8-29-2008

Reserve Bank of India Annual Report, 2007-2008

Reserve Bank of India

Report of the Central Board of Directors on the working of the Reserve Bank of India for the year ended June 30, 2008 submitted to the Central Government in terms of Section 53(2) of the Reserve Bank of India Act, 1934

RESERVE BANK OF INDIA ANNUAL REPORT 2007-2008

भारतीय रिज़र्व बैंक
RESERVE BANK OF INDIA
www.rbi.org.in

गवर्नर
Governor

LETTER OF TRANSMITTAL

Ref. No. SYD. 725 / 02.16.001 / 2008-09

August 29, 2008
Bhadra 7, 1930 (Saka)

The Finance Secretary
Government of India
Ministry of Finance
New Delhi - 110 001.

Dear Sir,

In pursuance of Section 53(2) of the Reserve Bank of India Act, 1934, I transmit herewith the following documents:

(i) A copy of the Annual Accounts for the year ended June 30, 2008 signed by me, the Deputy Governors and the Chief General Manager and certified by the Bank's Auditors; and

(ii) Two copies of the Annual Report of the Central Board on the working of the Bank during the year ended June 30, 2008.

Yours faithfully,

(Y. V. Reddy)

केन्द्रीय कार्यालय भवन, शहीद भगतसिंह मार्ग, मुम्बई - 400 001. भारत
फोन : (022) 2266 0868 / 2266 1872 / 2266 2644 फैक्स : (022) 2266 1784 ई-मेल : rbigovr@bom3.vsnl.net.in

Central Office Building, Shahid Bhagat Singh Marg, Mumbai - 400 001. INDIA
Tel : (022) 2266 0868 / 2266 1872 / 2266 2644 Fax : (022) 2266 1784 E-mail : rbigovr@bom3.vsnl.net.in

CENTRAL BOARD / LOCAL BOARDS

GOVERNOR

Y.V. Reddy

DEPUTY GOVERNORS

Rakesh Mohan
V. Leeladhar
Shyamala Gopinath
Usha Thorat

DIRECTORS NOMINATED UNDER SECTION 8 (1) (b) OF THE RBI ACT, 1934

Y.H. Malegam
Suresh D. Tendulkar
U.R. Rao
Lakshmi Chand

DIRECTORS NOMINATED UNDER SECTION 8 (1) (c) OF THE RBI ACT, 1934

H. P. Ranina
Ashok S. Ganguly
Azim Premji
Kumar Mangalam Birla
Shashi Rajagopalan
Suresh Neotia
A. Vaidyanathan
Man Mohan Sharma
D. Jayavarthanavelu
Sanjay Labroo

DIRECTOR NOMINATED UNDER SECTION 8 (1) (d) OF THE RBI ACT, 1934

D. Subbarao

MEMBERS OF LOCAL BOARDS

WESTERN AREA

Y.H. Malegam
K. Venkatesan
Dattaraj V. Salgaocar
Jayanti Lal Bavjibhai Patel

EASTERN AREA

Suresh D. Tendulkar
A. K. Saikia
Sovan Kanungo

NORTHERN AREA

U.R. Rao
Mitha Lal Mehta
Ram Nath
Pritam Singh

SOUTHERN AREA

Lakshmi Chand
C. P. Nair
M. Govinda Rao
Devaki Jain

As on June 30, 2008

PRINCIPAL OFFICERS

(As on June 30, 2008)

EXECUTIVE DIRECTORS	R.B. Barman
	V.K. Sharma
	C. Krishnan
	Anand Sinha
	V.S. Das
	G. Gopalakrishna
	H.R. Khan
CENTRAL OFFICE	
Department of Administration and Personnel Management	Prabal Sen, Principal Chief General Manager
Customer Service Department	Kaza Sudhakar, Chief General Manager
Department of Banking Operations and Development	P. Saran, Chief General Manager-in-Charge
Department of Banking Supervision	S. Karuppasamy, Chief General Manager-in-Charge
Department of Communication	Kum. A.I. Killawala, Press Relations Officer (Gr. F)
Department of Currency Management	U.S. Paliwal, Chief General Manager
Department of Economic Analysis and Policy	G.S. Bhati, Principal Adviser (Officiating)
Department of Expenditure and Budgetary Control	Smt. Deepa Srivastava, Chief General Manager
Department of External Investments and Operations	Smt. Meena Hemachandra, Chief General Manager-in-Charge
Department of Government and Bank Accounts	Shri S.V. Raghavan, Chief General Manager-in-Charge
Department of Information Technology	G. Padmanabhan, Chief General Manager-in-Charge
Department of Non-Banking Supervision	P. Krishnamurthy, Chief General Manager-in-Charge
Department of Payment and Settlement Systems	A.P. Hota, Chief General Manager
Department of Statistics and Information Management	A.K. Ray, Officer-in-Charge
Financial Markets Department	Chandan Sinha, Chief General Manager
Foreign Exchange Department	Salim Gangadharan, Chief General Manager-in-Charge
Human Resources Development Department	Deepak Singhal, Chief General Manager
Inspection Department	Karuna Sagar, Chief General Manager
Internal Debt Management Department	K.V. Rajan , Chief General Manager
Legal Department	K.D. Zacharias, Legal Adviser-in-Charge
Monetary Policy Department	M.D. Patra, Adviser-in-Charge
Premises Department	Vijay Chugh, Chief General Manager
Rajbhasha Department	Smt. Phulan Kumar, Chief General Manager
Rural Planning and Credit Department	G. Srinivasan, Chief General Manager-in-Charge
Secretary's Department	Smt. Grace E Koshie, Chief General Manager & Secretary
Urban Banks Department	A.K. Khound, Chief General Manager
COLLEGES	**PRINCIPALS/Chief General Manager**
Bankers' Training College, Mumbai	Smt. Deepali Pant Joshi
Centre for Advanced Financial Learning, Mumbai	-
College of Agricultural Banking, Pune	Sandip Ghose
Reserve Bank Staff College, Chennai	S. Ganesh
OFFICES	**REGIONAL DIRECTORS**
Chennai	F.R. Joseph
Kolkata	B. Mahapatra
Mumbai	A.N. Rao
New Delhi	R. Gandhi
BRANCHES	
Ahmedabad	B. Srinivas
Bangalore	Smt. D. Muthukrishnan
Bhopal	Rajesh Verma
Bhubaneswar	G. Jaganmohan Rao
Chandigarh	J. Sadakkadulla
Guwahati	Smt. Sewali Choudhury
Hyderabad	Smt. Suma Varma
Jaipur	B.P. Kanungo
Jammu	O.P. Aggarwal
Kanpur	J.B. Bhoria
Lucknow	D.P.S. Rathore
Nagpur	C.C. Mitra
Patna	K.K. Vohra
Thiruvananthapuram	S. Ramaswamy
	OFFICERS-IN-CHARGE
Belapur	A.K.Bera, Chief General Manager
Dehradun	Manoj Sharma, General Manager
Kochi	T.V. Gopalakrishnan, Chief General Manager
Panaji	M.A.R. Prabhu, Deputy General Manager
Raipur	A.K. Sharma, General Manager
Ranchi	Rabi N. Mishra, General Manager
Shimla	S.K. Bal, General Manager

CONTENTS

CONTENTS

CONTENTS

CONTENTS

CONTENTS

CONTENTS

TEXT TABLES

CONTENTS

CONTENTS

CONTENTS

CONTENTS

CONTENTS

CONTENTS

INDEX OF APPENDIX TABLES

CONTENTS

LIST OF ABBREVIATIONS

ABCP - Asset Backed Commercial Paper
ABSs - Asset Backed Securities
ACH - Automated Clearing Houses
ACU - Asian Clearing Union
ACU - Additional Competitive Underwriting
ADB - Asian Development Bank
ADR - Asset Development Reserve
ADRs - American Depository Receipts
ADs - Authorised Dealers
ADWRS - Agricultural Debt Waiver and Debt Relief Scheme
AFC - Asset Finance Company
AFI Annual Financial Inspection
AFS - Available for Sale
AIBP - Accelerated Irrigation Benefit Programme
AIDIS - All India Debt and Investment Survey
AIFI - All India Financial Institution
AIRB - Advanced Internal Rating Based Approach
ALD - Aggregate Liability to Depositors
ALM - Asset-Liability Management
AMA - Advanced Measurement Approach
AMCs - Authorised Money Changers
AML - Anti-Money Laundering
AMP - Advanced Measurement Approach
AMPIs - Aggregated Micro-Prudential Indicators
ANBC - Adjusted Net Bank Credit
APL - Above Poverty Line
APM - Administered Price Mechanism
ARC - Asset Reconstruction Company
AS - Accounting Standard
ASEAN - Association of South East Asian Nations
ATB - Auction Treasury Bill
ATM - Automated Teller Machine
BCs - Business Correspondents
BCBS - Basel Committee on Banking Supervision
BCP - Business Continuity Planning
BCSBI - Banking Codes and Standards Board of India
BCTT - Banking Cash Transaction Tax
BFS - Board for Financial Supervision
BIA - Basic Indicator Approach
BIFR - Board for Industrial and Financial Reconstruction
BIS - Bank for International Settlements
BLA - Bond Ledger Account
BoP - Balance of Payments
BOS - Banking Ombudsman Scheme
BPL - Below Poverty Line
BPLR - Benchmark Prime Lending Rate
BPO - Business Process Outsourcing
BPSS - Board for Regulation and Supervision of Payment and Settlement Systems
BRBNMPL - Bharatiya Reserve Bank Note Mudran Private Limited
BSE - The Stock Exchange, Mumbai
BSR - Basic Statistical Returns
BTC - Bankers' Training College
CA - Concurrent Audit
CAB - College of Agricultural Banking
CAPIO - Central Assistant Public Information Officer
CBLO - Collateralised Borrowing and Lending Obligation
CBS - Consolidated Banking Statistics
CBS - Core Banking System
CCC - Central Complaints Committee
CCEA - Cabinet Committee on Economic Affairs
CCIL - Clearing Corporation of India Limited
CCP - Central Counter Party
CCRS - Currency Chest Reporting System
CD - Certificate of Deposit
CDBMS - Centralised Data Base Management System
CDOs - Collateralised Debt Obligations

LIST OF ABBREVIATIONS

CDR	-	Corporate Debt Restructuring
CDSs	-	Credit Default Swaps
CENVAT	-	Central Value Added Tax
CFCAC	-	Committe on Fuller Capital Account Convertibility
CFES	-	Centralised Funds Enquiry System
CFMS	-	Centralised Funds Management System
CFT	-	Combating Financing of Terrorism
CFTS	-	Centralised Funds Transfer System
CGRA	-	Currency and Gold Revaluation Account
CIB	-	Capital Indexed Bond
CIBIL	-	Credit Information Bureau of India Limited
CIC	-	Central Information Commissioner
CICTAB	-	Center for International Co-operation and Training in Agricultural Banking
CLCC	-	Central Level Coordination Committee
CME	-	Capital Market Exposure
CMIS	-	Currency Management Information System
COMORS	-	Compliance Monitoring and Reporting System
CoR	-	Certificate of Registration
CP	-	Commercial Paper
CPADS	-	Centralised Public Accounts Department System
CPC	-	Cheque Processing Centre
CPDO	-	Centralised Public Debt Office
CPI	-	Consumer Price Index
CPI-IW	-	Consumer Price Index for Industrial Workers
CPIO	-	Chief Public Information Officer
CPPAPS	-	Committee on Procedures and Performance Audit on Public Services
CPR	-	Consolidated Prudential Return
COSMOS	-	Centralised Off-Site Monitering System
CR	-	Contingency Reserve
CRAR	-	Capital to Risk-Weighted Assets Ratio
CRB	-	Commodity Research Bureau
CRC	-	The Complaints Redressal Cell
CRF	-	Calamity Relief Fund
CRCS	-	Central Registrar of Co-operative Societies
CRR	-	Cash Reserve Ratio
CRT	-	Credit - Risk Transfer
CSAA	-	Control Self Assessment Audit
CSF	-	Consolidated Sinking Fund
CSGL	-	Constituents' Subsidiary General Ledger
CSO	-	Central Statistical Organisation
CSR	-	Corporate Social Responsibility
CST	-	Central Sales Tax
CTR	-	Cash Transaction Report
CTS	-	Cheque Truncation System
CTT	-	Commodities Transaction Tax
CVD	-	Countervailing Duty
CVPS	-	Currency Verification and Processing System
DAD	-	Deposit Accounts Department
DAPM	-	Department of Administration and Personnel Management
DBIE	-	Database on Indian Economy
DBOD	-	Department of Banking Operations and Development
DBS	-	Department of Banking Supervision
DCC	-	District Consultative Committee
DCCB	-	District Central Cooperative Bank
DCM	-	Department of Currency Management
DCRF	-	Debt Consolidation and Relief Facility
DDP	-	District Development Programme
DDT	-	Dividend Distribution Tax
DEAP	-	Department of Economic Analysis and Policy
DEBC	-	Department of Expenditure and Budgetary Control
DEIO	-	Department of External Investments and Operations
DEPB	-	Duty Entitlement Pass Book
DESACS	-	Department of Statistical Analysis and Computer Services
DFEC	-	Duty Free Entitlement Certificate
DFHI	-	Discount and Finance House of India

LIST OF ABBREVIATIONS

DFIs - Development Finance Institutions
DFRC - Duty Free Replenishment Certificate
DGBA - Department of Government and Bank Accounts
DGCI&S - Directorate General of Commercial Intelligence and Statistics
DGFT - Directorate General of Foreign Trade
DICGC - Deposit Insurance and Credit Guarantee Corporation
DIP - Disclosure and Investor Protection
DIT - Department of Information Technology
DLCC - District Level Consultative Committee
DMA - Direct Marketing Agent
DMIS - Document Management Information System
DNBS - Department of Non-Banking Supervision
DOC - Department of Communication
DoT - Department of Telecommunications
DPAP - Drought Prone Area Programme
DR - Disaster Recovery
DRG - Development Research Group
DRI - Differential Rate of Interest
DRS - Disaster Recovery System
DRT - Debt Recovery Tribunal
DSA - Direct Selling Agent
DSB - Designated Settlement Banks
DSIM - Department of Statistics and Information Management
DSS - Debt Swap Scheme
DTA - Domestic Tariff Area
DTL - Demand and Time Liabilities
DvP - Delivery *versus* Payment
EAD - Exposure at Default
EBT - Electronic Benefit Transfer
ECBs - External Commercial Borrowings
ECB - European Central Bank
ECBC - Energy Conservation Building Code
ECR - Export Credit Refinance
ECS - Electronic Clearing Services
EDC - Executive Directors' Committee
EDI - Entrepreneurship Development Institute
EDI - Electronic Data Interchange
EEA - Exchange Equalisation Account
EEFC - Exchange Earners' Foreign Currency
EEPC - Engineering Export Promotion Council
EFT - Electronic Funds Transfer
EIA - Energy Information Administration
EKMS - Enterprise Knowledge Management System
EMDEs - Emerging Market and Developing Economics
EMEs - Emerging Market Economies
EOU - Export Oriented Unit
EPCG - Export Promotion Capital Goods
ESOP - Employees Stock Option Plan
EU - European Union
FAQs - Frequently Asked Questions
FBT - Fringe Benefit Tax
FCA - Foreign Currency Assets
FCAC - Fuller Capital Account Convertibility
FCCB - Foreign Currency Convertible Bond
FCI - Food Corporation of India
FCNR(B) - Foreign Currency Non-Resident (Banks)
FCRA - Forward Contract Regulation Act
FDI - Foreign Direct Investment
FED - Foreign Exchange Department
FEDAI - Foreign Exchange Dealers' Association of India
FEMA - Foreign Exchange Management Act
FFMCs - Full Fledged Money Changers
FIF - Financial Inclusion Fund
FIIs - Foreign Institutional Investors
FIMMDA - Fixed Income Money Market and Derivatives Association of India
FIPB - Foreign Investment Promotion Board
FIRB - Foundation Internal Rating Based

LIST OF ABBREVIATIONS

FIs	-	Financial Institutions
FITF	-	Financial Inclusion Technology Fund
FLCC	-	Financial Literacy and Credit Counseling Centre
FIU-IND	-	Financial Intelligence Unit-India
FMC	-	Forward Market Commission
FMD	-	Financial Markets Department
FMS	-	Focus Market Scheme
FNVC	-	Forged Note Vigilance Cell
FOB	-	Free on Board
FOMC	-	Federal Open Market Committee
FPOs	-	Follow-on Public Offers
FPS	-	Focus Product Scheme
FRA	-	Forward Rate Agreement
FRB	-	Floating Rate Bond
FRBM	-	Fiscal Responsibility and Budget Management
FRL	-	Full Reservoir Level
FRL	-	Fiscal Responsibility Legislation
FSA	-	Financial Services Authority
FSF	-	Financial Stability Forum
FST	-	Financial Sector Technology
FTIs	-	Fast Track Issues
FTP	-	Financial Transaction Plan
GAAP	-	Generally Accepted Accounting Principles
GATS	-	General Agreement on Trade in Services
GB	-	Giga-bytes
GCC	-	General Credit Card
GDP	-	Gross Domestic Product
GDR	-	Global Depository Receipt
GDS	-	Gross Domestic Saving
GFCF	-	Gross Fixed Capital Formation
GFD	-	Gross Fiscal Deficit
GIPSA	-	General Insurer's (Public Sector) Association of India
GLC	-	General Line of Credit
GNP	-	Gross National Product
GoI	-	Government of India
GRF	-	Guarantee Redemption Fund
GS	-	Government Securities
GSDP	-	Gross State Domestic Product
GST	-	Goods and Services Tax
HFCs	-	Housing Finance Companies
HFT	-	Held for Trading
HLAC	-	High Level Advisory Committee
HRDD	-	Human Resources Development Department
HRMS	-	Human Resources Management System
HTM	-	Held to Maturity
HUF	-	Hindu Undivided Family
IAS	-	Integrated Accounting System
IASC	-	Inspection and Audit Sub-Committee
IBA	-	Indian Banks' Association
IBL	-	Inter-Bank Liabilities
IBS	-	International Banking Statistics
ICAAP	-	Internal Capital Adequacy Assessment Process
ICAI	-	Institute of Chartered Accountants of India
ICC	-	International Credit Card
ICCOMS	-	Integrated Computerised Currency Operation and Management System
ICOR	-	Incremental Capital-Output Ratio
ICP	-	International Comparison Programme
ICT	-	Information and Communication Technology
IDBI	-	Industrial Development Bank of India
IDL	-	Intra-Day Liquidity
IDMD	-	Internal Debt Management Department
IDR	-	Indian Depository Receipt
IDRBT	-	Institute for Development and Research in Banking Technology
IEA	-	International Energy Agency
IES	-	Integrated Establishment System
IFC	-	International Finance Corporation
IGIDR	-	Indira Gandhi Institute of Development Research

LIST OF ABBREVIATIONS

IIBF	-	Indian Institute of Banking and Finance
IIBI	-	Industrial Investment Bank of India Ltd.
IIFCL	-	India Infrastructure Finance Company Limited
IIM	-	Indian Institute of Management
IIP	-	Index of Industrial Production
IIT	-	Indian Institute of Technology
IIUS	-	Industrial Infrastructure Upgradation Scheme
IMA	-	Internal Models Approach
IMD	-	India Millennium Deposits
IMF	-	International Monetary Fund
IMFC	-	International Monetary and Financial Committee
INFINET	-	Indian Financial Network
IPC	-	Irrevocable Payment Commitments
IPDI	-	Innovative Perpetual Debt Instrument
IPO	-	Initial Public Offering
IPP	-	Independent Power Producers
IRB	-	Internal Rating Based
IRDA	-	Insurance Regulatory and Development Authority
IRDs	-	Interest Rate Derivatives
IRF	-	Interest Rate Future
IRS	-	Interest Rate Swap
IS	-	Information System
ISMS	-	Information Security Management System
ISO	-	International Organisation for Standardisation
IT	-	Information Technology
ITB	-	Intermediate Treasury Bill
ITES-BPO	-	Information Technology Enabled Services and Business Process Outsourcing
JNNURM	-	Jawaharlal Nehru National Urban Renewal Mission
JPC	-	Joint Parliamentary Committee
JV	-	Joint Venture
KCC	-	Kisan Credit Card
KYC	-	Know Your Customer
LAB	-	Local Area Bank
LAF	-	Liquidity Adjustment Facility
LAN	-	Local Area Network
LaR	-	Liquidity at Risk
LBS	-	Locational Banking Statistics
LC	-	Letter of Credit
LGD	-	Loss Given Default
LIBOR	-	London Inter-Bank Offered Rate
LIC	-	Life Insurance Corporation of India
LOC	-	Letter of Comfort
LPG	-	Liquefied Petroleum Gas
LPA	-	Long Period Average
LRS	-	Liberalised Remittance Scheme
LTV	-	Loan to Value
LVPS	-	Large Value Payment Systems
M&A	-	Merger and Acquisition
MASI	-	Management Audit Systems Inspection
MAT	-	Minimum Alternate Tax
MBC	-	Mutual Benefit Companies (Potential Nidhi)
MBFC	-	Mutual Benefit Financial Companies (Notified Nidhis)
MBS	-	Mortgage-Backed Securities
MEI	-	Macro Economic Indicators
MEP	-	Minimum Export Price
MF	-	Mutual Fund
MFI	-	Micro Finance Institution
MGC	-	Mortgage Guarantee Company
MICR	-	Magnetic Ink Character Recognition
MIS	-	Management Information System
MMBCS	-	Magnetic Media Based Clearing System
MMS	-	Multi Modal Settlements
MNSB	-	Multilateral Net Settlement Batch
MoU	-	Memorandum of Understanding
MPI	-	Macro-Prudential Indicator
MPLS	-	Multi Protocol Label Switching
MPP	-	Merchant Power Producers
MS	-	Money Supply (Broad Money)

LIST OF ABBREVIATIONS

MSCI	-	Morgan Stanley Capital International
MSEs	-	Micro and Small Enterprises
MSMEs	-	Micro, Small and Medium Enterprises
MSP	-	Minimum Support Price
MSS	-	Market Stabilisation Scheme
MTFP	-	Medium Term Fiscal Plan
MTM	-	Marked to Market
MTSS	-	Money Transfer Service Scheme
MUC	-	Minimum Underwriting Commitment
MW	-	Mega Watts
NABARD	-	National Bank for Agriculture and Rural Development
NASSCOM	-	National Association of Software and Services Companies
NAV	-	Net Asset Value
NBC	-	National Building Code
NBER	-	National Bureau of Economic Research
NBFCs	-	Non-Banking Financial Companies
NBFIs	-	Non-Banking Financial Institutions
NCAER	-	National Council of Applied Economic Research
NCAF	-	New Capital Adequacy Framework
NCC	-	National Clearing Cell
NDA	-	Net Domestic Asset
NDC	-	No Dues Cretificate
NDC	-	National Development Council
NDNC	-	National Do Not Call Registry
NDS	-	Negotiated Dealing System
NDS - OM	-	Negotiated Dealing System - Order Matching
NDTL	-	Net Demand and Time Liability
NEER	-	Nominal Effective Exchange Rate
NEFT	-	National Electronic Funds Transfer
NEP	-	National Electricity Policy
NER	-	North - Eastern Region
NFA	-	Net Foreign Assets
NFDC	-	National Film Development Corporation
NFEA	-	Net Foreign Exchange Assets
NFFWP	-	National Food for Work Programme
NFR	-	Non-Financial Reporting
NFS	-	National Financial Switch
NFSM	-	National Food Security Mission
NGO	-	Non-Government Organisation
NHB	-	National Housing Bank
NIBM	-	National Institute of Bank Management
NIC	-	National Informatics Centre
NIF	-	National Investment Fund
NIMC	-	National Implementing and Monitoring Committee
NMCP	-	National Manufacturing Competitiveness Programme
NOC	-	No Objection Certificate
NOF	-	Net Owned Funds
NPAs	-	Non-Performing Assets
NPC	-	National Payments Council
NPS	-	New Pension Scheme
NPV	-	Net Present Value
NR(E)RA	-	Non-Resident (External) Rupee Account
NREGF	-	National Rural Employment Guarantee Fund
NREGS	-	National Rural Employment Guarantee Scheme
NRHM	-	National Rural Health Mission
NRI	-	Non-Resident Indian
NRNR	-	Non-Resident Non-Repatriable
NRO	-	Non-Resident Ordinary
NRRDA	-	National Rural Road Development Agency
NSC	-	National Statistical Commission
NSDL	-	National Securities Depository Limited
NSE	-	National Stock Exchange
NSE-MIBOR	-	National Stock Exchange-Mumbai Inter-bank Offered Rate
NSMs	-	Note Sorting Machines
NSS	-	National Settlement System
NSSF	-	National Small Saving Fund
NSSO	-	National Sample Survey Organisation

LIST OF ABBREVIATIONS

OBC	-	Other Backward Classes
OBE	-	Off- Balance Sheet Exposures
OBU	-	Off-shore Banking Unit
OCBs	-	Overseas Corporate Bodies
ODI	-	Overseas Direct Investment
OIL	-	Oil India Ltd.
OLTAS	-	Online Tax Accounting System
OMCs	-	Oil Marketing Companies
OMO	-	Open Market Operation
OMS	-	Open Market Sales
ONGC	-	Oil and Natural Gas Commission
OPAC	-	Online Public Access Catalogue
OPEC	-	Organisation of Petroleum Exporting Countries
ORFS	-	Online Returns Filing System
OSMOS	-	Off-Site Monitoring System
OSMOS	-	Off-Site Monitoring and Surveillance
OTC	-	Over-the-Counter
OTCEI	-	Over-the-Counter Exchange of India
OTS	-	One-Time Settlement
OWS	-	Other Welfare Schemes
P&L	-	Profit and Loss
P/E	-	Price-Earnings
PACS	-	Primary Agricultural Credit Society
PAD	-	Public Accounts Department
PAIS	-	Personal Accident Insurance Scheme
PAT	-	Profit After Tax
PBT	-	Profit Before Tax
PCA	-	Prompt Corrective Action
PCPS	-	Perpetual Cumulative Preference Shares
PD	-	Probability of Default
PDCF	-	Primary Dealer Credit Facility
PDO	-	Public Debt Office
PDs	-	Primary Dealers
PDS	-	Public Distribution System
PFCE	-	Private Final Consumption Expenditure
PIO	-	Persons of Indian Origin
PIT	-	Personal Income Tax
PKI	-	Public Key Infrastructure
PMEGP	-	Prime Minister Employment Generation Programme
PMLA	-	Prevention of Money Laundering Act
PNCPs	-	Perpetual Non-Cumulative Preference Shares
POL	-	Petroleum, Oil and Lubricants
PPP	-	Public Private Partnership
PRIS	-	Performance Related Incentive Scheme
PSBs	-	Public Sector Banks
PSUs	-	Public Sector Undertakings
QIB	-	Qualified Institutional Buyer
QII	-	Qualified Institutional Investor
QIP	-	Qualified Institutional Placement
QIS	-	Quantitative Impact Study
R&D	-	Research and Development
RBIA	-	Risk-Based Internal Audit
RBS	-	Risk-Based Supervision
RBSB	-	Reserve Bank Services Board
RBSC	-	Reserve Bank Staff College
RC	-	Reconstruction Company
RCC	-	Regional Complaints Committee
RCPS	-	Redeemable Cumulative Preference Shares
RCS	-	Registrar of Cooperative Societies
RD	-	Revenue Deficit
RDA	-	Rupee Drawing Arrangements
RDDB	-	Recovery of Debts due to Banks and Financial Institutions
REER	-	Real Effective Exchange Rate
RIA	-	Right to Information Act
RIDF	-	Rural Infrastructure Development Fund
RIF	-	Repository of Inspecting Finding
RKVY	-	Rashtriya Krishi Vikas Yojana
RNBCs	-	Residuary Non-banking Companies
RNCPS	-	Redeemable Non-Cumulative Preference Shares

LIST OF ABBREVIATIONS

RPCD	-	Rural Planning and Credit Department
RRBs	-	Regional Rural Banks
RTGS	-	Real Time Gross Settlement
RTP	-	Reserve Tranche Position
RUDSETIs	-	Rural Development and Self-Employed Training Institutes
SA	-	Standardised Approach
SAARC	-	South Asian Association for Regional Cooperation
SACP	-	Special Agricultural Credit Plan
SAFTA	-	South Asian Free Trade Agreement
SARFAESI	-	Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest
SBI	-	State Bank of India
SBS	-	Shredding and Briquetting System
SC	-	Scheduled Caste
SC	-	Securitisation Company
SCB	-	Scheduled Commercial Bank
SCRA	-	Securities Contracts (Regulation) Act
SD	-	Sustainable Development
SDDS	-	Special Data Dissemination Standard
SDL	-	State Development Loan
SDLC	-	Software Development Life Cycle
SDR	-	Special Drawing Right
SEB	-	State Electricity Board
SEBI	-	Securities and Exchange Board of India
SEC	-	Securities Exchange Commission
SEFT	-	Special Electronic Funds Transfer
SEEPZ	-	Santacruz Electronics Exports Processing Zone
SEZs	-	Special Economic Zones
SFC	-	State Financial Corporation
SFIO	-	Serious Frauds Investigation Office
SFMS	-	Structured Financial Messaging Solution
SFP	-	Single Factor Productivity
SGL	-	Subsidiary General Ledger
SGSY	-	Swarnajayanti Gram Swarozgar Yojana
SHGs	-	Self-Help Groups
SIDBI	-	Small Industries Development Bank of India
SIPS	-	Systemically Important Payment Systems
SITP	-	Scheme for Integrated Textile Parks
SIVs	-	Structured Investment Vehicles
SLAF	-	Second Liquidity Adjustment Facility
SLB	-	Securities Lending and Borrowing
SLBC	-	State Level Bankers' Committee
SLCC	-	State Level Coordination Committee
SLR	-	Statutory Liquidity Ratio
SLRS	-	Scheme of Liberation and Rehabilitation of Scavengers
SLS	-	Securities Lending Scheme
SMAC	-	Secondary Market Advisory Committee
SMEs	-	Small and Medium Enterprises
SMO	-	Special Market Operation
SNB	-	Swiss National Bank
SPC	-	Sixth Pay Commission
SPMCIL	-	Security Printing and Minting Corporation of India Ltd.
SPV	-	Special Purpose Vehicle
SR	-	Security Receipt
SREP	-	Strategic Research and Extension Plan
SRF	-	Special Reserve Fund
SRMS	-	Scheme for Rehabilitation of Manual Scavengers
SRP	-	Supervisory Review Process
SRS	-	System Requirement Specification
SSA	-	Sarva Shiksha Abhiyan
SSCs	-	Special Sub-Committees
SSIs	-	Small Scale Industries
SSSs	-	Securities Settlement Systems
ST	-	Scheduled Tribe
StCB	-	State Co-operative Bank
STCRC	-	Short Term Co-operative Rural Credit

LIST OF ABBREVIATIONS

STL	-	Structural Liquidity Statement
STOs	-	State Treasury Offices
STP	-	Straight Through Processing
STPI	-	Software Technology Parks of India
STR	-	Suspicious Transaction Report
STRIPS	-	Separate Trading for Registered Interest and Principal of Securities
STT	-	Securities Transaction Tax
TAC	-	Technical Advisory Committee
TAF	-	Term Auction Facility
TAFCUB	-	Task Force for Urban Co-operative Bank
TAG	-	Technical Advisory Group
TBs	-	Treasury Bills
TDS	-	Tax Deduction at Source
TFC	-	Twelfth Finance Commission
TFCI	-	Tourism Finance Corporation of India
TFP	-	Total Factor Productivity
TMT	-	Thermo Mechanically Treated
TPDS	-	Targeted Public Distribution System
TRAI	-	Telecom Regulatory Authority of India
TUCC	-	Telecom Unsolicited Commercial Communications
TUF	-	Technology Upgradation Fund
UBD	-	Urban Banks Department
UCBs	-	Urban Cooperative Banks
ULIP	-	Unit Linked Insurance Plan
UNCTAD	-	United Nations Conference on Trade and Development
UNDP	-	United Nations Development Programme
UNIDO	-	United Nations Industrial Development Organisation
UNSCR	-	United Nations Security Council Regulations
UNSNA	-	United Nation System of National Accounts
URR	-	Unremunerated Reserve Requirements
URRBCH	-	Uniform Regulations and Rules for Bankers' Clearing House
UTLBC	-	Union Territory Level Bankers' Committee
VaR	-	Value at Risk
VAT	-	Value Added Tax
VCF	-	Venture Capital Fund
WADR	-	Weighted Average Discount Rate
WAN	-	Wide Area Network
WAP	-	Wireless Application Protocol
WDM	-	Wholesale Debt Market
WFP	-	World Food Programme
WGC	-	World Gold Council
WI	-	When Issued
WMA	-	Ways and Means Advance
WOS	-	Wholly Owned Subsidiary
WPI	-	Wholesale Price Index
WSS	-	Weekly Statistical Supplement
WTI	-	West Texas Intermediate
WTO	-	World Trade Organisation
Y-o-Y	-	Year-on-Year
YTM	-	Yield-to-Maturity
ZCYC	-	Zero Coupon Yield Curve
ZTC	-	Zonal Training Centre

This Report can also be accessed on Internet
URL : www.rbi.org.in

*For the Year July 1, 2007 to June 30, 2008**

PART ONE: THE ECONOMY: REVIEW AND PROSPECTS

I ASSESSMENT AND PROSPECTS

I.1 The Indian economy continued to perform well during 2007-08, although the growth moderated marginally. This was the third year in succession when the Indian economy achieved a growth rate of 9 per cent and above. This was the highest average growth rate achieved during any three year period in the history of independent India. During each of the last three years, the growth rate of agriculture was well above the trend growth rate with foodgrains production touching a new high in each of the last two years. Industry also registered robust growth with the growth rate in the previous year being in double digits. Services exhibited double digit growth in all the three years. Although the Indian economy has been generally performing well in the post-reform period, the performance during the last three years was indeed noteworthy and it was second only to China among the major countries.

I.2 The improved performance in the last three years was the result of the well thought out and calibrated reforms pursued in the various sectors during the last one decade and a half. The high growth rate was underpinned by a distinct improvement in the saving and investment rates mainly on account of a turnaround in the public sector saving rate and improvement in the corporate sector saving rate along with the sustained high saving rate of households. Under the rule-based fiscal consolidation programme, public sector savings witnessed a turnaround underpinned by a steady increase in the tax-GDP ratio and steady improvement in savings of non-departmental undertakings. This enabled a narrowing of public sector saving-investment gap in recent years, thereby releasing greater resources for the private sector. The significant financial restructuring of the corporate sector and consequent reduction in the overall debt-equity ratio has had a significant impact on the profitability of the corporate sector and its savings. Household savings have been high traditionally in India and their contribution to overall savings has remained steady in recent years. Improved savings and generally comfortable financing conditions from the domestic and international capital markets drove the private investment rate above 10 per cent of GDP beginning from 2004-05. Thus, improved corporate and public sector finances have played a critical role in the steady increase in both the overall saving and investment rates to new peaks for the fourth year in succession in 2006-07. Another major driver of the growth process has been improved levels of productivity as reflected in the stable and low incremental capital-output ratio. While studies show that both industry and services have recorded productivity gains, such gains have been more pronounced in respect of the services sector. Productivity gains in industry and services emanated from increased use of technology, reorientation of processes, increased capacity utilisation and continued restructuring of the corporate sector.

I.3 The slight moderation in growth in 2007-08 in comparison with 2006-07 was mainly due to some adverse developments in the second half of the year. Growth decelerated sharply in advanced industrial

* : While the Reserve Bank of India's accounting year is July-June, data on a number of variables are available on a financial year basis, *i.e.*, April-March, and hence, the data are analysed on the basis of the financial year. Where available, the data have been updated beyond March 2008. For the purpose of analysis and for providing proper perspective on policies, reference to past years as also prospective periods, wherever necessary, has been made in this Report.

economies in the last quarter of 2007 mainly on account of turbulence in the international financial markets. Domestic inflation, which was well below the projections till December 2007, started hardening from January 2008, both on account of supply side pressures such as the one-off increase in domestic petrol and diesel prices, continuous hardening of prices of petroleum products that were not administered, rise in prices of wheat and oilseeds and adjustment in steel prices, and increased demand side pressures. Concerns over slowdown in growth in relation to earlier expectations encouraged central banks in many advanced countries to reduce their policy rates. The resultant rise in liquidity led to a search for higher yields. India with strong macroeconomic fundamentals attracted large capital flows during 2007-08, driven by external commercial borrowings, portfolio flows and foreign direct investment (FDI) inflows. Capital flows significantly higher than the current account deficit (which widened on account of strong import demand and rise in crude oil prices) and hardening of inflation necessitated continuation and reinforcement of pre-emptive monetary policy actions to dampen excessive demand pressures, while providing a conducive environment for continuation of the growth momentum.

I.4 The short-term growth prospects are now faced with several downside risks, both global and domestic. Global economic conditions have worsened with the growth in major advanced economies decelerating and inflation hardening. In India, headline industrial growth after a sustained expansion that began in 2003-04 moderated from September 2007. Growth in the services sector has also showed some signs of moderation mainly due to somewhat lower growth in the financial and construction sub-sectors. Inflation has hardened further even though the pass-through of the rise in international crude oil prices remains incomplete. Finances of the Government are under some stress on account of several factors such as increased pressures from oil, fertilisers and food subsidies, the farm loan waiver scheme and the hike in wages following the implementation of the Sixth Pay Commission recommendations.

I.5 Notwithstanding some downside risks to macroeconomic activity in the short run, the medium to long term prospects continue to remain robust. The structural factors underpinning the growth process continue to be as robust as before. The rise in saving and investment rates and gains in productivity experienced in recent years are likely to be sustained. Public finances, despite some underlying pressures, have remained broadly on track so far as prescribed under the fiscal rules. The improvement in State finances, in particular, in recent years is encouraging. There has been a sharp improvement in the profitability, asset quality and soundness parameters of the banking sector. As a result, the banking sector has developed resilience and is better equipped to intermediate funds efficiently than before. The balance sheets of the corporate sector have also strengthened significantly over the years. On the external sector front, although India's current account deficit has been widening, its robust macroeconomic fundamentals have also facilitated some capital inflows even during periods of heightened global uncertainty.

I.6 Although the medium to long-term prospects remain robust, there is a need to persist with the reform efforts in all sectors of the economy to realise the full potential of the economy. Structural weaknesses, which have resulted in stagnation in productivity in agriculture, need to be addressed, particularly when food inflation is rising globally. For improving the industrial performance, it is necessary that infrastructure constraints are removed, particularly in electricity and energy as also roads, ports, airports, and urban and rural infrastructure. While services have remained the main driver of growth, measures are needed to step up efforts in the area of education at all levels, which would help absorb unemployed youth, especially in the rural sector, and at the same time help address the skill shortages in the labour force that are emerging. In the fiscal sector, issues of subsidies on fuel, food and fertilisers need to be addressed urgently. In the external sector, the gradual process of fuller capital account liberalisation that is underway needs to continue. In the financial sector, keeping in view progress in reforms in real and financial sectors, further reforms need to be carried forward drawing appropriate lessons from the turbulence in the international financial markets, while addressing challenges in the context of inclusive growth and financial inclusion.

ASSESSMENT OF 2007-08

I.7 Real GDP growth was placed at 9.0 per cent during 2007-08, moderating from 9.6 per cent recorded during 2006-07 and 9.4 per cent during 2005-06. However, it was still significantly higher than the average of 7.8 per cent achieved during the Tenth Plan (2002–2007). Also, this is the first time since 1950-51 (from which the official data are readily available) that the Indian economy recorded a growth of 9.0 per cent or above for three years in succession. Moderation in 2007-08 was spread across several sub-sectors of industry and services, while the agricultural sector registered improved growth.

I.8 Growth in agriculture and allied activities recovered from 3.8 per cent in 2006-07 to 4.5 per cent in 2007-08, which was higher than the average growth of 4.0 per cent targeted for the Eleventh Plan (2007–2012). The overall foodgrains production was also estimated to touch an all-time peak of 230.7 million tonnes, underpinned by above normal and well distributed South-West Monsoon. Record high levels were touched by all foodgrains, led by pulses, coarse cereals and rice. Among non-food crops, oilseeds and cotton touched their peak levels, with the former witnessing a significant increase.

I.9 The industrial upturn, which started in April 2002 and peaked by the end of 2006-07, moderated during 2007-08. In terms of index of industrial production (IIP), industrial growth decelerated from 11.5 per cent in 2006-07 to 8.5 per cent in 2007-08. Manufacturing growth (9.0 per cent) was lower than that in the preceding three years. According to the use-based classification, industrial growth decelerated across all the sectors during 2007-08 with a marked slowdown in the consumer goods sector. While growth in non-durables segment decelerated, the consumer durables segment witnessed a fall in production, particularly in respect of items for which consumer preferences have shifted towards new products. The capital goods sector continued to record a strong growth of 18.0 per cent during 2007-08 on the back of strong investment demand. The growth of core infrastructure industries at 5.6 per cent slowed down from the high growth of 2006-07, reflecting deceleration in all industries, barring coal.

I.10 The services sector continued to record double digit growth for the third successive year, notwithstanding some moderation (to 10.7 per cent in 2007-08 from 11.2 per cent in 2006-07). The sector benefited from rise in tourism, retail trade boom, improved performance of railways and civil aviation, surge in exports of business process outsourcing and information technology (IT) enabled services, and higher demand for real estate. While ‘trade, hotels, transport and communication’ and ‘community, social and personal services’ continued to be buoyant, construction activity moderated to single digit growth after posting double digit growth for the preceding four years, reflecting rise in input costs, capacity constraints in steel and cement sectors limiting the availability of key raw materials, and slow down in the real estate segment. Financial sector activity also witnessed some deceleration.

I.11 The strengthening of economic activity in the Indian economy in recent years has been underpinned by a steady upward trend in the saving and investment rates and improvement in efficiency of capital use. The savings rate increased from 26.4 per cent of GDP in 2002-03 to 34.8 per cent in 2006-07, while the investment rate rose from 25.2 per cent to 35.9 per cent. The average saving and investment rates at 31.4 per cent of GDP each during the Tenth Plan were the highest in any of the five year Plan periods. This trend was maintained during 2007-08, the first year of the Eleventh Five Year Plan, as gross fixed capital formation increased by 1.4 percentage points to 33.9 per cent of GDP.

I.12 As the sustained economic growth was accompanied by a decline in population growth, the average real per capita income growth rose from 3.3 per cent during the Ninth Plan (1997–2002) to 6.1 per cent during the Tenth Plan (2002–2007), which was the highest growth achieved during any Plan period. The poverty ratio (based on uniform recall period) also declined from 36.0 per cent in 1993-94 to 27.5 per cent in 2004-05. Employment growth (based on current daily status) accelerated from 1.25 per cent per annum during the period 1993-94 to 1999-2000 to 2.62 per cent during the period 1999-2000 to 2004-05. However, with the labour force expanding at a faster pace, the incidence of unemployment based on current daily status rose from 7.31 per cent in 1999-2000 to 8.28 per cent in 2004-05.

I.13 Growth in money supply (M_3) decelerated marginally from 21.5 per cent during 2006-07 to 20.8 per cent during 2007-08. Of the major components, buoyancy in time deposits continued during 2007-08, *albeit* there was some moderation in the last quarter of the year. Time deposits continued to grow at a robust rate, *albeit* somewhat lower than the last year, driven by strong economic activity, higher interest rates on bank deposits and availability of tax benefits under Section 80C for bank deposits. Demand deposits grew at a higher rate than in the previous year, with much of the expansion taking place in January and February 2008, when there was also increased volatility in the equity market. On the sources side, growth of bank credit moderated marginally during 2007-08, after three consecutive years of strong expansion. Demand for bank credit was broad-based with agriculture, industry and retail sectors absorbing 11 per cent, 43 per cent and 12 per cent, respectively, of the incremental expansion in overall non-food credit during 2007-08. Growth of credit to sectors such as commercial real estate remained high (year-on-year growth of 38 per cent at end-March 2008). Banks' SLR[1] investment, as a proportion of their net demand and time liabilities (NDTL), was 27.8 per cent at end-March 2008, almost the same level as at end-March 2007. Net foreign assets remained the key driver of reserve money. The Reserve Bank continued to actively modulate market liquidity conditions through the liquidity adjustment facility (LAF), open market operations, issuance of securities under the market stabilisation scheme (MSS) and use of cash reserve ratio (CRR).

I.14 Headline inflation, after easing up to an intra-year low of 3.1 per cent in mid-October 2007, increased subsequently to 7.7 per cent by end-March 2008, partly reflecting supply-side pressures on key agricultural commodities such as rice, wheat, oilseeds/edible oils, increase in iron and steel prices in line with international prices, partial pass-through of international crude oil prices to domestic prices and continued demand pressures. The increase in domestic primary food prices, however, was of a significantly lower order (6.5 per cent) compared with an increase of 45.3 per cent in international food prices, on a year-on-year basis, in March 2008. This, to an extent, reflected the impact of domestic supply-augmenting measures. International oil prices reached new peaks during 2007-08. The price of the Indian basket also increased by over 60 per cent in rupee terms between February 2007 (when domestic prices were last cut) and March 2008. However, domestic mineral oil prices increased by only 9.3 per cent, year-on-year, at end-March 2008, reflecting the restricted pass-through in the case of domestic petroleum products. While domestic prices of petrol and diesel witnessed a one-off upward adjustment in February 2008 (3-4 per cent), after a gap of almost a year, non-administered petroleum products prices hardened (39-42 per cent) in tandem with international crude prices. Domestic iron and steel prices increased, reflecting higher domestic demand as well as firm global prices, while prices of non-ferrous metals declined in response to sharp correction in international prices from their peaks in May 2007. Consumer price inflation, which had eased up to January 2008, increased subsequently mainly due to increase in food and services prices. Various

[1] Refers to investment in SLR securities as notified in the Reserve Bank notification DBOD No. Ref. BC. 61/12.02.001/2007-08 dated February 13, 2008.

measures of consumer price inflation at 6.0-7.9 per cent in March 2008 were placed lower as compared with 6.7-9.5 per cent a year earlier.

I.15 The upsurge in inflation in India occurred at a time when global commodity prices were volatile and at historically elevated levels and central banks in advanced and emerging economies alike were articulating heightened inflation concerns. Consequently, there were concerns that demand pressures, which had remained reasonably somewhat contained, were being coupled with supply-side pressures and, if not temporary in view of global demand-supply imbalances, could impact domestic inflation significantly. Accordingly, in order to contain inflation and inflationary expectations, the Reserve Bank continued to take pre-emptive monetary actions in a calibrated manner in line with the evolving monetary and liquidity conditions. While leaving the liquidity adjustment facility (LAF) rates unchanged during the year, the Reserve Bank increased the cash reserve ratio by a further 150 basis points during 2007-08. The Government also took various fiscal measures during 2007-08 in the form of reduction in customs duties and restrictions on exports of few essential commodities to augment domestic supply and check price spirals, especially in food items. In order to address the supply-demand mismatches on an enduring basis, the minimum support prices for key crops were also raised to encourage production.

I.16 The Central Government's provisional accounts for 2007-08 continued to reflect its formal commitment of staying on course with the path of fiscal consolidation under the Fiscal Responsibility and Budget Management (FRBM) Rules, 2004. Gross fiscal deficit (GFD) and revenue deficit, as percentages to GDP, at 2.8 per cent and 1.2 per cent, respectively, in 2007-08 (provisional accounts) were lower by 0.7 percentage point each than those in 2006-07. The fiscal correction during 2007-08, thus, turned out to be higher than the minimum reductions of 0.3 per cent and 0.5 per cent (relative to GDP) for GFD and revenue deficit, respectively, stipulated per year under the FRBM Rules, 2004. Furthermore, the provisional accounts continued to show an improvement in primary surplus during 2007-08, reflecting containment of non-interest expenditure below the non-debt receipts. The reduction in deficit indicators was enabled by buoyant revenue growth and improved expenditure management. The gross tax/GDP ratio maintained the upward trend to reach 12.5 per cent in 2007-08 (provisional accounts). Expenditure management efforts focussed on moderating non-plan expenditure, while increasing plan expenditure. Capital outlay, however, continued to remain at a low level of 1.5 per cent of GDP. In this regard, it is noteworthy that the Centre continued to incur extra-budgetary liabilities on account of oil, food, fertiliser and special State Bank of India bonds issued during the year aggregating to 0.8 per cent of GDP (lower than around 1 per cent during 2006-07), of which special bonds to oil companies as partial compensation for their under-recoveries were 0.4 per cent of GDP (lower than that of around 0.6 per cent of GDP during 2006-07).

I.17 The consolidated fiscal position of the State Governments in 2007-08 (revised estimates) reflected further progress towards fiscal correction and consolidation in line with their respective Fiscal Responsibility Legislation (FRL). The consolidated revenue account surplus was placed at 0.5 per cent of GDP in 2007-08 (revised estimates), thereby continuing the surplus position achieved in 2006-07 (accounts) for the first time after 1986-87. In all, 23 States reported revenue surplus during the year, one year ahead of the target for achieving the revenue balance by 2008-09 as prescribed by the Twelfth Finance Commission (TFC). The improvement in the revenue account resulted from higher increase in revenue receipts over the budgeted level, aided by higher devolution and transfers from the Centre, while the States' own tax revenue declined marginally. The State Governments substantially increased capital outlay, especially for irrigation and flood control, transport and water supply and sanitation. The consolidated gross fiscal deficit (GFD) of States based on revised estimates was marginally lower than the budgeted level. Eleven States managed to bring down the ratio of GFD to Gross State Domestic Product (GSDP) to less than 3 per cent, two years ahead of the TFC target. The financing of GFD underwent a compositional shift with the State Governments witnessing a sharp decline in accruals under National Small Savings Fund (NSSF), thereby resorting to higher market borrowings. The recourse to Ways and Means Advances (WMA) by the State Governments was higher during 2007-08 as compared with the previous year. The State Governments, however, continued to maintain high level of surplus cash balances.

I.18 Global financial markets witnessed turbulent conditions during the most part of 2007-08 as losses on US sub-prime mortgage loans escalated into widespread financial stress, raising fears about stability of banks and other financial institutions. The crisis in the sub-prime mortgage market gradually deepened and spilled over to markets for other assets. The surge in demand for liquidity, coupled with growing concerns about counterparty risk, led to unprecedented pressures in major inter-bank markets. Apart from taking action at an individual level, central banks in advanced economies also initiated collective measures in a collaborative manner to ease liquidity stress in financial markets, reflecting the ongoing globalisation of financial markets. Concerns about slowdown in the real economy propelled a broad-based re-pricing of growth risk by the end of 2007. Equity markets in advanced economies remained volatile during the most part of the year, while those in emerging market economies (EMEs) declined sharply from January 2008. Long-term government bond yields in advanced economies softened, reflecting flight to safety by investors and easing of monetary policy in the US. In the currency markets, the US dollar depreciated against major currencies. In contrast to the previous episodes of broad-based asset market weaknesses, EMEs proved to be more resilient than those in advanced industrial economies.

I.19 Financial markets in India remained, by and large, orderly during 2007-08, barring the equity market, which witnessed occasional bouts of volatility during the second-half of August 2007, second-half of December 2007 and beginning of the second week of January 2008 broadly in tandem with trends in international equity markets. The primary market segment of the capital market, which had witnessed increased activity till early January 2008, turned subdued thereafter due to volatility in the secondary market. Over the year, as a whole, however, the equity market registered further gains. Brief spells of volatility were observed in the money market on account of changes in capital flows and cash balances of the Central Government with the Reserve Bank. After the withdrawal of the ceiling on reverse repo acceptances under the liquidity adjustment facility (LAF) in August 2007, interest rates in overnight money markets moved broadly in the reverse repo and repo corridor for the most part of the year. Collateralised money market rates remained below the call rate during the year. Yields in the government securities market softened during the large part of the year.

I.20 India’s balance of payments remained comfortable during 2007-08. Merchandise trade continued to exhibit robust growth during 2007-08. According to the Directorate General of Commercial Intelligence and Statistics (DGCI&S) data, the growth of merchandise exports and imports accelerated to 25.8 per cent and 29.0 per cent, respectively, during 2007-08 as compared with 22.6 per cent and 24.5 per cent, respectively, in the preceding year. The growth in exports in recent years has been underpinned by structural factors like product diversification towards technology-intensive items as well as favourable terms of trade in respect of commodity exports amidst ongoing surge in their prices globally. India's exports also witnessed geographical diversification, as a result of which the share of developing countries in India's exports increased, while that of developed markets such as the European Union (EU) and the US declined. The growth of merchandise imports accelerated in the wake of an unprecedented rise in international crude oil prices and continued buoyancy in capital goods imports. While non-oil imports accounted for about

67 per cent of the total imports in 2007-08, petroleum, oil and lubricants (POL) imports continued to be the single largest component, accounting for about 33 per cent of India's imports. India's POL imports grew from US $ 17.6 billion in 2002-03 to US $ 79.6 billion in 2007-08, largely due to elevated international prices of crude oil. POL imports registered a high growth of 39.4 per cent during 2007-08, reflecting largely the price effect, as growth in volume terms remained relatively low. The 10.1 per cent growth of POL imports in volume terms during 2007-08 was lower than that of 19.3 per cent a year earlier.

I.21 Overall higher import growth relative to exports in recent years has resulted in widening of the trade deficit, on a balance of payments basis, from US $ 10.7 billion in 2002-03 to US $ 63.2 billion in 2006-07 and further to US$ 90.1 billion during 2007-08. The trade deficit, as percentage of GDP, thus widened from 2.1 per cent in 2002-03 to 6.9 per cent in 2006-07 and further to 7.7 per cent in 2007-08. However, the impact of widening of the trade deficit on the current account was contained by a rise in remittances from overseas Indians, growth in software exports and a growth, *albeit* modest, in business services. Gross invisible receipts inched closer to the level of merchandise exports. Net surplus under invisibles at 6.2 per cent of GDP offset a large part of the trade deficit, thereby containing the current account deficit at 1.5 per cent of GDP in 2007-08 as compared with 1.1 per cent in 2006-07.

I.22 Net capital flows to India increased sharply to US $ 108.0 billion (or 9.2 per cent of GDP) during 2007-08, which were 2.4 times higher than the level in 2006-07. Capital flows far exceeded the current account deficit. Both debt and non-debt flows were higher during 2007-08. Direct and portfolio investment inflows and outflows increased sharply. Net foreign direct investment (FDI) inflows to India increased from US $ 22.0 billion during 2006-07 to US $ 32.3 billion during 2007-08, while net FDI outflows rose from US $ 13.5 billion to US $16.8 billion. During 2007-08, portfolio investment, including FII flows, remained volatile. The gross inflows and gross outflows under portfolio investment, including FIIs, were of the order of US $ 235.6 billion and US $ 206.3 billion, respectively, resulting in a net inflow of US $ 29.3 billion during 2007-08 (US $ 3.2 billion in 2006-07). The debt flows (net) amounted to US $ 42.0 billion during 2007-08 led by external commercial borrowings, underpinned by increased financing requirements and arguably by widening of interest rate differentials. Short-term credit also rose sharply, reflecting increased import financing requirements, particularly by oil companies for crude oil imports. Large net capital flows, which were significantly higher than the current account deficit, led to an accretion of foreign exchange reserves, placing continued pressure on monetary management. Although India's stock of external debt rose during 2007-08, debt sustainability indicators remained at comfortable levels. Foreign exchange reserves provided a cover of 140.0 per cent to the stock of external debt at end-March 2008.

I.23 Notwithstanding moderate levels of current account deficit since the early 1990s, India's current receipts-GDP ratio increased from 8 per cent in 1990-91 to 26 per cent in 2007-08, while current receipts and current payments, combined together, increased from 19 per cent to 53 per cent. Gross capital inflows and outflows together constituted 64 per cent of GDP in 2007-08 as compared with 12 per cent in 1990-91. All these indicators suggest growing integration of the Indian economy with the global economy.

I.24 To sum up, the Indian economy continued to exhibit robust growth amidst growing uncertainties in the global economy. While there was moderate deceleration in real GDP growth in industry and services, the recovery in domestic agriculture supported the growth momentum, besides helping in containing inflationary pressures in key agricultural commodities. The growth momentum was underpinned by the continued acceleration in savings and investment rates and by the sustained productivity growth. The fiscal position of both the Centre and the States improved, notwithstanding higher interest payments, subsidies and extra-budgetary liabilities. Notwithstanding global uncertainties, growth in merchandise exports and imports accelerated during 2007-08, reflecting India's well diversified foreign trade. While expansion in aggregate supply capacities alleviated domestic macro-imbalances during 2007-08 to some extent, the increased domestic demand spilled over to the external sector as reflected in the sharp widening of the merchandise trade deficit. Monetary expansion remained higher than the indicative trajectory of 17.0-17.5 per cent in the face of heightened pressures resulting from excess capital inflows on a sustained basis in 2007-08. Inflation picked up during the fourth quarter of 2007-08, necessitating fiscal and administrative measures by the Government to augment domestic availability of key commodities as a first public policy response. The upsurge in inflation in India, however, occurred at a time when global commodities prices touched historically elevated levels and India witnessed huge net capital inflows. Pre-emptive monetary measures were continued to contain inflation and inflationary expectations. However, it is critical to note that the monetary policy responses were calibrated in a manner that could contain the possible adverse impact of the measures on the growth momentum of the economy.

OUTLOOK FOR 2008-09

I.25 The global economy has continued to slow down during 2008 so far mainly due to slackness in growth in advanced economies such as the US, the UK and the Euro area. According to estimates of the International Monetary Fund (IMF), global GDP is expected to decelerate from 5.0 per cent in 2007 to 4.1 per cent in 2008 and further to 3.9 per cent in 2009. According to the IMF, a mild recession in the US economy is expected as the housing market correction continues to exacerbate financial stress. Although emerging and developing economies have not been significantly affected so far by financial market turbulence and have continued to grow at a rapid pace, economic activity is beginning to moderate in some countries, including China. Growth in world trade volume is also expected to moderate from 6.8 per cent in 2007 to 5.6 per cent in 2008 and 5.8 per cent in 2009.

I.26 During 2008-09 (April-August), global financial markets have witnessed generally uncertain conditions. The markets recovered during April-May 2008 in the wake of repeated actions by central banks individually as also in a coordinated manner. However, inter-bank money markets, failed to recover as liquidity demand remained elevated. Central banks continued to work together and consult regularly on liquidity conditions in financial markets. In view of the persistent liquidity pressures in some term funding markets, the European Central Bank (ECB), the US Federal Reserve, and the Swiss National Bank (SNB) announced an expansion of their liquidity measures in May 2008. Credit markets were buoyed by a cautious return of risk tolerance, with the spreads narrowing from the very wide levels witnessed in the first quarter of 2008. Market liquidity improved, allowing for better price differentiation across instruments. The stabilisation of financial markets and the emergence of a somewhat less pessimistic economic outlook also contributed to the turnaround in the equity markets. Government bond yields rose mirroring the developments in the credit and equity markets. Growing perceptions among investors that the impact from the financial turbulence on real economic activity might turn out to be less severe than was anticipated also improved investor confidence. Although the US Fed kept the policy rate unchanged in its meetings held on June 25, 2008 and August 5, 2008, in view of the inflation outlook remaining highly uncertain, it resolved that it would continue to monitor economic and financial developments and would act as needed to promote sustainable economic growth and price stability. Financial markets came under stress again in June and early July 2008 as concerns mounted about the losses and longer-term profitability of two US mortgage companies. In order to further enhance the effectiveness of its existing liquidity facilities, the US Federal Reserve announced a package of measures on July 30, 2008 which included: (i) extension of the Primary Dealer Credit Facility (PDCF) and the Term Securities Lending Facility (TSLF) through January 30, 2009; (ii) introduction of auctions of options on US$ 50 billion of draws on the TSLF; (iii) introduction of 84-day Term Auction Facility (TAF) loans as a complement to 28-day TAF loans; and (iv) increase in the Federal Reserve's swap line with the ECB to US$ 55 billion from US$ 50 billion in May 2008. In association with this change, the ECB and the SNB also adapted the maturity of their operations. Equity markets recovered somewhat from end-July 2008 reflecting incipient decline in the crude oil prices.

I.27 Going forward, the overall balance of risks to the short-term global growth outlook remains tilted to the downside with growth in advanced economies expected to fall well below the potential. A critical risk comes from the ongoing financial market turbulence, and its possible ramifications for the health of the financial system as a whole. Interaction between negative financial shocks and domestic demand particularly through the housing market remains a concern for the United States and to a lesser degree for Western Europe and other advanced economies. The emerging market and developing economies, which have not been seriously impacted so far by the financial market turbulence, are expected to provide some cushion to the global economy. On the other hand, globally, inflation has risen considerably from its level a year ago in advanced economies and EMEs alike. Higher and more volatile prices of food, energy and other commodities such as metals have imparted a significant upside bias to inflation and inflation expectations across the world, leading to additional complexity in the conduct of monetary policy at a time of severe financial stress. The resurgence of inflationary pressures has also exacerbated the concerns regarding slowdown in economic activity through their impact on real disposable incomes and consumers' purchasing power. Furthermore, as monetary policy may be tightened to modulate demand due to increasing global concerns relating to inflation and inflation expectations, emerging markets are likely to witness some moderation in their growth momentum too. The outlook on capital flows to the emerging markets remains uncertain. The massive injections of liquidity that have been made by central banks in advanced economies in recent months to assuage financial market turbulence could lead to large capital flows to the EMEs. On the other hand, in the event of abrupt change in global sentiments, or monetary policy actions, the possibility of reversal of capital flows can also not be ruled out. While EMEs have remained resilient so far, there is uncertainty as to how long, and to what extent the divergence of growth performance between advanced economies and EMEs will persist in future.

I.28 According to the latest forecast by the India Meteorological Department, the rainfall during South-West Monsoon season (June to September 2008) is likely to be 100 per cent of normal, with a model error of +/-4 per cent. The cumulative rainfall during the season so far (up to August 13, 2008), has been 2 per cent above normal as compared with 5 per cent above normal in the corresponding period of the previous South-West Monsoon season. Although, in comparison with last year's monsoon the spatial distribution has not been as satisfactory, by and large, monsoon conditions have been favourable so far in large parts of the country. Deficient/scanty rainfall in some regions, however, could affect the prospects of some crops. As on August 7, 2008, the total live water storage of 81 major reservoirs was 37 per cent of the full reservoir level (FRL), which was lower than the last year (57 per cent) and also lower than the average of 40 per cent for the past ten years. The sowing of *kharif* crops has been progressing with the area coverage (as on August 8, 2008) under rice showing a significant increase. However, the area coverage in respect of pulses, sugarcane and cotton declined.

I.29 Industrial production growth during April-June 2008 at 5.2 per cent was lower (10.3 per cent growth a year ago) mainly on account of a slowdown in the manufacturing growth (to 5.6 per cent from 11.1 per cent a year ago) and electricity growth (to 2.0 per cent from 8.3 per cent a year ago). In terms of use-based classification, the slowdown was reflected in all the sectors, including that in the capital goods sector, which had performed exceedingly well during the previous few years. The capital goods sector recorded a growth of 6.5 per cent during April-June 2008 (19.1 per cent during April-June 2007). The growth of core infrastructure industries was placed at 3.5 per cent during April-June 2008 as compared with 6.3 per cent a year ago, with all the industries witnessing deceleration, barring coal.

I.30 Available information on lead indicators of services sector activity presents a mixed picture. While growth in tourist arrivals, revenue earning freight traffic of the railways and export cargo handled by civil aviation accelerated during 2008-09 (up to May/June), growth decelerated in respect of some other indicators such as cargo handled at major ports and civil aviation. Some deceleration was also observed in respect of growth rates of commercial vehicles production, and cement and steel during April-June 2008, which are the lead indicators of transportation and construction, respectively.

I.31 The Central Government proposed to strengthen the fiscal consolidation process as stipulated under the FRBM Rules, 2004 by budgeting the revenue deficit and gross fiscal deficit (GFD) at 1.0 per cent of GDP and 2.5 per cent of GDP, respectively, during 2008-09. The gross tax-GDP ratio was budgeted at 13.0 per cent during 2008-09. The targets relating to fiscal deficit were set to be achieved as per the mandate, while those relating to revenue deficit were rescheduled primarily on account of a conscious shift in plan priorities in favour of revenue expenditure-intensive programmes and schemes and systemic rigidity in non-plan expenditure in the short term, particularly arising from committed and obligatory expenditure such as interest payments, pensions, salaries and defence. The ongoing reforms and fiscal correction initiatives would continue to support domestic demand and investment, both of which are the main drivers of growth in GDP. During the current financial year (April-June 2008), the Central Government's revenue deficit and GFD were at 1.4 per cent of GDP and 1.6 per cent of GDP, respectively, which were lower than those during the same period of the last fiscal year. In absolute terms, while the fiscal deficit was lower by Rs.26,278 crore during April-June 2008, the primary deficit was lower by Rs.27,916 crore. It, however, may be noted that the GFD and primary deficit during April-June 2007 included the capital expenditure to the tune of Rs.35,531 crore incurred by the Government on account of purchase of the Reserve Bank's stake in State Bank of India (SBI). After adjusting for the SBI related transaction, the GFD and primary deficit for April-June 2008 were higher by Rs.9,253 crore and Rs.7,615 crore, respectively, than GFD and primary deficit during April-June 2007. Adjusted for SBI related transaction, GFD, as percentage of budget estimates, at 64.6 per cent in April-June 2008 was higher as compared with 50.9 per cent in April-June 2007. Tax collections grew by 28.4 per cent during April-June 2008 as compared with the first quarter of the last fiscal year to reach 2.1 per cent of GDP, while Plan expenditure rose from 1.0 per cent of GDP to 1.2 per cent of GDP during the same period. Non-tax receipts also increased over the corresponding period a year ago. During 2008-09, gross and net market borrowings (up to August 14, 2008) amounted to 54.5 per cent and 57.8 per cent, respectively, of the full year estimates as compared with 51.5 per cent and 50.6 per cent, respectively, a year ago. The weighted average maturity of dated securities during 2008-09 (up to August 14, 2008) at 15.21 years was higher than 14.32 years during the corresponding period of the previous year. During the same period, the weighted average yield increased to 8.72 per cent from 8.24 per cent.

I.32 The State Governments budgeted for higher consolidated revenue surplus during 2008-09 than that in the previous year, which would facilitate a reduction in the GFD to 2.1 per cent of GDP from 2.3 per cent during 2007-08. The increase in revenue surplus would result primarily from higher revenue receipts. Capital outlay would be maintained at 2.7 per cent of GDP in 2008-09 (BE) as in the previous year. The State Governments budgeted to maintain the ratio of development expenditure at 10.5 per cent during 2008-09 as in the previous year. In all, 25 State Governments have budgeted revenue surplus for 2008-09, the final year of the TFC target of eliminating revenue deficit. Furthermore, as many as 17 State Governments budgeted GFD-GSDP ratio at 3 per cent or less, a year ahead of the TFC target. The achievement of the TFC targets ahead of the recommended schedule by a number of State

Governments reflects strong growth in tax revenues, both States' own and devolution from the Centre, and higher grants-in-aid. While States have been able to scale up capital outlay, there has been some rationalisation of revenue expenditure during the Fiscal Responsibility Legislation (FRL) period. The financing pattern of GFD would undergo a compositional shift with a decline in accruals under the NSSF. As a result, the market borrowings would emerge as the major source of financing of GFD. The State Governments continued to maintain a high level of cash surplus during 2008-09 (up to July), as reflected in their investments in intermediate and auction Treasury Bills.

I.33 Expansion of money supply (M_3), (y-o-y), as on August 1, 2008 (19.6 per cent) was lower than a year ago (21.8 per cent), but higher than the indicative projection of 17.0 per cent[2] set out in the First Quarter Review of Annual Statement on Monetary Policy (July 2008). Growth of aggregate deposits decelerated due to deceleration in both demand and time deposits. Growth in bank credit, on the other hand, accelerated with growth in non-food credit of scheduled commercial banks (SCBs), y-o-y, placed at 26.2 per cent on August 1, 2008 as compared with 23.5 per cent a year ago. Accordingly, incremental credit-deposit ratio of SCBs rose to 86.0 per cent from 67.2 per cent a year ago. Investments in SLR securities by SCBs were at 27.0 per cent of their net demand and time liabilities as on August 1, 2008 (27.8 per cent at end-March 2008) as compared with 28.6 per cent a year ago. Growth of reserve money, y-o-y, as on August 15, 2008 at 31.1 per cent (24.3 per cent adjusted for the first round impact of increases in the CRR) was higher than 24.1 per cent (14.2 per cent adjusted for the first round effect of increases in CRR) a year ago.

I.34 Headline inflation firmed up further to 12.6 per cent on August 9, 2008 from 7.7 per cent at end-March 2008 (and 4.2 per cent a year ago), partly reflecting the impact of another round of upward revision in the prices of administered petroleum products such as petrol (11.2 per cent), diesel (9.8 per cent) and LPG (13.9 per cent[3]) as well as increase in prices of freely-priced petroleum products. Prices of non-administered petroleum products increased in the range of 19–56 per cent over end-March 2008 as compared with an increase of around 30 per cent in international crude oil (Indian basket) prices between March 2008 and July 2008. As a result, fuel group inflation hardened to 18.0 per cent, year-on-year, on August 9, 2008 in contrast to a decline of 2.0 per cent a year ago.

I.35 Apart from fuel prices, the intermittent but sharp increases in basic metals prices in line with international trends, along with iron ore prices were the other major factors that have contributed to inflation during 2008-09 so far. Manufactured products' inflation hardened to 10.9 per cent on August 9, 2008 from 7.3 per cent at end-March 2008 (and 4.7 per cent a year ago) which, apart from metals, was due to increase in the prices of edible oils and oil cakes as well as recent firming up of textiles prices, which reflected, to an extent, the continued hardening in the prices of inputs such as oilseeds and raw cotton. The increases in the prices of fertilisers as well as machinery and machinery tools have also contributed to the hardening of manufactured products inflation. The generalised increase in manufactured products inflation suggests the persistence of demand pressures and the existence of supply inelasticities. Primary articles inflation firmed up to 11.8 per cent on August 9, 2008 from 9.7 per cent at end-March 2008, driven by the hardening of vegetables, raw cotton and oilseeds prices. Various measures of consumer price inflation were placed higher (7.3–9.4 per cent) in June/July 2008 than those in March 2008 (6.0–7.9 per cent).

I.36 Going forward, there are some upside risks to inflation. While the freely-priced petroleum products have been adjusting continuously, the administered petroleum product prices have been revised upwards only twice since February 2007. Thus, the prices of freely priced petroleum products

[2] The indicative projection for money supply for 2008-09 was revised from 16.5-17.0 per cent set out in the Annual Policy Statement (April 2008) to 17.0 per cent in the First Quarter Review (July 2008).

[3] The announced LPG price increase was 20.3 per cent in June 2008.

in India could be expected to move in tandem with international prices during the rest of the year, while those of administered products, barring kerosene and LPG to an extent, may necessitate some upward revision. As against the almost 134 per cent increase in prices of international crude oil (Indian Basket) from US $ 56.6 per barrel in February 2007 to US $ 132.3 per barrel in July 2008 (127 per cent increase in rupee terms), domestic prices of freely-priced petroleum products increased by around 87 per cent over the same period. In contrast, however, administered prices of petrol and diesel have increased by only about 14 per cent since February 2007. There, thus, remains a large overhang of pass-through from past increases in international crude oil prices. As such, any incremental increase in international crude prices, which at the current juncture cannot be ruled out even though spot prices have eased from the peak of around US $ 145 per barrel in early July 2008 to below US $ 120 per barrel in August 2008. This scenario will not only result in a further pass-through to freely-priced petroleum products prices, but also necessitate upward revision in administered prices of petrol and diesel as well. These revisions would push up inflation directly, besides feeding through the production chain indirectly. However, the total impact would depend both on the extent of pass-through to consumers and the pricing power of firms, on the one hand, and the potential contraction in aggregate demand due to comparatively reduced expenditure on other items, on the other. Furthermore, the extent of such immediate hardening of inflation would lead to the build up of inflationary expectations. This, however, needs to be assessed along with the second round effects of demand contraction that could have a moderating influence on overall inflation. Moreover, the adverse impact may neither be homogenous across various producing and using sectors nor instantaneous across sectors. Given the current structure of the Indian economy, whereby services constitute the predominant share of GDP, the adverse impact of fuel price pass-through on the GDP growth in India, may be somewhat lower relative to other EMEs.

I.37 The outlook on international crude oil prices continues to be uncertain and, if the forecast by the US Energy Information Administration (EIA) is any indication, oil prices (WTI) could rise further in future. Any further increase in international crude prices is likely to put further pressures on the oil import bill in view of sustained growth in domestic consumption demand for petroleum products. There is also a view that slowdown in global economic activity may moderate demand and speculation. Accordingly, it is argued that there is a possibility, *albeit* remote, of a drastic reduction in the level of crude prices in the period ahead. In the event of international crude oil prices falling below the level up to which pass-through to domestic petroleum and oil (POL) product prices has occurred, there could be some easing of domestic inflation. Similarly, there is also a view that international prices of other commodities, including metals could also moderate with the slowing down in aggregate demand globally. While such moderation in some global commodity prices in future cannot be ruled out, it may be prudent to assume that in all likelihood, the current elevated levels would continue in future. However, should oil prices continue to soften as in recent weeks and domestic inflation moderate from the current elevated levels to tolerable levels, the evolving stance of overall macroeconomic and monetary policy would need to be informed by such developments. At the same time, if oil prices continue to remain at an elevated level and inflationary pressures persist, it is critical to demonstrate on a continuing basis a determination to act decisively, effectively and swiftly to curb any signs of adverse developments in regard to inflation expectations by enabling an adjustment of overall demand on an economy-wide basis, particularly in an environment of limited supply elasticities in the short run.

I.38 Apart from oil, coal and electricity prices also pose upside risk to inflation. Although domestic coal prices have increased moderately during 2007-08, higher imports at increasingly higher prices could exert upward pressures on domestic coal prices. Looking at the past relationship, it is observed that the pass-through of increase in coal/oil prices into electricity prices has declined in recent years, reflecting above average increase in domestic production of coal and electricity. However, in view of the sharp increase in international prices of crude oil, gas and coal, some pass-through to coal and electricity prices cannot be ruled out, especially as more than half of India's energy needs are coal based. Some hardening of domestic iron and steel prices, another major driver of inflation, is also expected on account of rising input costs of iron ore and coking coal globally, notwithstanding improved domestic and world steel production. Other metal prices are expected to ease somewhat in line with global trends, reflecting the slowing global manufacturing demand. Pressures from oilseeds/ edible oils/oil cakes prices may continue in view of lower domestic *rabi* production and lower than normal acreage under current *kharif* oilseeds crop as well as firm international prices. Furthermore, the hardening of domestic raw cotton prices in line with international prices is likely to continue during 2008-09 in view of sharp decline in *kharif* crop acreage up to August 8, 2008, which may feed into textiles prices, as has been observed in the recent past (the WPI of textiles has increased by almost 12.5 per cent over end-March 2008). Thus, inflationary pressures from the supply side during the rest of the year on account of both pass-through from international prices and domestic demand-supply imbalances of certain key commodities need to be carefully assessed.

I.39 At the same time, the surge in inflation also indicates intensification of pressures on domestic demand as reflected in continued strength in fixed investment, growth in monetary aggregates above the indicative trajectory, rise in incremental non-food credit-deposit ratio of banks and evolving fiscal conditions. While capital flows have slowed down, a possible change in direction of capital flows also needs to be continuously assessed. Fiscal developments in the early months of 2008-09 indicate some stress on the financial position of the Union Government. Growing extra-budgetary liabilities and enhanced expenditures on subsidies, loan waivers and salaries in the rest of the year may warrant close and careful monitoring of fiscal situation. Fiscal policy generally tends to operate as a counter cyclical stabiliser, whereby during periods of aggregate demand pressures, Government expenditure is contained and higher revenue is generated, and during downswing, the government expenditure is stepped up and the revenue generation activity is slowed down. However, in India, rigidity in Government expenditure hinders the operation of counter-cyclical fiscal policy. In fact, Government finances in India are under pressure at a time when the economy is already facing demand pressures.

I.40 Indian financial markets remained largely orderly during 2008-09 (up to August 20, 2008). Brief spells of volatility were observed in the money market mainly on account of variations in cash balances of the Central Government with the Reserve Bank and changes in capital flows. Interest rates in overnight money markets remained generally consistent with the informal corridor set by reverse repo and repo rates. Interest rates in the collateralised segment of the overnight money market remained below the call rate. In the foreign exchange market, the Indian rupee for the most part depreciated against the US dollar in the wake of hardened oil prices and increased demand for dollars. Yields in the Government securities market hardened. The Indian equity markets witnessed correction until mid-July 2008 amidst high volatility in tandem with trends in major international equity markets, reflecting the impact of global factors (apprehensions of global inflation, slowdown in corporate earnings and hardening of oil prices) as well as domestic factors (rise in inflation, higher borrowing costs and slowing industrial growth). From mid-July 2008, domestic stock markets recovered reflecting softening of crude oil prices and increase in the major global equity indices. As on August 20, 2008, domestic stock market indices, however, remained below their end-March 2008 levels.

I.41 Growth in merchandise exports accelerated, while imports showed moderation during the first quarter of 2008-09 as compared with the first quarter of 2007-08. According to DGCI&S, merchandise exports increased by 22.4 per cent during April-June

2008 (20.4 per cent a year ago). Imports expanded by 29.8 per cent (38.0 per cent a year ago), led by a higher growth in oil imports (50.4 per cent as compared with 23.9 per cent), and while non-oil imports growth decelerated (20.9 per cent as compared with 45.1 per cent). The acceleration in the growth of oil imports reflected mainly the impact of escalation of international crude oil prices. The trade deficit widened to US $ 30.4 billion during April-June 2008 from US $ 21.5 billion during April-June 2007.

I.42 Capital flows have been volatile during 2008-09 (up to early August 2008). Net capital flows during 2008-09 so far were lower than those in the corresponding period of 2007-08 mainly on account of outflows by foreign institutional investors (US $ 4.7 billion) during 2008-09 (up to August 8, 2008) in contrast to net FII inflows (US $ 10.1 billion) a year ago. On the other hand, net FDI flows into India were placed higher at US $ 10.1 billion during April-June 2008 as compared with US $ 5.0 billion during April-June 2007. The funds raised through issuances of ADRs/GDRs abroad were also significantly higher (US $ 999 million) during April-June 2008 as compared with April-June 2007 (US $ 316 million). NRI deposits recorded a net inflow (US $ 360 million) during April-June 2008 mainly due to inflows under the rupee deposit accounts as against a net outflow (US $ 446) during April-June 2007. As on August 15, 2008, foreign exchange reserves declined by US $ 13.5 billion over the end-March 2008 level.

I.43 The Reserve Bank, in its Annual Policy Statement for 2008-09 (April 2008), placed real GDP growth in the range of 8.0-8.5 per cent for policy purposes, assuming that (a) global financial and commodity markets and real economy would be broadly aligned with the central scenario as then assessed; and (b) domestically, normal monsoon conditions would prevail. In view of the lagged and cumulative effects of monetary policy on aggregate demand and assuming that supply management would be conducive, capital flows would be managed actively and in the absence of adversities emanating in the domestic or global economy, the Statement noted that the policy endeavour would be to bring down inflation from the then high level of above 7.0 per cent to around 5.5 per cent in 2008-09 with a preference for bringing it as close to 5.0 per cent as soon as possible, while recognising the evolving complexities in globally transmitted inflation. The resolve, going forward, according to the Annual Policy Statement, would continue to be to condition policy and perceptions for inflation in the range of 4.0-4.5 per cent so that an inflation rate of around 3.0 per cent became a medium-term objective consistent with India's broader integration into the global economy and with the goal of maintaining self-accelerating growth over the medium-term.

I.44 In the First Quarter Review of the Annual Statement of Monetary Policy in July 2008, it was noted that while in the absence of unanticipated weather adversities, moisture conditions should support a continuation of the above medium-term trend growth in agriculture, moderation could persist in the industrial and services sectors in the short-term, notwithstanding the still robust momentum in these sectors. It also noted that according to the IMF, world GDP growth during 2008 was also expected to decelerate by close to one percentage point in relation to 2007 with second round effects on world GDP growth. Accordingly, it indicated that taking into account aggregate demand and supply prospects, for policy purposes, a projection of real GDP growth of around 8.0 per cent appeared a more realistic central scenario at the then prevailing juncture, barring domestic or external shocks. The First Quarter Review also pointed out that escalation in inflation had become a global phenomenon and the increase in inflation in India over the previous year was not proportionately different from elsewhere. While the policy actions, according to the Review, would aim to bring down the prevailing intolerable level of inflation to a tolerable level of below 5.0 per cent as soon as possible and around 3.0 per cent over the medium-term, a realistic policy endeavour would be to bring down inflation from the then prevailing level of about 11.0-12.0 per cent to a level close to 7.0 per cent by March 31, 2009.

I.45 The stance of monetary policy in 2008-09, according to the Annual Policy Statement, would be governed by the evolution of inflationary pressures from escalated and volatile food and fuel prices, which were common to both global and domestic economy with some elements of contagion. Overall, relative to the global economy, the Statement observed that there was less uncertainty about the prospects for the Indian economy. The moderation in growth in the Indian economy was likely to be lower in comparison with the global economy, which was likely to witness a significant slowdown in growth. Accordingly, domestic factors would continue to dominate the policy setting, with the emphasis on inflation expectations so as to maintain the hard-earned gains in terms of both outcomes of India's growth momentum and positive sentiment. While the demand pressures persist in India and investment demand continues to be strong, the supply response could be expected to improve further alongside a build up of additional capacities. Therefore, critical to the setting of monetary policy would be the anchoring of expectations relating to both global and domestic developments. Accordingly, the overall stance of monetary policy in the Annual Policy Statement was stated broadly to ensure a monetary and interest rate environment that accorded high priority to price stability, well-anchored inflation expectations and orderly conditions in financial markets while being conducive to the continuation of the growth momentum.

I.46 The First Quarter Review, while reiterating the Annual Policy stance for 2008-09, noted that there was an urgent need for monetary policy to address aggregate demand pressures, which were strongly in evidence, by continuing with measured responses on an ongoing basis, in a timely manner. Various measured responses beginning September 2004, which had moderated early signs of overheating that emerged in 2006-07, would continue to work in conjunction with supply side measures to bring down inflation to more acceptable levels in the near future. Consistent with the stance of monetary policy and on the basis of incoming information on domestic and global macroeconomic and financial developments, the Reserve Bank continued with its policy of withdrawal of monetary accommodation. In view of the progressive build up of underlying inflationary pressures, monetary policy recognised the need to smoothen and enable the adjustment of demand on an economy-wide basis so that inflation expectations were contained.

I.47 Accordingly, the Reserve Bank continued taking monetary tightening measures during 2007-08 (April-March) and 2008-09 (up to August). The cash reserve ratio (CRR) was increased by 150 basis points in three phases during 2007-08 from 6.0 per cent to 7.5 per cent. The CRR was raised by 50 basis points in two stages of 25 basis points each, effective fortnights beginning April 14, 2007 and April 28, 2007. This was followed by another hike of 50 basis points to 7.0 per cent with effect from the fortnight beginning August 4, 2007. The CRR was further raised by 50 basis points to 7.5 per cent effective from the fortnight beginning November 10, 2007. During 2008-09 (up to August 2008), the Reserve Bank further raised the CRR by 150 basis points in four phases to 9.0 per cent. The repo rate under the liquidity adjustment facility (LAF) was increased by 25 basis points effective June 12, 2008 and further by 50 basis points to 8.5 per cent effective June 25, 2008 and further to 9 per cent effective July 30, 2008. Thus, the cumulative increase in the CRR and the repo rate was 450 basis points and 300 basis points, respectively, since September 2004. This consistent and calibrated approach of measured monetary policy tightening reflected the Reserve Bank's clear commitment to the maintenance of price and financial stability, while maintaining the growth momentum at desired levels.

I.48 To sum up, going forward, apart from global risks, outlook for the Indian economy is also contingent upon unfolding of domestic risks. While industrial and services sector activity has moderated, the outlook for agriculture would continue to depend upon the progress of monsoon. The outlook for domestic food prices depends crucially on the behaviour of agricultural production. Imports can be used only to a limited extent to meet shortfalls in domestic production. In the short run, output largely depends on seasonal conditions (level and intraseasonal distribution of rainfall) and their regional pattern. Inflation risks have increased sharply and appear to be persistent. While inflationary pressures seem common to both advanced and emerging market economies, including India, with some elements of contagion, there is less uncertainty about the growth prospects of the Indian economy in comparison with other economies. Unlike the global economy, which is expected to slow down significantly, the Indian economy is likely to witness a slight moderation in the growth which continues at an elevated level. The conduct of monetary policy in the context of bringing down inflationary pressures is, however, getting complicated by global developments and domestic demand pressures.

REAL SECTOR

Agriculture

I.49 The ongoing surge in global prices of major food items, which began in 2006, has significant implications for the domestic agricultural sector and overall macroeconomic and financial stability. Global prices in July 2008 (y-o-y) for several food items such as rice (140 per cent), wheat (38 per cent), oilseeds (40-77 per cent), edible oils (34-68 per cent) and sugar (33 per cent) were significantly higher than their levels prevailing a year ago. Reflecting the sustained uptrend, the food price index (compiled by the IMF), which had increased by 10.5 per cent in 2006 and 15.2 per cent in 2007, rose sharply by 40 per cent, year-on-year, in July 2008, surpassing the levels previously witnessed in the late 1980s. On the demand side, apart from increase in consumption, driven by growth in population along with its dietary shifts, income, globalisation and urbanisation, the growing diversion of food for non-food uses such as bio-fuel production in the wake of surge in oil prices also contributed to food inflation. According to the IMF, rising corn-based ethanol production accounted for three-fourth of the increase in global corn consumption during 2006–07, which not only drove corn prices but also prices of other food crops. Arresting this diversion would be contingent upon (a) future correction of policies that continue to encourage the use of food for biofuel production; (b) advancement of technological development that enables viable 'second generation' biofuel production based on cellulosic feed stocks instead of food and feed crops; and (c) the future course of oil prices. Internationally, on the supply side, land and water constraints, underinvestment in rural infrastructure, lack of access to inputs, and weather disruptions have impaired productivity growth in agriculture and the needed production response. Inventory levels of those major food crops, whose production levels have not kept pace with rising demand growth in recent years, declined to levels last seen in the 1970s. Consensus is emerging about the absence of adequate policy incentives for farmers to increase their supply of food and other agricultural products to cope with the growing demand. Furthermore, drought conditions, possibly induced by climate change, in the main producing regions such as Australia and Ukraine also caused shortfalls in the production. Bad weather led to poor global wheat harvest for the second consecutive year in 2007, which bid up wheat prices, and created spillovers into other crops through substitution effects. Elevated oil prices increased production costs of food commodities and drove up transportation costs, thereby hindering production response to high output prices. Finally, in the wake of financial market turbulence, reductions in policy rates particularly in the US and investors' search for newer and safer assets, could have promoted financialisation of commodity trade by making inventory holding remunerative, thereby inducing greater volatility in food prices.

I.50 Food prices have also hardened in India in recent times. However, the increase in wholesale prices of various crops in India such as rice (7 per cent), wheat (5 per cent), oilseeds (18 per cent) and edible oils (17 per cent) at end-July 2008 over end-July-2007 was of a much lower order in comparison with the increase in global food prices. Scaling of a new peak in foodgrains production and significant improvement in procurement have resulted in comfortable stocks in the current period, thereby containing undue spurts in food prices in India. At the same time, some concerns have also arisen relating to agriculture production. The performance in agriculture continues to be essentially monsoon-driven. The per capita availability of cereals and pulses also declined. The per capita consumption of cereals declined from a peak of 468 grams per day in 1990-91 to 412 grams per day in 2005-06, while that of pulses declined from 42 grams per day to 33 grams per day during the same period.

I.51 In India, although the share of agriculture in real GDP has declined below one-fifth, it continues to be an important sector as it employs 52 per cent of the workforce. Agriculture growth has remained lower than the growth rates witnessed in the industrial and services sectors. These inter-sectoral differences in the growth performance raise the issue of differential growth in per capita income of people engaged in agriculture relative to those employed in other sectors. Therefore, future policy needs to ensure greater absorption of labour into industry and services so that growth in labour productivity and level in incomes from agriculture can accelerate.

I.52 Stagnation in productivity in agriculture on the one hand, and growing incomes and changes in consumption patterns on the other, have led to demand-supply mismatches in the case of major agricultural commodities. Boosting agricultural production, through increase in gross cropped area (multiple cropping), enhancement in irrigation coverage and improvement in productivity, has remained a challenge in the wake of flattening out of increase in net sown area. Although total irrigation potential increased from 81.1 million hectares in 1991-92 to 102.8 million hectares in 2006-07 (still less than three-fourths of the ultimate irrigation potential), its utilisation was only around 85 per cent. Over the years, the Government's announcement of minimum support prices (MSPs) prior to the commencement of sowing season setting out floor prices (inclusive of bonus) has intended to incentivise crop production and facilitated procurement. The MSPs were revised upwards in 2007-08 over those in 2004-05 in respect of common paddy (33 per cent), wheat (56 per cent), moong and urad (23 per cent each), arhar (14 per cent) and jute (19 per cent). Productivity of crops in India, however, remains not only low relative to other countries, but also shows large inter-state variations. Furthermore, actual yields also lag the levels, which could possibly be achieved through improved practices, as noted by the Steering Committee on Agriculture for the Eleventh Plan.

I.53 According to the OECD-FAO Agricultural Outlook 2007-2016, the global prices of agricultural commodities are expected to rule much above their historic equilibrium levels in the next ten years. This could also have implications for India unless some concrete measures are initiated to address the issue of domestic demand-supply mismatches. While trade and fiscal measures along with imports can address supply-demand mismatches in the short run, in the medium to long run, there is a need to ensure that domestic food management enables maintenance of adequate levels of buffer stocks. Going forward, the overall improvement in foodgrains production and the rise in the level of buffer stocks would assuage supply shortages, dampen inflation expectations, economise on imports and fortify food security in the context of the intensifying food crisis worldwide. There is, however, a need to carefully avoid the possible unintended consequences of building up buffer stocks for market supplies at a time when demand-supply gaps are already strained, while ensuring food security and maintaining price stability.

I.54 The long-term solution lies in addressing structural weaknesses in agriculture such as exhaustion of yield potential of high yielding varieties of rice and wheat, unbalanced fertiliser use, low seeds replacement rate, inadequate incentive system and post harvest value addition. Lack of yield growth, limited varietal break-through, decline in agricultural investment, almost non-existent extension services and low resilience to moisture stress, pest infestation and rising input costs, especially fertilisers and fuel have inhibited agricultural productivity. Therefore, a comprehensive agricultural revamp programme needs to be a policy priority, whereby area-specific high yielding varieties are developed (particularly for wheat and pulses, where domestic production capacity is still inadequate), area under assured irrigation is expanded and accelerated technology diffusion is undertaken through research and extension network. Furthermore, a regionally differentiated agricultural strategy needs to be implemented taking into account local resource endowments, capabilities as well as constraints.

I.55 Among the recent initiatives to overcome demand-supply mismatches, the Central Government launched the National Food Security Mission (NFSM) up in 2007, which set quantitative targets for the Eleventh Plan in respect of rice, wheat and pulses. The Mission's strategy is to bridge yield gaps in potential areas by introducing modern technologies and improved agronomic practices. This would be a significant way forward to meet the projected additional requirement of about 19 million tonnes of foodgrains by 2011-12. Second, the State Governments would also be incentivised to increase their share of public investment in agriculture and allied activities during the Eleventh Plan through *Rashtriya Krishi Vikas Yojana*, a State Plan scheme, which was approved in August 2007. Third, the National Policy for Farmers, 2007 was also approved by the Government, which would, *inter alia*, provide a holistic approach to development of agriculture. Fourth, in order to create an incentive structure to promote balanced use of fertilisers, the Cabinet Committee on Economic Affairs (CCEA) on June 12, 2008 approved a nutrient based pricing regime for all subsidised fertilisers. To ensure easy availability of fertilisers in all parts of the country, the Cabinet Committee also approved a uniform freight subsidy regime for all subsidised fertilisers, which would facilitate availability of fertilisers in all parts of the country, especially in areas which are far from the production facilities and ports by reimbursing freight on an actual basis.

I.56 Going forward, in order to reap the full potential in agriculture, greater focus needs to be placed on modernising the agricultural research system as success so far has been restricted to select crops. This is imperative in view of degradation of natural resource base, especially depleting groundwater table with particularly adverse impact on small and marginal farmers. According to the estimates of the Planning Commission, public expenditure on research would need to increase from the present 0.7 per cent of agricultural GDP to 1.0 per cent by the end of the Eleventh Plan. Second, although investment rates in agriculture have showed some increase in recent years, the levels are still inadequate. Productivity increase in agriculture is critically contingent on enhanced capital formation, both from the public and private sectors. Investment in agriculture as a proportion of GDP needs to be raised substantially. Third, there is a need to promote diversification of agriculture towards horticulture and livestock. Agricultural marketing would be critical for success of this diversification strategy. Since high value agriculture is based on perishable commodities, large investments would be required in modern methods of grading, post-harvest management and development of cold storage supply chains. Fourth, there is need to recognise the benefits of collective representation of farmers in the product and credit markets. Agricultural production is in the hands of a very large number of relatively small and fragmented holdings. Since most of farmers access input and output markets on an individual basis, they are at a great disadvantage both in terms of access to these markets and the terms on which they can get inputs and sell their produce. Creating a legal framework which enables and encourages the emergence of autonomous organisations (co-operatives, producer companies) is essential to improve bargaining power of farmers generally (and of small and marginal farmers in particular), thereby strengthening incentives of faster, more efficient and more equitable growth. In fact, the legislative and institutional arrangements appear to inhibit operation of genuine markets, thus adversely affecting farmers and agriculture as well as related sectors. Concerted and immediate actions to remove such bottlenecks in the related markets are critical. A legislative framework that enables small and marginal farmers to establish autonomous organisations through which they can collectively access inputs and sell produce, would make the market respond more favourably to their needs, and provide the basis for increased investment in agriculture. Fifth, it is imperative to ensure the efficient use of inputs such as water resources, seeds and fertilisers. Appropriate sets of incentives and disincentives for enabling such efficient use of critical and valuable inputs should be very high on the agenda for meaningful policy response. For this purpose, farmers, may also be imparted necessary training by the local administration and research institutes. Finally, there is a need to recognise that access to food for a large section of the population is hindered due to chronic poverty, unemployment and lack of purchasing power. Nearly half of the population still suffers from chronic under-nutrition in the country. Despite significant increase in agricultural production, goals of self-sufficiency in food, food security and nutrition at the household level are yet to be achieved. The medium term prospects for agriculture – important both for sustaining rapid growth with price stability and for the growth of rural employment and incomes – depends on the realisation of targets of irrigation and watershed development and developing yield improving technologies for crops such as oilseeds and pulses and for rainfed areas. Equally important are concerted measures to improve the quality of implementation of these programmes as well as the functioning of institutions for their continuing management. These need to be combined with a pricing policy designed to induce farmers to make more prudent and economical use of key inputs. The challenge, thus, lies in continuously working towards implementing the Government's strategy of faster and more inclusive growth in its multiple dimensions. A comprehensive approach broadly on the lines as described above is most critical at this juncture not only for assuring price stability but also simultaneously serving the objectives of equity, employment-generation and output-augmentation impacting the welfare of an absolute majority of families, including the most disadvantaged.

Industry and Infrastructure

I.57 Industrial growth, which accelerated during the period 2002-03 to 2006-07, moderated in 2007-08 reflecting, apart from the base effect, some slowing down of domestic and external demand. While manufactured exports recorded a higher growth of 19.1 per cent during 2007-08 as compared with 17.0 per cent, a year ago, the performance of some export-oriented industries with low import intensity remained subdued. Hardening of crude oil prices and spike in commodity prices, which form inputs for the industrial sector, increased the costs of industrial production. As alluded to earlier, the deceleration in the consumer goods sector, particularly durables, was partly contributed by the decline in production of those items, which have now become outdated. Shifts in consumption patterns towards new items, however, are not being captured comprehensively in the present series of the IIP with base 1993-94. Thus, the recorded slowdown in the durables segment could be somewhat overstated. Furthermore, the industrial sector faced several supply constraints emanating from the shortages in the cement and steel sectors, which were reflected in a spurt in their prices. Other constraints included industry-specific capacity limitations, inadequate power availability, transportation bottlenecks and other infrastructural services, which exerted pressure on the output.

I.58 A relevant issue in the performance of the manufacturing sector relates to the input costs, particularly that of industrial raw materials and short-term inflation. An upsurge in demand for metals and minerals, which sustains the industrial growth, puts an upward pressure on both domestic and international prices. Fiscal measures in the form of lower duties and taxes were effected in the Budget 2008-09 to provide some relief from high prices. However, the medium-term solution lies in improving the supply response and developing the infrastructure. The coordinated efforts in this direction would remove bottlenecks, which hinder the growth in productivity and result in inefficiency.

I.59 In making the textile industry globally competitive, especially in the post-Multi Fibre Agreement regime, the Government has focused on three areas – stable policy environment, modernisation through technological upgradation, and building of global brands for Indian textiles. In addition to rupee appreciation, demand conditions of the importing countries have also affected the textile exports from India. In order to enable textile exporters to tide over the difficulties, the Government announced a set of measures in July 2007 and in November 2007. For making the Indian textile industry globally competitive, there is need to focus upon technology improvements, better product designing and export diversification.

I.60 The hardening of international crude oil prices poses a serious downside risk to the manufacturing sector growth during 2008-09. Higher oil prices result in rise in transportation cost, which then raises the cost of production and product prices, which, in turn, have an adverse impact on overall demand conditions for the manufacturing sector. In particular, due to uneven availability of power, many manufacturing units in India depend on captive power plants that operate on diesel. The impact of rise in oil prices could be more severe on these units. The rise in input costs might also further affect the consumer durables industry.

I.61 Performance of the infrastructure sector continues to be an area of concern. The performance of the electricity sector was adversely affected by capacity constraints, which were caused, *inter alia*, by problems relating to coal and ash handling units, and water availability, and slow implementation of the setting up of new power capacities. Such issues restrained the operationalisation of new units commercially and hampered power generation in both thermal and hydro power plants. As uninterrupted quality power supply is the basic requirement for industrial development, the Eleventh Five Year Plan proposes to overcome the current power deficit of over 9 per cent by the close of the Plan period. However, the capacity addition programme of the Government shows that only about 64 per cent of the targeted capacity was added during the Tenth Five Year Plan (2002-07) in the power sector. As power is the basic input in almost all economic activities, project delays in the power sector could constrain the ability of the economy to sustain projected high rates of growth. During 2007-08, about 9,263 MW capacity has been added as against the target of 16,335 MW. Another 11,000 MW of capacity is expected to be added during 2008-09. The slow progress in capacity additions has accentuated the power supply deficits and any slippage in achieving the targets may worsen the situation further in the face of increasing demand for power from industry and other sectors. In this context, the concerns relating to the performance of new units and their commercial operationalisation are being examined by the Central Electricity Authority. The Union Budget 2008-09 has budgeted to provide Rs. 800 crore for the Accelerated Power Development and Reforms Programme in 2008-09. Furthermore, there is a proposal to create a national fund for transmission and distribution reforms. One of the major reasons for deficiency in the availability of power is the lower user charges, which in many cases do not reflect the cost of generation and transmission of power. The need is to adjust the user charges whereby the power companies find the generation of power a viable activity. Users are also likely to be willing to pay the appropriate charges if they are assured of good quality and uninterrupted power supply. For instance, according to some reports, some industrial units in a particular city agreed to make available excess electricity to the grid, which, in turn, was made available to consumers but at a higher price.

I.62 Among the core sectors, the coal sector was the only exception during 2007-08, which recorded accelerated growth. While measures have been initiated to increase the coal production to meet the growing demand not only from the electricity sector but also from other utilities, environmental concerns and issues relating to rehabilitation of displaced population due to mining activities and construction of dams also need to be addressed proactively. A new coal distribution policy seeks to facilitate supply of assured quantities and quality of coal to various categories of consumers at pre-determined prices in a regime of enforceable obligations on the part of both the suppliers and consumers of coal.

I.63 In view of shortages and rising prices of petroleum products in recent times, keen interest is being shown globally in setting up of thermal power plants that are not based on oil. As such thermal plants are dependent on coal and gas, the thermal based additions to capacity in India would have implications for the cost of power generation due to increasing prices of gas and coal, and erratic gas supplies would lower plant load factor. Besides, a rise in mineral oil prices could also have an impact on gas prices, which would hamper the production of power. At the margin, renewable energy sources offer an alternative for meeting the growing demand for power. A grid interactive renewable energy capacity of 11,449 MW has already been installed in the country by the end of March 2007. Capacity addition of 15,000 MW from the renewable energy sources has been proposed during the Eleventh Plan period, but progress in this direction is slow. Though the country has hydro potential of over 150,000 MW capacity, new projects in this sector are held up due to various disputes, and other implementation difficulties.

I.64 With rapid urbanisation, the issue of inadequacy of urban infrastructure, including, *inter alia*, mass rapid transport system, drinking water, sewage system, solid waste management, roads and lightings, has come to the fore. The improvement in urban infrastructure can lead to significant gains in productivity. So far, 26 projects with a total cost of Rs.1,766 crore, involving central grant of Rs.952 crore have been sanctioned under the industrial infrastructure upgradation scheme (IIUS). The work on these projects is at different stages of implementation, which would improve the urban infrastructure to some extent. Furthermore, to improve the urban infrastructure, the Union Budget 2008-09 increased the allocation to the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) from Rs.5,482 crore in 2007-08 to Rs.6,866 crore in 2008-09.

I.65 The Approach Paper to the Eleventh Plan (2007-12) has noted the absence of world class infrastructure as the most critical short-term barrier to the growth of the manufacturing sector. It is, thus, imperative that the existing infrastructure facilities, particularly roads, ports, airports, power and urban and rural infrastructure are strengthened to provide growth-enabling environment for the industry. This, in turn, would require augmentation of infrastructure investment. The Planning Commission has projected that the investment in the infrastructure sector should increase to 9.3 per cent of GDP during the Eleventh Plan period from 5.4 per cent in 2006-07. In order to facilitate such investment levels, private participation and public-private partnerships are envisaged to be encouraged.

I.66 While recent data indicate some moderation in the industrial growth, it is possible that some recent developments will improve the prospects for recovery in momentum. Fiscal concessions in the form of raising of income tax exemption limits and adjustment of tax slabs could enhance disposable income of middle-class, which may have a positive impact on consumption demand for industrial goods. Furthermore, reduction in excise duties in respect of various commodities could not only ease inflationary pressures but also lower the prices of a number of consumer goods, thereby making them more affordable. There are, however, also some downside risks to the industrial growth momentum during 2008-09. The under-performance of the power sector in the last couple of months, especially in respect of nuclear and gas-based power plants, might have an adverse impact on the industrial growth. Besides, the elevated global crude oil prices could further add to the inflationary pressures in the economy and dampen industrial growth prospects, both from demand and supply sides. During the past five years of industrial upturn, the core sector growth has not kept pace with the growth in the manufacturing sector, thereby causing apprehensions regarding the sustainability of industrial sector growth.

Services

I.67 The services sector continues to propel the overall growth momentum in India. The phase of robust growth in the Indian economy coincided with marked acceleration in the growth of the services sector beginning from 2003-04. The services sector recorded double-digit growth during the three year period from 2005-06 to 2007-08, underpinned by a significant increase in demand for domestic services. The hotel and tourism industries recorded strong growth on the back of rise in domestic tourism and increased interest of foreign travellers in India. The 'trade, hotels and restaurants' sector grew at double digit rate in the last five years. The domestic retail boom supported the performance of trade, while the improved performance, especially of railways and civil aviation, provided a boost to the transportation sector. Furthermore, the civil aviation sector witnessed unprecedented upsurge in recent years with passengers flown in by domestic operators recording robust growth in the past five years. The operation of low cost airlines, which has made air travel attractive, has resulted in high growth in domestic air passenger traffic, apart from facilitating elevated levels of trade traffic. However, in recent months some moderation is noticed in expansion of activities in hotels, passengers handled at international/domestic terminals and airlines traffic due to several reasons. The rise in aviation turbine fuel (ATF) costs has led to a hike in air fares.

I.68 A surge in exports of business process outsourcing (BPO) and ITES in conjunction with higher demand for real estate and spurt in capital market activity led the growth of 'finance, real estate and business services' during 2007-08. India is a major force in the information technology sector. A number of multi-nationals have leveraged the relative cost advantage and highly skilled manpower base available in India, and have established shared services and call centres in India to cater to their worldwide needs. The IT/ITES sector's contribution to the country's GDP steadily increased from 1.2 per cent in 1997-98 to 6.0 per cent in 2007-08. The ITES sector's export earnings are expected to touch a level of US$ 40.3 billion in 2007-08. The direct employment in the IT/ITES sector is expected to have reached about 2.0 million by the end of 2007-08, an increase of about 375,000 professionals over 2006-07.

I.69 Rising merchandise trade, high inflow of FDI, encouraging investment climate, high level of non-food credit, buoyant domestic demand conditions, and rise in some categories of consumption are likely to provide the necessary growth momentum to the services sector from the demand side. Both domestic and external demand could continue to provide the necessary support to the services sector growth.

I.70 The telecom sector remains at the centre-stage due to strong demand for cellular phones largely in the rural areas, small towns and cities, and steady growth in broadband connections. The monthly addition to mobile subscribers has multiplied in recent years, making communications as one of the fastest growing segments. With growth of network and increased subscriber base, additional spectrum is allotted subject to availability as per the eligibility based on the number of active subscribers, peak traffic of the operator's network, and demographic features of the service area. These criteria are reviewed from time to time taking into account the relevant factors and technological developments. However, there is a need for a transparent spectrum allocation policy to induce healthy competition among operators and enable them to reach out to people in the rural areas.

I.71 There are some concerns that construction activity may be affected in view of the sluggishness in steel and cement production. There are some reports suggesting deceleration in growth of the construction equipment industry. While the slowdown in construction activity in commercial real estate is a welcome development, any deceleration of investment in infrastructure would be a matter of concern. There is, therefore, a need to carefully watch the developments in the construction equipment industry so that it does not affect the speed and quality of infrastructure development.

I.72 Services sector activity is labour intensive and adequate availability of skilled manpower in the economy is critical for its sustained growth. Furthermore, companies worldwide are trying to take advantage of India's labour force. There are signs that rapid growth has resulted in shortage of high quality skills, especially in knowledge intensive industries. There is a need to bridge the demand-supply gap of skilled resources. On the one hand, there is a severe shortage of skilled labour, and on the other, there are a large number of people who are unemployed. The emerging skill shortages in the economy need appropriate policy intervention if India has to retain its competitive position in the services sector. There is need for an increased focus on education at all levels, which will facilitate absorption of unemployed youth in rural areas and at the same time provide skilled resources for the expanding economy, especially the services sector. Issues of both quality and quantity need to be given comparable weight. Vocational training institutes also need to be substantially expanded for meeting the industry requirements as well as generating self-employment opportunities.

I.73 At this juncture, several factors such as strong market demand, upbeat investments, surging new orders, vigorous technology transformation, and adoption in communications, business services, software exports and IT-enabled services are likely to provide strong anchor for the future growth of the services sector. However, rise in international mineral oil prices poses a downside risk to the outlook. Rise in mineral prices may particularly affect the performance of the transport sector, which had 10.4 per cent weight in the services sector and constituted 6.4 per cent of GDP as in 2006-07. A sharp increase in input prices of aviation fuels and petroleum products may also impinge on the pace of growth of this sector. The tourism sector, which heavily relies on various transport services, would also be impacted as tour package costs would soar impacting the hotel industry. Furthermore, as the services sector derives its demand to a large extent from the industrial sector, moderation in the industrial growth momentum might also impact the services sector growth prospects.

I.74 The global slowdown raises uncertainties about the prospects of external demand for both the industry and services sectors in India. Although the Indian industry remains primarily domestic demand driven, there are a few industries, including gems and jewellery, textiles and engineering goods, which have higher dependence on external demand conditions. In the event of some export demand compression for some of India's manufactured exportable items, there could be some impact on certain segments of the manufacturing sector. On the other hand, it could be expected that many global giants such as those in the global automobile sector could continue to outsource their manufacturing operations to low cost destinations like India. In the case of services, those sectors, that have significant dependence on global markets could be affected with a slowdown in global economy. In particular, deceleration in global economic activity could impact the domestic trade and transportation sectors. Furthermore, a loss in the growth momentum globally could also limit business and leisure tourism, which, in turn, could have implications for the performance of hotels. The Indian ITES-BPO industry remains highly dependent on external market conditions as India's ITES exports account for about two-thirds of its ITES-BPO revenues. The impact of lacklustre global economic activity on Indian ITES and BPO services, however, remains uncertain. While cost cutting measures in the developed countries might increase outsourcing to India, a reduction in IT spending in these economies, on the contrary, might work against Indian ITES industry. On the one hand, as the global economy slows down, companies – largely from the developed economies – in their quest for reducing their cost of production/operation might outsource some or a larger part of their operations to cheaper and efficient markets such as India. However, as the global slowdown this time has hit the financial services industry the most, it might see a decline in outsourcing activities to India as the financial services companies reduce their geographical operations.

FISCAL POLICY

I.75 The Central Government was mandated under the FRBM Act, 2003 to reduce its gross fiscal deficit-GDP ratio to three per cent and eliminate its revenue deficit by 2008-09. The fiscal correction process was set to continue in 2008-09 in tune with the legislative mandate with the Centre's gross fiscal deficit-GDP ratio budgeted to decline to 2.5 per cent during 2008-09. It, however, budgeted revenue deficit-GDP ratio at 1.0 per cent and rescheduled its elimination by 2009-10, primarily in order to meet the necessary requirements of revenue expenditure-intensive programmes, particularly at the commencement of the Eleventh Five Year Plan. The systemic rigidity of containing non-Plan committed expenditures in the short run was another contributory factor. Nevertheless, the progress of the Central Government in achieving the quantitative targets has been satisfactory so far under the FRBM Act/Rules.

I.76 Fiscal consolidation of the Central Government under the FRBM Act, 2003 has been revenue-led, underpinned by a significant increase in the tax-GDP ratio. Robust economic growth and macroeconomic stability during the last four years have also resulted in higher than anticipated tax receipts. A steady increase in the tax-GDP ratio for the Central Government was led by direct tax revenues, the share of which in total taxes increased from 41.3 per cent in 2003-04 to 52.1 per cent in 2007-08 (RE). Within direct taxes, the share of corporation tax increased from 60.0 per cent in 2003-04 to 61.1 per cent in 2007-08 (RE). As proportion to GDP, corporation tax increased from 2.3 per cent to 4.0 per cent over the same period, while the personal income tax increased from 1.5 per cent to 2.2 per cent. The scope of deepening fiscal empowerment further through improved tax revenues lies in maintaining a moderate tax structure. In the case of indirect taxes, the services tax has emerged as a rapidly growing source of revenue. The share of the service tax in total indirect taxes increased from 5.3 per cent in 2003-04 to 18.0 per cent in 2007-08 (RE). As a proportion of GDP, the share increased from 0.3 per cent to 1.1 per cent over the same period. There is a need to bring more services into the tax net in consonance with the rise in the share of the services sector in GDP. On the indirect taxes side, the objective has been to integrate the taxes on goods (central excise) and services and finally move to a comprehensive Goods and Services Tax (GST). The stock of tax revenues raised but not realised increased by 10 per cent during 2006-07 to Rs. 99,293 crore at end-March 2007.

I.77 Expenditure management policy of the Central Government in recent years has aimed at containing non-developmental expenditure and providing adequately for priority spending on social development and infrastructure. However, the progress in this regard shows that the non-development expenditure of the Central Government declined from 8.8 per cent of GDP in 2003-04 to 8.3 per cent in 2007-08 (RE) and is further budgeted to come down to 7.4 per cent in 2008-09. Although 80 per cent of non-plan expenditure is obligatory in nature on items like defence, interest payments, subsidy and transfers to the State Governments, the Government has considered creation of further fiscal space through carefully calibrated fiscal consolidation in support of inclusive growth as an important part of its expenditure management. The share of expenditure on education in the combined expenditure of the Centre and States was budgeted to increase from 10.0 per cent in 2007-08 to 10.8 per cent in 2008-09, and that of health from 4.9 per cent to 5.0 per cent. It may, however, be noted that the share of public expenditure on education and health in India is low by international standards. According to the World Bank, the share of public expenditure on health in India at 1.0 per cent of GDP was lower than that in Brazil (3.5 per cent), China (1.8 per cent) and least developed countries (1.9 per cent) in 2005. Under the FRBM Act obligations, containing revenue expenditure and encouraging capital expenditure for productive assets are critical for sustaining the fiscal correction. Keeping this in view, Government expenditure has increasingly focused on improving the quality of implementation and enhancing the efficiency and accountability of the delivery mechanism for translating budgetary outlays into intended outcomes. In order to improve transparency and accountability, Ministries are being encouraged to release summaries of their monthly receipts and expenditure to general public (through their website) and in particular, disclose scheme-wise funds released to different States. The consolidated monthly position of receipts and payments is being placed in public domain every month.

I.78 Finances of the Central Government may come under pressures with the implementation of the Sixth Pay Commission (SPC) award (estimated at 0.4 per cent of GDP), loss of revenues on account of reduction in duties on petroleum products (estimated direct impact of 0.4 per cent of GDP), likely increase in fertiliser subsidy due to sharp rise in international prices of raw materials and fertilisers and implementation of debt waiver and debt relief scheme for farmers (1.4 per cent of GDP spread over four fiscal years). Furthermore, as announced, the Government may additionally incur increasing liabilities towards additional issuances of oil and fertilisers bonds, which would impact the level of public debt. Interest expenditure on account of these bonds would, however, tend to increase revenue expenditure and widen revenue and fiscal deficits. Although the issuance of such bonds does not directly increase the conventionally measured fiscal deficit, the proceeds from such bonds are used to effectively fund current subsidy expenditures. Their macroeconomic and financial market impacts, and crowding out of resource availability to the private sector are similar to expansion of the fiscal deficit. Therefore, in order to ensure that fiscal imbalances do not diverge from the budget estimates, efforts are needed to improve tax buoyancy through widening of tax base and further improvement in tax administration. In the near term, tax buoyancy and the process of fiscal consolidation would also crucially hinge upon macroeconomic growth and stability.

I.79 Finances of the State Governments witnessed significant improvement with the implementation of Fiscal Responsibility Legislations (FRLs). As the State Governments come closer to meeting the objective of reduction in deficit indicators, they need to place greater emphasis on sustaining the progress. It would be important to generate adequate fiscal space through revenue augmentation that could be utilised for financing development expenditure. The generation of revenues through improvement in efficiency of tax collection and appropriate charges on public services assume added significance under the rule-based fiscal framework on account of implicit cap on financing of expenditure by borrowings. The States can, however, price a range of services that they provide appropriately only by improving the quality of delivery. While the fiscal consolidation efforts have enabled a reduction in key deficit indicators, the level of States' outstanding liabilities continues to remain high as compared with many emerging and developing countries. Although there has been some reduction in the debt-GDP ratio due to the debt consolidation and relief measures, the States continue to hold a large chunk of high cost debt. Some States have prepaid high cost debt on account of comfortable cash balance position. The States need to factor in the impact of higher staff remuneration based on the recommendation of the Sixth Pay Commission of the Central Government. The State Governments may incur revenue losses due to lower tax devolution on account of reduction in excise and customs duties on petroleum products by the Centre and reduction in sales tax on these products by some States. In the near future, State finances would be shaped by the recommendations of the Thirteenth Finance Commission that was set up in November 2007 (award period: 2010-15) and the implementation of the Goods and Services Tax (GST), which is expected to come into force from April 1, 2010.

I.80 The management of public finances during the last four years, mandated under FRBM Act, 2003, has been broadly on track so far. The robust economic growth and macroeconomic stability, in general, resulted in higher than anticipated tax revenues and created fiscal space for meeting the demand for resources. The revenue-led consolidation reflected the combined effect of a balanced and reasonable tax rate structure with fewer exemptions and wider coverage of tax base, and efficiency of tax administration. The ongoing reforms and fiscal correction initiatives, in turn, supported domestic demand and investment, thereby propelling the economic growth. Notwithstanding the improved position, there are several underlying fiscal pressures that are not entirely evident in the headline fiscal indicators. Although implementation of fiscal rules have had a positive effect of focusing attention on fiscal issues, there has been an increased recourse to extra-budgetary fiscal liabilities, as alluded to above. The issue is not merely one of transparency in fiscal operations or a *de facto* larger Government borrowing programme than admitted, but of greater significance for the Government debt market and monetary management. The issuance of bonds has been resorted to frequently for financing not only fuel, food and fertiliser subsidies, but also deferred liabilities with regard to bank loan waivers and contribution to capital of public sector banks. The significant quasi-fiscal transactions to finance recurrent revenue expenditures through *de facto* borrowings create apprehensions about the quality of the fiscal consolidation process that is underway and poses challenges for fiscal, external and monetary management. There is, however, a need to recognise that while insulation of the economy from temporary shocks emanating from higher international commodity prices cannot be avoided, withholding the pass-through of the permanent component of the elevated levels of commodity prices may continue to maintain the demand at the elevated level.

I.81 While the need to eliminate revenue deficit and target a nominal limit on fiscal deficit is important, the mode of financing of the fiscal deficit and the appropriate use of resources so raised are equally important, particularly in the context of pressing requirements for adequate investment in social and financial infrastructure. Furthermore, there is a need to work towards durable fiscal correction and consolidation through fiscal empowerment, *i.e.*, by expanding the scope and size of revenue flows. Exclusive focus on fiscal deficit may tend to reduce the role of the Government, thereby hampering the process of growth, especially when the focus is on inclusive growth. The Indian economy is undergoing structural transformation and it needs large investments in social and financial infrastructure. There is, therefore, a need to step up investment in certain critical areas such as education, health care and physical infrastructure. The role of fiscal authority also assumes importance in the light of ongoing financial turbulence across the world as it must be recognised that when everything else fails, it is only the fisc that has to take the hit and come to rescue.

EXTERNAL SECTOR

I.82 India's balance of payments is increasingly being influenced by global developments, reflecting its growing linkages with the rest of the world through real as well as financial flows. The ratio of merchandise exports to GDP has risen since the early 1990s. During 2002-2007, India's export growth was placed higher than its key competitors in the Asian region (except China). Simultaneously, import intensity has also risen steadily as domestic entities have expanded access to internationally available raw material and intermediate goods as well as quality inputs for providing the cutting edge to domestic production and export capabilities. Services exports, led by buoyancy in software and business services, and overseas remittances, have progressively become larger and more stable since the mid-1990s, thereby imparting resilience to India's invisible receipts. The net invisibles surplus has offset a significant part of the expanding trade deficit and helped in containing the current account deficit to an average of around one per cent of GDP since the early 1990s. Gross current receipts (merchandise exports and invisible receipts) and gross current payments (merchandise imports and invisible payments) taken together now constitute more than one half of GDP, suggesting the growing integration of the Indian economy with the global economy. Unlike significant current account surpluses in many other Asian economies, India recorded current account deficits in recent years. In regard to capital account also, India's linkages with the global economy are getting stronger, underpinned by the growing openness of the economy and a two way movement in financial flows.

I.83 In the capital account, the liberalised external payments regime has been facilitating the process of acquisition of foreign companies by Indian corporates, both in the manufacturing and services sectors, with the objectives of reaping economies of scale, access to technology knowhow and capturing offshore markets to face the global competition. Notwithstanding higher outflows, capital inflows (net) increased to nine per cent of GDP in 2007-08 from an average of two per cent during 2000-01 to 2002-03. Net capital inflows during the period 2003-2008 on an average, amounted to US $ 44.8 billion. At this level, capital inflows (net) remained higher than the average for any five year period in the independent India. Inflows as well as outflows have shown significant increases in the recent period, reflecting the strong fundamentals of the economy as well as the conducive policy environment. Gross inflows and outflows constituted around 64 per cent of GDP during 2007-08. Persistently large capital inflows (net) above the current account deficit have implications for the monetary management. Similarly, persistently large outflows (net) would also complicate the task of monetary and liquidity management, particularly in the face of liquidity pressures.

I.84 In the medium term, the continued focus on financial market development could potentially mitigate the challenge of capital flows. However, it is important to recognise that the development of financial markets is a gradual process. Hence, while continuing to work on development of the financial markets, capital flows have to be managed through other tools in the short term. The gradual process of fuller capital account liberalisation could be pursued over the medium-term, keeping in view particularly the issues raised by the recent financial market turbulence in advanced economies. Therefore, the issue is not either financial market development or management of capital account, but how much of each approach should be adopted in a given situation and over time while recognising and taking into account the scope and prospects for reforms in the fiscal and real sectors.

I.85 The overall approach to the management of India's foreign exchange reserves would continue to take into account the changing composition of the balance of payments and endeavour to reflect the 'liquidity risks' associated with different types of flows and other requirements. Furthermore, the reserves would continue to be invested in major economies, adhering to the principles of according priority to safety, liquidity and return. As regards the reserve management, a related issue is the valuation of foreign exchange reserves on a marked-to-market basis on the balance sheet of the Reserve Bank. In this regard, the Reserve Bank has adopted a conservative accounting practice, whereby unrealised gains are not shown, while losses are booked.

I.86 In India, the foreign exchange reserves are reflected on the balance sheet of the Reserve Bank and are managed as per the provisions of the RBI Act, 1934 consistent with the global best practices. The Reserve Bank adheres to appropriate prudential norms and the transparency and data dissemination standards with regard to reserves management.

FINANCIAL SECTOR

I.87 In recent years, the Reserve Bank has emphasised credit quality, improvement of the credit delivery system (with specific focus on agriculture, micro, small and medium enterprises) and financial inclusion. The Reserve Bank has also been continuously upgrading risk management practices in banks and supervisory processes so as to meet the challenges arising from financial innovations and simultaneously laying down robust arrangements for dealing with stress in the financial system. The importance of adequate, timely and hassle free credit delivery, appropriate credit pricing related to risk and conducive credit culture need hardly be over emphasised. In response to the various initiatives taken by the Government and the Reserve Bank, there has been significant increase in the credit flow to agriculture, small and medium enterprises and crop loans at administered interest rates. Various measures such as one-time settlement (OTS) and rescheduling/restructuring schemes for distressed farmers, simplification of procedures, adoption of business correspondent model and the use of smart cards have also facilitated increased credit to the rural sector. Furthermore, the linking of credit to a broader base of adjusted net bank credit, including their non-SLR investments, in respect of priority sector targets, also seeks to promote credit to the priority sectors. The regulations under the Credit Information Companies (Regulation) Act were notified and operation of credit information companies under the regulations is expected to reduce information asymmetries and facilitate efficient credit allocation and pricing, while fostering a better credit culture. While concessional credit and debt relief are intended to alleviate farmers' distress and reopen the credit lines that have been choked, sustaining an appropriate credit culture going forward would require incentive systems for greater flow and efficient allocation of credit.

I.88 The asset quality and soundness parameters of the Indian banking sector have improved significantly in the recent period, and are now comparable with global levels. In consonance with the policy emphasis on gradual harmonisation with the international best practices, foreign banks operating in India and Indian banks having presence outside India have already migrated to the standardised approach for credit risk and the basic indicator approach for operational risk under Basel II with effect from March 31, 2008. All other scheduled commercial banks would migrate to these approaches under Basel II not later than March 31, 2009. The Pillar 2 guidelines were issued during the year. Certain amendments were also carried out in the Basel II framework issued earlier. Newer avenues of raising capital were provided to banks to accord them with greater flexibility in meeting the Basel II requirement. Special emphasis was laid on liquidity and asset liability management. The policy initiatives also focussed on strengthening the corporate governance practices in banks and improving customer service.

I.89 In contrast to the global situation, India has been, by and large, spared of global financial contagion resulting from the sub-prime turbulence for a variety of reasons. The credit derivatives market in India is in an embryonic stage. The originate-to-distribute model in India is not comparable to the ones prevailing in advanced markets. There are restrictions on investments by residents in such products issued abroad and regulatory guidelines on securitisation do not permit immediate profit recognition. Financial stability in India has been achieved through perseverance with prudential policies that prevent institutions from excessive risk taking, and financial markets from becoming extremely volatile and turbulent. As a result, financial markets remained orderly, and financial institutions, especially banks, remained financially sound. Supervision of financial institutions is exercised by a quasi-independent Board carved out of the Reserve Bank's Central Board. Close co-ordination also exists with other regulators on market regulation. A few such instances of pre-emptive regulation to ensure financial stability include, *inter alia*, prescription of a Board mandated policy in respect of real estate exposure of banks and increasing risk weights for various segments of the financial sector, provisioning against standard assets, norms on exposure to inter-bank liability, norms on financial regulation of systemically important NBFCs and banks' relationship with them, norms for securitisation and non-SLR investments and marking-to-market valuation norms. The regulatory guidelines are supplemented by moral suasion and supervisory review.

I.90 The Reserve Bank's broad approach to financial sector reforms has been to develop institutional and financial infrastructure and lay down appropriate regulatory and supervisory regime to ensure financial stability consistent with the overall objectives of growth with price stability. The pace of reforms has been contingent upon putting in place appropriate systems and procedures, technologies and market practices. As a result of various reforms, the financial markets have transited to a regime characterised by market-determined interest and exchange rates, price-based instruments of monetary policy, current account convertibility, phased capital account liberalisation and an auction-based system in the government securities market. In recent years, a new challenge for the financial sector in the context of inclusive growth is how to extend itself and innovate to meet the demands for financial inclusion and respond adequately to new opportunities and risks. Innovative channels for credit delivery need to be developed, perhaps with greater use of information technology and intensified skills development in human capital. Strong demand for housing and buoyancy in real estate prices in an environment of non-transparency, could potentially pose risks to the banking system. In conjunction with the interest rate cycles, the banking system as well as the regulator would need to be vigilant to future non-performing assets (NPAs) and the US-like sub-prime woes. The vulnerability of financial intermediaries can be addressed through prudential regulations and their supervision. Risk management of non-financial entities could be addressed through further development of the financial markets, which enable them to manage their risks using appropriate products.

MONETARY POLICY

I.91 The conduct of monetary policy in India has been guided by the objectives of maintaining price stability and ensuring adequate flow of credit for sustaining overall growth. The relative emphasis between these two objectives has varied according to prevailing circumstances and the underlying macroeconomic conditions, which are set out in the Reserve Bank's policy statements issued from time to time. In recent years, there has been a confluence of several global and domestic factors impinging on inflation expectations, growth momentum and financial stability. The Reserve Bank, therefore, has been taking measures in a calibrated manner to contain inflation and inflationary expectations and maintain financial stability. Accordingly, the stance of monetary policy switched from 'a very close watch on the movements in the price level' (May 2004) to 'equal emphasis on price stability' to 'consideration of calibrated measures for stabilising inflationary expectations' (October 2004). Similarly, liquidity management was emphasised with a switch from provision of 'adequate liquidity' to 'appropriate liquidity'. Recognising the long and variable lags of monetary policy, the Reserve Bank had begun a phased withdrawal of monetary accommodation in September/October 2004, when it raised the CRR (50 basis points) and LAF reverse repo rate (25 basis points). The Reserve Bank continued to persevere with its calibrated monetary measures along with active management of liquidity, depending on the evolving global and domestic situation impinging on inflation expectation and growth momentum. Between September 2004 and April 2007, the Reserve Bank raised the CRR and the repo rate by 200 basis points and 175 basis points, respectively. The reverse repo rate was raised by 150 basis points. It may be recalled that the Reserve Bank had provided an unprecedented alert about 'early signs of overheating of the Indian economy' during 2006-07 on the back of some evidence of firming up of demand pressures, in particular, the combination of high growth and consumer inflation coupled with escalating asset prices and tightening infrastructural bottlenecks. In this context, to supplement monetary measures and in order to protect the banking system from a possible enduring asset bubble without undermining growth impulses, prudential measures were also initiated in the form of enhanced provisioning requirements and risk weights in specific sectors in addition to select supervisory reviews.

I.92 The monetary policy stance of withdrawing monetary accommodation continued during 2007-08. In view of unprecedented turbulence in global financial markets beginning August 2007 following the sub-prime crisis and the unconventional policy response of major central banks, monetary policy resolved to be vigilant and proactive in cushioning the real economy from excess volatility in financial markets (October 2007 and January 2008). This warranted more intensified monitoring and swift responses with all the available instruments to preserve and maintain domestic macroeconomic and financial stability. While domestic factors dominated the policy stance, monetary policy recognised the risks to inflation from high and volatile international food, fuel and metal prices. In view of these factors, the stance of monetary policy in January 2008 focussed on swift response to the evolving constellation of adverse international developments and to the domestic situation impinging on inflation expectations, financial stability and growth momentum, with both conventional and unconventional measures, as appropriate on a continuing basis. In view of heightened global uncertainties and mounting inflationary pressures from escalated and volatile food and energy prices, which possibly contained some structural components, and persistence of demand pressures, *albeit* with some improvement in supply response, Annual Monetary Policy Statement of April 2008 noted that while it had to respond proactively to immediate concerns, it could not afford to ignore considerations over a longer term perspective with respect to overall macroeconomic prospects. Accordingly, the Reserve Bank emphasised the need to demonstrate on a continuing basis the determination to act decisively, effectively and swiftly to curb any signs of adverse developments with regard to inflation expectations. In view of unprecedented uncertainties and dilemmas, it also emphasised the importance of taking informed judgements with regard to the timing and magnitude of policy actions based on an evaluation of incoming information on a continuous basis. In line with the stance set out in April 2008, monetary policy statement underlined the need to eschew any further intensification of inflationary pressures and firmly anchor inflation expectations.

I.93 Mirroring inflation trends in many advanced as well as emerging economies, inflation in India also hardened significantly in recent months above the Reserve Bank's tolerable level, amidst strong evidence of aggregate demand pressures, exacerbated by the slack in the supply response. Recognising that high and volatile energy prices were not a temporary phenomenon and the evolving complexities in globally transmitted inflation, the First Quarter Review (July 2008) accorded the highest priority to bringing down inflation from the prevailing high levels to a level close to 7.0 per cent by end-March 2009 and stabilising inflationary expectations. Furthermore, monetary policy reiterated its resolve to bring down inflation from the prevailing intolerable level to a tolerable level of below 5.0 per cent as soon as possible and around 3.0 per cent over the medium term. In this backdrop, the Reserve Bank felt the need to smoothen the adjustment of demand on an economy-wide basis to ensure that generalised instability did not develop. The stance of monetary policy of withdrawing monetary accommodation and appropriate prudential measures were supplemented by the fiscal and supply augmenting measures by the Government. As a result, although, the commodity prices have hardened in recent times, the order of increase in prices in India even in respect of commodities that were major contributors to domestic inflation was significantly lower than that in several developed and other emerging market economies.

I.94 The conduct of monetary policy has become more challenging recently for a variety of factors. First, it is necessary to recognise the global dimensions of the crisis, which is threatening the credibility of monetary policy world wide. The unfolding of global developments and the responses of monetary authorities seem to suggest that, on the one hand, there are threats to growth and financial stability particularly in the wake of ongoing turbulence in international financial markets. On the other hand, high and volatile international prices of fuel, food and metal prices pose a serious risk to inflation. Global developments have considerably heightened the uncertainty surrounding the outlook on capital flows to India, thereby complicating the conduct of monetary and liquidity management in India. While continued strong domestic fundamentals and massive injections of liquidity by central banks in advanced economies increase the possibility of sustained inflows, abrupt changes in sentiment or global liquidity conditions also raise the possibility of large and volatile capital outflows. Accordingly, monetary policy in India has to be vigilant and proactive in cushioning the real economy from excess volatility in financial markets while recognising that India cannot be totally immune to global developments. In this context, it may be noted that apart from using monetary instruments flexibly in both directions, the Reserve Bank can also use the prudential measures flexibly, in the given context of capital account management.

I.95 Second, localised factors such as banks' balance sheet adjustments in the run-up to the year-end closure of accounts and advance tax flows have also influenced liquidity conditions. However, additional liquidity management operations in anticipation of these developments during 2007-08, by and large, smoothened market interest rates and enabled their orderly evolution. Another factor that has also produced large swings in market liquidity in recent years is the sizeable movements in Government cash balances. Uncertainty over the movement of Government cash balances can further complicate the management of liquidity, especially when the drawdown of cash balances by the Government coincides with an increase in capital inflows necessitating Reserve Bank's intervention in the foreign exchange market, thereby injecting liquidity into the system.

I.96 Third, the evolving fiscal situation in an atmosphere of persistent inflationary pressures poses severe challenges to monetary management, especially if supply inelasticities continue to prevail in the short-term. Thus, there is a need to ensure that effectiveness of monetary policy is not diluted by fiscal expansion. It is important to recognise that in an environment of limited supply elasticities in the short run, an adjustment of overall aggregate demand on an economy-wide basis is warranted to ensure that generalised instability does not develop and erode the hard-earned gains in terms of both outcomes of and positive sentiments on India's growth momentum. On the other hand, it is also necessary to nurture and consolidate the recent gains in augmenting supply capacities and improvements in productivity and efficiency which accrue over a longer term horizon. Fourth, it is necessary to recognise that monetary policy has also to reckon with the structural components embedded in the drivers of inflation which, unlike cyclical elements, are somewhat impervious in the short run to instruments of aggregate demand management.

I.97 Fifth, it needs to be recognised that existence of this stipulated SLR prescription of 25 per cent of net domestic demand and time liabilities of banks hampers the genuine development of the government securities market. The dilemma arises as to whether it can be assumed that there is a genuine government securities market, and hence reinforce more marketisation by rapidly reducing SLR or ensure a viable market borrowing programme and reduce SLR in tandem. In this context, there is a need to assess the sensitivity of the fisc to interest rate burden if SLR is reduced rapidly. The importance of SLR status for bonds issued by the Government has also come to the fore recently when oil bonds issued by the Government turned out to be illiquid despite carrying a yield of 25 basis points higher than the SLR-eligible bonds of similar maturity. It needs to be recognised that issuance of special bonds increases the overall supply of Government bonds and thus leads to an upward pressure on yields. The undoubtedly desirable reform of the debt markets in India needs to recognise these realities in addition to the ongoing reforms in the corporate debt market.

I.98 Sixth, the domestic financial markets continue to exhibit orderly conditions, except the equity markets which have reflected the risk aversion and increased uncertainty in line with the international financial market developments. The heightened uncertainty surrounding global financial markets and the unusual policy responses of major central banks suggest that the threats to global growth and stability that loom over the near-term horizon, continue to be significant, for the evolving monetary policy stance in 2008-09. The major source of the direct impact is through the financial flows, in particular, the equity market and the foreign exchange market.

I.99 Seventh, although growth rates of monetary and banking aggregates have started to dip since June 2008 in line with the projected trajectories, the demand for bank credit continues to be strong. While credit to the petroleum sector has risen sharply due to the funding requirements of oil companies in the context of escalation in international crude prices, bank credit to other sectors has also picked up, particularly to infrastructure, cement, chemicals, transport operators and professional and other services, reflecting resilience of activity in these sectors. On the other hand, bank credit to agriculture, housing, real estate, construction, metal products, textiles, gems and jewellery and engineering has moderated on account of sector-specific factors. The growth in credit during 2008-09 (year-on-year up to August 1, 2008) resulted in increase in the incremental non-food credit-deposit ratio to 85.4 per cent. It needs to be recognised that banks cannot sustain such a high incremental credit-deposit ratio as they are required to maintain more than 33 per cent of their net demand and time liabilities in the form of CRR and SLR. Therefore, it is important that the banking system strives to maintain a balance between the credit growth and the deposit growth.

I.100 Finally, the continued dominance of administered interest rates in some form or the other indicates that the extent of monetary policy measures need to take cognisance of rigidities in transmission on this account.

I.101 In this background of severe challenges as well as prevailing structure of financial markets and institutions in India, it is important to take informed judgments with regard to the timing and magnitude of monetary policy actions; and judgments need to have the benefit of evaluation of incoming information on a continuous basis.

I.102 As the inflation rates have hardened beyond tolerable levels, monetary policy would continue to address aggregate demand pressures which appear to be strongly in evidence. However, at the same time, there is need to improve the supply position in some critical sectors. In order to tackle food price inflation, the demand-supply mismatches need to be addressed over the medium term, which, would necessitate raising crop yields through the use of modern technology, improved irrigation facilities as well as provision of market-based incentive systems for the farmers both in the credit and product markets. In view of large dependence on crude oil imports, limiting the adverse impact of higher international oil prices would require adopting strategies of greater decontrol of petroleum product pricing with targeted subsidies, rationalisation of applicable taxes and duties to appropriate levels, and gradual but regular pass-through of prices to consumers so as to avoid the risk of large one-off adjustments in headline inflation. As prices of manufactured products in an open economy are sensitive to both import and export prices, containment of manufactured products inflation would, apart from domestic demand, hinge upon creating conducive environment for industrial and productivity growth through the provision of adequate infrastructure as well as increased access to key industrial inputs. Trade and competition policies could aim at promoting flexible price setting behaviour of firms. As sectoral shocks in the face of even moderate increase in demand have the potential to raise inflation beyond levels justified by the overall supply-demand balance, fiscal and supply-side measures can help in containing sector-specific inflationary pressures from becoming generalised. An overriding priority for monetary policy would be to eschew any further intensification of inflationary pressures.

I.103 Notwithstanding some downside risks to growth and upward pressures on inflation in the near term, the medium to long-term prospects of the Indian economy continue to be robust. There is, however, a need to persist with the reform efforts in all the sectors of the economy to realise the full potential of the economy. The immediate challenge is to bring down inflation to a tolerable level as soon as possible and maintain financial stability while taking account of improvements in the fiscal sector and supply elasticities in the real sector.

II ECONOMIC REVIEW

I. MACROECONOMIC POLICY ENVIRONMENT

Global Economy

II.1.1 The global economic growth moderated marginally to 5.0 per cent in 2007 from 5.1 per cent in 2006, but remained higher than the average growth of 4.5 per cent per annum during the four-year period 2003-2006. The growth is, however, projected to decelerate sharply to 4.1 per cent in 2008, reflecting the expected slowdown in most of the advanced economies. After stronger than expected growth in the third quarter of 2007, growth in most of the advanced economies such as the US, Japan and Euro area decelerated sharply in the last quarter of 2007, mainly on account of the turbulence in the US sub-prime mortgage market and its spread to international financial markets. The deceleration in economic activity in several advanced economies was offset by robust growth in emerging and developing economies led by China and India. The spillover to emerging markets and developing countries has remained relatively contained so far because of their limited exposure to sub-prime related structured products. Consumption activity supported domestic demand in emerging Asian economies, while export growth showed some signs of moderation. The increased domestic demand combined with rising food, metal and energy prices, however, led to the build-up of inflationary pressures in a number of countries in emerging Asia. Apart from the possibility of further credit crunch, downside risks to global growth include contagion from the likely US recession, increased inflationary pressures and persisting global imbalances. In response to high food prices and their implications for inflation and inflationary expectations and to protect food consumption by vulnerable sections of the population, both developed and developing countries resorted to various forms of market interventions such as price controls, reduction of import barriers and/ or imposition of export restrictions.

II.1.2 The Indian economy continued to exhibit robust growth during 2007-08. Although the real GDP growth moderated to 9.0 per cent in 2007-08 from 9.6 per cent in 2006-07, it was higher than the average growth performance of the preceding four-year period (2003-04 to 2006-07). During the Tenth Five Year Plan period (2002-03 to 2006-07), the average growth rate was placed at 7.8 per cent per annum, marginally short of the Plan target of 8 per cent – the fastest pace of expansion in any Plan period so far. Growth in per capita income (*i.e.*, per capita net national product at factor cost) decelerated to 7.8 per cent in 2007-08 from 8.1 per cent during 2006-07. However, it was higher than the average growth of 7.2 per cent per annum during four-year the period (2003-04 to 2006-07). Per capita income growth averaged 6.1 per cent per annum during the Tenth Plan period.

II.1.3 Policy measures taken in 2007-08 in the various sectors of the economy helped sustain the growth momentum. In addition, specific measures were also taken to contain domestic inflationary pressures which intensified due to high and volatile international prices of fuel, food and metal. The Central Government initiated a number of fiscal and supply augmenting measures during 2007-08, which included reducing customs duties on imports; allowing imports of some commodities at zero duty; and imposing ban on exports of some sensitive items. These measures were supplemented by monetary measures in the form of several rounds of increase in the cash reserve ratio (CRR) during the year aimed at active management of liquidity. The major policy measures undertaken in the real, fiscal, external, monetary and financial sectors are covered in the first part of this Chapter, while the developments in these sectors are covered in the subsequent parts of this Chapter.

REAL SECTOR POLICIES

Agriculture and Allied Activities

II.1.4 Recognising the crucial role played by the agricultural sector in bolstering macroeconomic stability and growth prospects, the Government continued to accord high priority to this sector in pursuance of its policy of broad-based and inclusive growth. It undertook a number of new initiatives during 2007-08 to step up agricultural growth and improve the condition of the farming community. These included measures to improve productivity, irrigation facilities, institutional credit and rural infrastructure. Steps were also taken to increase investment in agriculture by the States and provide debt relief to distressed farmers.

II.1.5 Concerned with the slow growth in the agriculture and allied sectors, the National Development Council (NDC), in its 53rd meeting held on May 29, 2007, adopted a resolution that the Central and State Governments would undertake measures to rejuvenate agriculture and meet the needs of the farmers. In accordance with this resolution, the Ministry of Agriculture launched a centrally-sponsored scheme, National Food Security Mission (NFSM) in 2007-08 with the objective of increasing production of rice, wheat and pulses through area expansion and yield improvement in the targeted districts with high potential but relatively low level of productivity performance at present (Box II.1).

II.1.6 The NDC resolution also proposed to launch a programme to incentivise the States to increase the share of investment in agriculture in their State plans and also provide flexibility and autonomy to them in the process of planning and executing agriculture and allied sector schemes. Accordingly, on August 16, 2007, the Government approved the *Rashtriya Krishi Vikas Yojana* (RKVY) with an allocation of Rs.25,000 crore for the Eleventh Five Year Plan. The RKVY will be a State Plan Scheme and the eligibility for assistance under the scheme would depend upon the amount provided in the State Budgets for agriculture and allied sectors, over and above the baseline percentage expenditure incurred on these sectors. The funds under the RKVY would be provided to the States as 100 per cent grant by the Central Government.

II.1.7 The Government approved the National Policy for Farmers, 2007, with a focus on the economic well-being of the farmers in addition to production and productivity. The broad areas to be covered under this Policy include asset reforms to improve farmers' access to productive assets and marketable skills; water use efficiency embodying the idea of more crop per drop; and frontier technologies and *Gyan Chaupals* to provide for a holistic approach to development of the farm sector.

II.1.8 The Government approved a rehabilitation package of Rs.16,979 crore for 31 districts prone to farmers' suicides in the four States of Andhra Pradesh, Maharashtra, Karnataka and Kerala in 2007-08. The rehabilitation package, to be implemented over a period of three years, aims at establishing a sustainable and viable farming and livelihood support system through debt relief to farmers, improved supply of institutional credit, crop-centric approach to agriculture, assured irrigation facilities, watershed management, better extension and farming support services, and subsidiary income opportunities through horticulture, livestock, dairying and fisheries.

II.1.9 The Government expected to complete 24 major and medium irrigation projects and 753 minor irrigation schemes in 2007-08 under the Accelerated Irrigation Benefit Programme (AIBP), creating additional irrigation potential of 500,000 hectares. The Union Budget 2008-09 increased the estimated outlay during the current financial year to Rs.20,000 crore with a grant component of Rs.5,550 crore as against Rs.11,000 crore and Rs.3,580 crore, respectively, during the previous year.

II.1.10 The Union Budget 2008-09 raised the corpus of Rural Infrastructure Development Fund (RIDF)-XIV in 2008-09 to Rs.14,000 crore to meet the funding requirement for rural infrastructure. In addition, a separate window under RIDF-XIV for rural roads with a corpus of Rs.4,000 crore was also proposed in the Union Budget 2008-09.

II.1.11 The flow of credit to the agricultural sector exceeded the target for the fourth consecutive year during 2007-08. As against a target of Rs.2,25,000 crore for 2007-08, the actual distribution of farm credit by the banking system was Rs.2,25,348 crore. The Union Budget has set the total agricultural credit target for 2008-09 at Rs.2,80,000 crore. The Budget also provided for the continuance of the short-term crop loans at 7 per cent per annum and made an initial provision of Rs.1,600 crore for interest subvention in 2008-09.

Box II.1
National Food Security Mission

In the Indian context, domestic availability of foodgrains at an affordable price to the common people has been a major yardstick of food security. Keeping this in view, the Green Revolution was launched in the mid-1960s with the aim of attaining food self-sufficiency while simultaneously increasing the incomes of the rural poor. The Green Revolution focused on high yielding varieties of seeds, expansion in irrigation coverage, increased use of fertilisers and chemicals, institutional support (including credit) and supportive price policies, which helped in stepping up the foodgrains production. The production of foodgrains increased from around 51 million tonnes in 1950-51 to around 95 million tonnes in 1967-68 and thereafter touched a peak of 230.7 million tonnes (estimated) in 2007-08. This enabled India to become an exporter of foodgrains in contrast to the 1960s when it imported foodgrains.

The average growth rate of foodgrains production at 1.2 per cent during 1990-2007, however, trailed behind the average population growth of 1.9 per cent. According to the Economic Survey 2007-08, the per capita availability of cereals and pulses declined during this period. The consumption of cereals declined from a peak of 468 grams per capita per day in 1990-91 to 412 grams per capita per day in 2005-06, while that of pulses declined from 42 grams per capita per day (72 grams in 1956-57) to 33 grams per capita per day during the same period. Furthermore, access to food for a large section of the population is hindered due to chronic poverty, unemployment and lack of purchasing power. The challenge of food security remains a daunting task with nearly half of the population still suffering from chronic under-nutrition in the country.

In view of the need to address the problem of food shortage in the country, the National Development Council (NDC) in its 53rd meeting held on May 29, 2007 adopted a resolution to launch a Food Security Mission to increase the production of rice, wheat and pulses by 10 million tonnes, 8 million tonnes and 2 million tonnes, respectively, by the end of the Eleventh Plan (2011-12). Accordingly, 'National Food Security Mission' (NFSM), a centrally sponsored scheme, was launched in 2007-08. The Mission aims at increasing production of rice, wheat and pulses through area expansion and productivity enhancement in a sustainable manner in the identified districts of the country; restoring soil fertility and productivity at the individual farm level; creating employment opportunities; and enhancing farm level economy (i.e., farm profits) to restore confidence amongst the farmers.

The NFSM is envisaged to focus on districts which have high potential but relatively low level of productivity performance at present. The approach is to bridge the yield gap in respect of rice, wheat and pulses through dissemination of improved technologies and farm management practices. A series of programme interventions has been designed to reach resource scarce farmers and for continuous monitoring of various activities. Panchayati Raj Institutions will be actively involved in the activities like selection of beneficiary, identification of priority areas and implementation of local initiatives in the identified districts.

To achieve its objectives, the strategies of NFSM would consist of implementation through active engagement of all the stakeholders at various levels; promotion and extension of improved technologies; close monitoring of flow of funds to ensure that interventions reach the target beneficiaries on time; integration of proposed interventions with the district plan; fixing targets for each identified district and constant monitoring and concurrent evaluation for assessing the impact of the interventions for a result oriented approach by the implementing agencies. The NFSM is being implemented in 305 districts of 16 States in the country. The identified districts are given flexibility to adopt any local area specific interventions as are included in the Strategic Research and Extension Plan (SREP) prepared for agriculture development of the district. An amount of Rs.149.4 crore was released to various States to plan and implement various interventions during 2007-08. The total outlay of NFSM has been fixed Rs.4,882.5 crore during the Eleventh Five Year Plan (Table A).

Table A: Allocation Proposed under NFSM

(Rs. crore)

Year	Rice	Wheat	Pulses	Total
2007-08	70.8	234.6	96.9	402.3
2008-09	384.1	682.7	285.9	1,316.8
2009-10	366.3	290.8	287.2	944.2
2010-11	428.3	341.5	286.4	1,056.3
2011-12	508.8	370.8	283.4	1,163.0
Total	1,722.3	1,920.3	1,239.9	4,882.5

India is one of the few countries which have experimented with a broad spectrum of programmes for improving food security. The latest endeavour embodied in the form of NFSM is expected to give a palpable thrust to food production in the country in a time bound manner.

References

1. Government of India (2007), *National Food Security Mission, Operational Guidelines*, Ministry of Agriculture, August.
2. _____ (2002), *Report of the Committee on India Vision, 2020* (Chairman Dr.S.P.Gupta), Planning Commission, December.
3. _____ (2008), *Economic Survey, 2007-08*, Ministry of Finance
4. _____ *Various Press Releases*, Press Information Bureau.

II.1.12 In accordance with the announcement in the Union Budget 2008-09, the Government of India issued in May 2008, the guidelines for the scheme of debt waiver and debt relief for farmers to mitigate the distress of the farming community, especially the small and marginal farmers. The Government estimates that about 30 million small and marginal farmers and about 10 million other farmers will benefit from the scheme. The revised cost of the scheme was placed at Rs.71,680 crore in May 2008.

II.1.13 The allocation for National Rural Employment Guarantee Scheme (NREGS), which is a demand-driven scheme carrying a legal guarantee for employment, was budgeted at Rs.16,000 crore for 2008-09 and the scheme was proposed to be rolled out to all 596 rural districts in the country.

Manufacturing and Infrastructure

II.1.14 Sector-specific policies were continued in 2007-08 to provide stimulus to the manufacturing sector, the growth of which had slowed down during the year. Steps continued to be taken to strengthen the micro, small and medium enterprises (MSMEs) in order to improve their competitiveness. Fiscal measures were also undertaken to address the concerns of a slowdown in specific sectors, which are important from the perspective of growth and employment and also have large externalities.

II.1.15 A High Powered Group (Chairman: Dr. V. Krishnamurthy) was constituted by the Government of India in January 2008 to suggest measures to ensure the continuing growth of the manufacturing sector in the country. The terms of reference of the Group include suggesting policy measures to (a) ensure sustained growth of the Indian manufacturing industries for the next 10-15 years; (b) reverse the recent deceleration in the growth of the manufacturing industries; (c) boost exports of Indian manufactured goods in the face of appreciation of the rupee and high interest rates, particularly with respect to labour intensive sectors such as textiles, leather and handicrafts; (d) leverage foreign direct investment (FDI) to modernise manufacturing in India and create a strong technological base.

II.1.16 A new Coal Distribution Policy was notified in October 2007 to facilitate the supply of assured quantities of coal to various categories of consumers at pre-determined prices in a regime of enforceable obligations on the part of both the suppliers and consumers of coal. This policy also envisaged an enlarged role for the State Governments in the supply of coal to a large number of small and medium industries. Based on the provisions of the policy, e-auction of coal was reintroduced with certain modified features to facilitate the emergence of proper coal market in the country. Under the new mode of e-auction, there will be no floor price for bidding as was the case in the earlier phase of e-auction of coal; coal public sector undertakings (PSUs) will, however, have the liberty of having a reserve price, which is not lower than the notified prices of coal for appropriate commercial decision making. There will be two platforms for e-auction, one for the supply of coal for a longer period of one year or more and the other for supply of coal for shorter periods as per the frequency of offer of e-auction. All the coal PSUs will be required to announce a schedule of offer of coal for sale under e-auction mode at the start of the year for proper planning, both by the coal suppliers and consumers.

II.1.17 The pace of de-reservation of products reserved for exclusive manufacturing by the micro and small enterprises (MSEs) has accelerated since 2005 with a view to increase the competitiveness of the industry, upgrade technology, compete with imports and achieve the economies of scale. The Government de-reserved 79 items in February 2008. With this de-reservation, only 35 items remain exclusively reserved for manufacturing by the MSEs. In continuation of support to micro, small and medium enterprises (MSMEs), the Union Budget 2008-09 proposed to create a risk capital fund in the Small Industries Development Bank of India (SIDBI). The Budget also envisaged that SIDBI will reduce the guarantee fee from 1.5 per cent to 1.0 per cent and annual service fee from 0.75 per cent to 0.5 per cent for loans up to Rs.5 lakh.

II.1.18 The Government also announced 10-point initiatives under the National Manufacturing Competitiveness Programme (NMCP) for promotion and development of MSMEs to be implemented during the Eleventh Plan period in MSME clusters in the Public Private Partnership (PPP) mode. The measures include ongoing schemes as well as new schemes under the Package for Promotion of Micro and Small Enterprises announced in February 2007. Some of the new initiatives for promotion and development of MSMEs include a scheme for financial assistance to select management/business schools and technical institutes to conduct tailor made courses; scheme for financial assistance to five select universities/colleges to run 1,200 entrepreneurial clubs and scheme for rejuvenation, modernisation and technological upgradation of the coir industry. The Government also launched the *Rajiv Gandhi Udyami Mitra Yojana* in February 2008 to provide handholding assistance to first generation entrepreneurs through lead agencies or *Udyami Mitras* in the establishment and management of the new enterprises, in dealing with various procedural and legal hurdles, and in completion of various formalities required for setting up and running of the enterprises. In order to provide a more focused identification and targeting of beneficiaries belonging to the marginalised section, a new credit linked subsidy programme, Prime Minister's Employment Generation Programme (PMEGP), was launched on August 15, 2008 by merging the *Prime Minister's Rojgar Yojana* (PMRY) and Rural Employment Generation Programme (REGP). The programme sought to generate employment opportunities through establishment of micro enterprises in rural as well as urban areas.

II.1.19 The Union Budget 2008-09 proposed to continue the Scheme for Integrated Textile Parks (SITP) and the Technology Upgradation Fund (TUF) during the Eleventh Plan period, with special thrust on spinning, weaving, knitting, garment manufacturing, technical textiles and processing segments of the textiles industry in view of their potential for value-addition and employment generation. The cluster approach to handloom sector has made rapid progress and 250 clusters are being developed. Under the health insurance scheme, 1.8 million weavers were covered by March 2008. The scheme has been extended for 2008-09 and ancillary handloom workers have also been brought within the ambit of the scheme.

II.1.20 The Government pursued measures aimed at expansion of infrastructure. In the power sector, the Union Budget 2008-09 made a provision of Rs.5,500 crore for the *Rajiv Gandhi Grameen Vidyutikaran Yojana*. In view of the poor state of transmission and distribution of electricity, a national fund for transmission and distribution was proposed to be created. To improve the road network, the Union Budget increased the allocation for National Highway Development Programme to Rs.12,966 crore in 2008-09 from Rs.10,867 crore in 2007-08.

II.1.21 The Government constituted a High Powered Committee in June 2008 (Chairman: Dr. Arvind Virmani) to examine the financial position of oil companies. The Group was required to (i) examine the impact of the increase in oil prices between 2004-05 and 2007-08 on the financial position of oil companies, including upstream exploration companies, refiners and downstream oil marketing companies (OMCs); (ii) analyse the cash flows and the profitability of all three groups of companies so as to get a clear picture of the changes taking place in their operating positions, particularly the impact on access to credit and cash availability for their operations; (iii) revisit the concept of 'under recoveries' and examine the reported deficit and the real deficit faced by OMCs as a result of price constraints imposed on them; (iv) estimate the financial needs of the refiners and OMCs in order to continue their normal business activities and to meet the energy needs of the economy, and the possible sources of funds to meet their financial needs; and (v) examine the available options for burden sharing by all stakeholders, including upstream exploration companies, refiners, downstream OMCs and stand alone refiners.

II.1.22 In order to provide fillip to the industry, promote value addition, and remove duty inversions and other anomalies, the Union Budget 2008-09 altered customs duties across various categories. Accordingly, the customs duty on project imports, phosphoric acid and specified machinery for manufacture of sports goods was reduced from 7.5 per cent to 5 per cent; customs duty on certain specified life saving drugs, bulk drugs used for the manufacture of such drugs, polished cubic zirconia, convergence products and rough coral was reduced from 10 per cent to 5 per cent while on crude and unrefined sulphur, the duty was brought down from 5 per cent to 2 per cent. The customs duty on steel melting scrap, aluminium scrap and bactofuges was reduced to nil. Full exemption from duty was granted for specified parts of set top boxes, specified raw materials for use in the IT/electronic hardware industry, specified raw materials for sports goods, rough cubic zirconia, naphtha imported for the production of fertilizers, cut and polished coloured gemstones and rough synthetic gemstones.

II.1.23 Excise duty was reduced for a wide variety of goods. These included goods produced in the pharmaceutical sector, water purification devices, veneers and flush doors, sterile dressing pads, specified packaging material, and breakfast cereals (from 16 per cent to 8 per cent); buses and their chassis, small cars, two wheelers and three wheelers (from 16 per cent to 12 per cent); hybrid cars (from 24 per cent to 14 per cent); paper, paper board and articles made therefrom, and certain varieties of writing, printing and packing paper (from 12 per cent to 8 per cent). All electric vehicles were exempted from excise duty. Effective August 14, 2008, full exemption from central excise duty was granted to goods procured for setting up ultra mega power projects based on super critical coal thermal technology.

FISCAL POLICY

II.1.24 The process of fiscal consolidation in 2007-08 continued as stipulated under the Fiscal Responsibility and Budget Management (FRBM) Rules, 2004. Fiscal policy simultaneously pursued the objectives of economic growth, equity and macroeconomic stability. The revised estimates of finances of the Central Government for 2007-08 showed improvement, with the key deficit indicators, *viz.,* revenue deficit (RD) and gross fiscal deficit (GFD) as a ratio to GDP, declining by 0.1 per cent and 0.2 per cent, respectively, over the budget estimates. This was on account of robust economic growth coupled with buoyant tax revenue. The tax-GDP ratio in the revised estimates of 2007-08 improved to 12.5 per cent from the budgeted level of 11.8 per cent.

II.1.25 The tax policy for 2007-08 focused on a balanced tax structure in terms of reasonable tax rates, fewer exemptions, wider tax base and recovery of arrears. The overall rates of personal income and corporation taxes were kept unchanged, while the threshold limit of exemption from personal income tax was raised by Rs.10,000. The surcharge on companies with a taxable income of Rs.1 crore or less was removed. The rate of dividend distribution tax (DDT) was raised from 12.5 per cent to 15 per cent on dividends distributed by companies and to 25 per cent on dividends paid by money market mutual funds and liquid mutual funds.

II.1.26 In order to expand the existing tax base, several measures were taken. First, the minimum alternate tax (MAT) base was widened by bringing the profits of Software Technology Parks of India (STPI) units and Export Oriented Units (EOUs) within its ambit. Second, the provision of Tax Deduction at Source (TDS) was extended to payments made to contractors by individuals and Hindu Undivided Families (HUFs) engaged in business and having turnover above a specified limit. Third, the scope of fringe benefit tax (FBT) was expanded to include the benefits provided under the employees' stock option plan (ESOP) under its ambit.

II.1.27 Amongst the major reliefs granted under the direct taxes, cash withdrawals by the Central and State Governments were exempted from the scope of banking cash transactions tax (BCTT), while the BCTT exemption limits for individuals and HUFs were raised from Rs.25,000 to Rs.50,000. The 100 per cent deduction provided for 10 years in respect of profits and gains provided for infrastructure facilities was extended to cross-country natural gas distribution network. Furthermore, the expression 'infrastructure facility' was expanded to include navigational channel in the sea within its ambit. To facilitate the creation of urban infrastructure, the issue of tax-free bonds was sanctioned through State Pooled Finance Entities formed for raising funds for a group of urban local bodies. The weighted deduction of 150 per cent given for expenditure relating to in-house research and development was extended for five more years till March 31, 2012. The exemption from tax given to venture capital funds was restricted only to investments in venture capital undertakings in biotechnology, information technology relating to hardware and software development, nanotechnology, seed research and development, research and development of new chemical entities in the pharmaceutical sector, dairy industry, poultry industry and production of bio-fuels.

II.1.28 Significant changes were also made in indirect taxes. Continuing with the policy of bringing about moderate, rational and simplified tax structure and reducing customs duty rates to ASEAN levels, the peak rate of customs duty for non-agricultural imports was reduced from 12.5 per cent in 2006-07 to 10 per cent in 2007-08. In order to make available input materials at competitive rates to domestic manufacturers, the import duty on chemicals and plastics was reduced substantially across the various categories. The simple average tariff for non-agricultural goods was reduced from 12.2 per cent in 2006-07 to about 9.4 per cent in 2007-08. With the aim of advancing research and development in the country, the concessional rate of 5 per cent duty available to public funded research institutions was extended to all research institutions registered with the Directorate of Scientific and Industrial Research. The strategy with respect to excise duties continued to be focused on expanding the tax base rather than moderating rates. Accordingly, the Union Budget 2007-08 kept the general CENVAT rates unchanged. The *ad valorem* component of excise duty on petrol and diesel was, however, reduced from 8 per cent to 6 per cent in order to share the burden of higher international crude prices.

Union Budget 2008-09

II.1.29 The Union Budget 2008-09 reiterated its commitment to a faster and more inclusive growth and also emphasised the need to address supply constraints on growth. The Budget sought to make 2008-09 the year of consolidation by (i) securing the ongoing programmes on firm financial foundation; (ii) closely monitoring implementation and enforcing accountability; and (iii) measuring the outcomes in terms of the targets achieved as well as their quality. Despite pressure from committed and non-discretionary expenditures such as interest payments, defence, pensions, salaries and subsidies, the Budget for 2008-09 committed to the overarching objectives of achieving faster and more inclusive growth by increasing allocation for social sectors, including rural employment, education and health. The Budget also sought to ensure adequate resources for improving physical infrastructure including rural roads and electrification to tap the potential of rural India.

II.1.30 The process of fiscal consolidation as outlined in the Union Budget 2008-09 would continue to be revenue-led, while focusing on reprioritisation and improvement in the quality of expenditure, particularly in infrastructure development and in social sectors like health and education. Under education, the focus would be on enhancing retention in primary level and strengthening secondary and technical education. In the area of health care, allocations were increased for establishing a decentralised health delivery system.

II.1.31 The tax proposals announced in the Union Budget 2008-09 aimed at sustaining the growth in tax revenue and consolidating the achievements made in the last four years. This was sought to be achieved through appropriate policy intervention coupled with improvement in the quality, efficiency and effectiveness of tax administration. The policy strategy was to be oriented towards moderate and fewer tax rates, removal of exemptions and broadening of the tax base. In the case of tax administration, emphasis was placed on recovery of arrears of tax revenue, improvement in service delivery to the tax payer and enhancement of deterrence levels. Overall, the direct tax measures in the Union Budget 2008-09 were expected to be revenue neutral, whereas the indirect proposals were estimated to involve a loss of Rs.5,900 crore.

II.1.32 With regard to direct taxes, the corporate tax rates and surcharges were kept unchanged. The threshold limit of exemption for personal income tax (PIT) was raised from Rs.1,10,000 to Rs.1,50,000 for all assessees, thus giving every assessee a relief of a minimum of Rs.4,000. The basic exemption limit was raised to Rs.1,80,000 for women and to Rs.2,25,000 for senior citizens above 65 years of age. The four slabs for personal income tax were also revised upwards. With a view to encouraging small savings, the Senior Citizens' Savings Scheme 2004 and the Post Office Time Deposit Account were included under Section 80C of the Income Tax Act. An additional deduction of Rs.15,000 was allowed under Section 80D to an individual who pays medical insurance premium for his/her parent or parents. The banking cash transaction tax (BCTT) is being withdrawn with effect from April 1, 2009.

II.1.33 The corporate debt instruments issued in demat form and listed on recognised stock exchanges were exempted from tax deduction at source. The rate of tax on short-term capital gains was raised to 15 per cent to bring it in line with the dividend distribution tax rate. A parent company was allowed to setoff the dividend received from its subsidiary company against dividend distributed by it, provided the latter has suffered dividend distribution tax (DDT) and the parent company is not a subsidiary of another company.

II.1.34 The Union Budget 2008-09 provided some reliefs to corporates and firms in the fringe benefit tax (FBT) by excluding crèche facilities, guest houses, sponsorship of an employee-sportsperson and expenses relating to organising sports events for employees from the purview of FBT. The rebate given to securities transaction tax (STT) against tax liability was removed and STT paid would be treated like any other deductible expenditure against business income. Furthermore, for options which are not exercised, the levy of STT would be on the option premium, and the liability will be on the seller; for options which are exercised, the levy would be on the settlement price and the liability would be on the buyer. The Budget introduced a commodities transaction tax (CTT) on the same lines as STT on options and futures traded in commodity exchanges.

II.1.35 In the case of indirect taxes, the peak rate of customs duty on non-agricultural goods was maintained at 10 per cent for 2008-09. Sector specific reductions in customs duties were undertaken to promote industry. Special countervailing duty (CVD) at the rate of 4 per cent was imposed on a few specified projects in the power sector. In order to prevent price distortions and revenue losses arising on account of a complex regime of export benefits and duty exemptions, the duty exemption granted on naphtha for use in the manufacture of polymers was withdrawn and was subjected to the normal rate of 5 per cent. However, naphtha imported for the production of fertilisers would continue to be exempted from import duty.

II.1.36 In order to provide stimulus to the manufacturing sector, the Union Budget 2008-09 reduced the general CENVAT rate on all goods from 16 per cent to 14 per cent. The excise duty in the case of growth and employment oriented sectors were reduced. On certain goods, such as composting machines, wireless data cards, packaged coconut water, tea and coffee mixes, and puffed rice, excise duty was reduced from 16 per cent to nil. The *ad valorem* component of the excise duty on unbranded petrol and unbranded diesel was abolished and replaced by an equivalent specific duty of Rs.1.35 per litre. As a result, the specific duty on unbranded petrol and unbranded diesel was fixed at Rs.14.35 per litre and Rs.4.60 per litre, respectively.

II.1.37 While the service tax rate was kept unchanged, in keeping with the growing share of service sector in the economy, the coverage was widened to include asset management service provided under unit linked insurance plan (ULIP); services provided by stock/commodity exchanges and clearing houses; right to use goods, in cases where value added tax (VAT) is not payable; and customised software. In order to facilitate small service providers and to ensure optimum utilisation of the administrative resources, annual threshold limit of service tax exemption for small service providers was increased from Rs. 8 lakh per year to Rs.10 lakh per year. This exemption was expected to benefit about 65,000 small service providers.

II.1.38 The Government intended to request the Thirteenth Finance Commission to revisit the roadmap for fiscal adjustment and suggest a suitably revised roadmap after the obligations on account of the Sixth Central Pay Commission (SPC) become clear. The SPC submitted its Report to the Government on March 24, 2008. Subsequently, the Central Government approved the implementation of the recommendations of the SPC with some modifications. The financial implications of the SPC award as modified by the Central Government is estimated to be around Rs.22,100 crore (Box II.2).

II.1.39 Following an agreement between the Central Government and the State Governments and in pursuance of the announcement made in the Union Budget 2008-09, the rate of central sales tax (CST) was reduced from 4 per cent to 3 per cent in 2007-08 and further to 2 per cent from June 1, 2008. Compensation for revenue loss to the States in any year arising from the lowering of CST will be limited to the proportionate loss based on the actual collection of CST in the relevant year. The Government noted that considerable progress had been made in preparing a road map for introducing the goods and services tax with effect from April 1, 2010.

II.1.40 The expenditure policy for 2008-09 was aimed at containing non-plan expenditure while providing adequately for spending on social development and infrastructure needs. In this regard, every ministry/department is required to effect a mandatory cut of 10 per cent on specified heads of non-plan expenditure. The remaining heads of non-plan expenditure except interest payment, repayment of debt, defence capital, salaries, pensions and Finance Commission grants to States, were to be subjected to a mandatory cut of 5 per cent. The fiscal policy strategy was to remain accommodative towards expenditures relating to inclusive growth, human capital development and critical infrastructure development to achieve the growth objectives set out for the Eleventh Five Year Plan. Outcome budgets for 2008-09 were presented by various ministries/departments to identify, monitor and

Box II.2
Impact of the Sixth Pay Commission on Government Finances

The Sixth Central Pay Commission (SPC) (Chairman: Justice B.N.Srikrishna), which was constituted by the Government on October 5, 2006, submitted its Report on March 24, 2008. The terms of reference envisaged transforming the organisations of the Central Government into modern, professional and citizen friendly entities that are dedicated to the service of the people. Accordingly, the SPC evolved a pay package for the Government employees and made recommendations for rationalising the Governmental structure with a view to improving the delivery mechanisms for providing better services to the common man. In order to achieve the objectives, the Commission recommended a reduction of layers within the Governmental structure so as to expedite decision making and improve delivery mechanism. It also suggested Performance Related Incentive Scheme (PRIS) and variable increments in the basic scheme of pay scales. The PRIS envisaged a pecuniary component, over and above the salary, for higher performance that would be judged by improved delivery to the end user by an external independent agency. Pay scales and revision of pension were proposed to take effect retrospectively from January 1, 2006, while other recommendations will be implemented prospectively.

Salient features of the SPC's recommendations included: (a) four distinct running pay bands for both civilian and defence forces in addition to distinct pay scales for the Secretary to Government of India/equivalent and Cabinet Secretary; (b) fixing of minimum salary at the entry level of pay band (PB-1) at Rs.6,660 (revised to Rs.7,000 by the Union Cabinet in August 2008); maximum salary at the Secretary level at Rs.80,000; minimum:maximum ratio to be 1:12; (c) doubling of most of the allowances of both civilian and defence forces along with indexation of all fixed allowances to inflation; (d) 40 per cent increase in pension; (e) revision of base year of consumer price index, as frequently as feasible, for computing dearness allowance; and (f) provision of military service pay for all personnel of defence forces up to the level of brigadier/equivalent.

The impact of the pay hike on Government finances was estimated to be Rs.12,561 crore per annum (Table A), of which Rs.9,242 crore would be borne by the Central Government and the remaining Rs.3,319 crore would be borne by the Railway Budget. The Commission, however, projected savings of Rs.4,586 crore per annum on account of the (i) recommended rectification of commutation pension formula; (ii) revised scheme for payment of pension commutation; (iii) revised scheme for payment of advances and lateral movement of defence forces personnel. Thus, the net additional financial burden for Government was projected to be Rs.7,975 crore per annum. The Commission, however, noted that there might not be any accrual of savings in the first year of the implementation of the recommendations.

Table A: Financial Impact per annum

(Rupees crore)

Head	Implications
Revised pay scales for civilians	3,828
Revised pay scales for defence forces	1,640
Military service pay for defence forces	1,497
Transport Allowances (civilians and defence forces)	241
HRA (civilians and defence forces)	1,100
Pension (civilians and defence forces)	1,365
Gratuity (civilians and defence forces	410
Leave encashment (civilians and defence forces)	180
Defence forces allowances	1,750
Other allowances	400
Miscellaneous (up-gradations of individual posts, individual allowances)	150
Total	**12,561**

The one-time expenditure impact on account of payment of arrears retrospectively from January 1, 2006 was estimated at Rs.18,060 crore. Of this, Rs.12,642 crore would be borne by the Budget of the Central Government and the remaining Rs.5,418 crore by the Railway Budget. The Union Government has approved the recommendations of the SPC awards on August 14, 2008. The financial implications in 2008-09 on account of implementation of the recommendations of the SPC as modified by the Central Government would be around Rs.22,100 crore. Of this, around Rs.15,700 crore would be borne by the Central Budget and Rs.6,400 crore by the Railway Budget.

Reference:

Government of India (2008), *Report of the Sixth Central Pay Commission,* March.

Government of India (2008), Press Information Bureau, Ministry of Finance, August, 14.

assess actual outcomes. With a shift in focus from outlays to outcomes, the need for efficient tracking of expenditure, improving the quality of expenditure and enhancing the efficiency and accountability of the delivery mechanism were recognised as critical for obtaining value for money. In order to ensure better expenditure discipline, the accounting system was being expanded to provide online tracking of status on Government receipt and expenditure through various Central Government ministries/ departments to capture the online releases status on various Central/States schemes.

II.1.41 The Budget continued to place emphasis on social sector infrastructure through higher outlays to the flagship programmes relating to rural employment, education, health, water supply, women and child development and other welfare programmes and through monitoring the achievement of physical targets set out in these programmes. The allocations for health and education were increased considerably for 2008-09 keeping in view their importance in social sector reforms. The Union Budget 2008-09 proposed to shift the focus of *Sarva Shiksha Abhiyan* (SSA), a flagship programme under *Bharat Nirman*, from access and infrastructure at the primary level to enhancing retention, improving quality of learning and ensuring access to upper primary classes. It also proposed a new scheme to establish 6,000 high quality model schools, extend the coverage of mid-day meal scheme to upper primary classes in Government and Government-aided schools in all blocks in the country and setting up institutes of higher education in various States. Based on the recommendation of the National Knowledge Commission, the Ministry of Information and Technology would establish a National Knowledge Network to encourage sharing of resources and collaborative research. The Union Budget 2008-09 increased the allocation for National Rural Health Mission (NRHM), aimed at establishing a fully functional, community owned decentralised health delivery system, to Rs.12,050 crore.

II.1.42 The Government introduced three schemes that are designed to provide social security to workers in the unorganised sector in a phased manner in anticipation of the enactment of 'The Unorganised Sector Workers' Social Security Bill 2007'. These were (i) the *Aam Admi Bima Yojana* that would provide insurance cover to poor households; (ii) the *Rashtriya Swasthya Bima Yojana* to provide a health cover of Rs.30,000 for every worker in the unorganised sector falling under the below poverty line (BPL) category and his/her family; and (iii) the Indira Gandhi National Old Age Pension Scheme that was enlarged with effect from November 19, 2007 to include all persons over 65 years falling under BPL category.

State Governments

II.1.43 The State Governments continued to make progress in fiscal correction and consolidation programme during 2007-08 in terms of the path of fiscal restructuring prescribed by the Twelfth Finance Commission (TFC) and targets fixed under their respective Fiscal Responsibility Legislation (FRL). As at end-June 2008, all States, barring West Bengal and Sikkim, had enacted FRL. All States have implemented Value Added Tax (VAT) in *lieu* of sales tax, with the last State, *viz*., Uttar Pradesh, implementing VAT with effect from January 1, 2008. The State Governments have been preparing Medium Term Fiscal Plan (MTFP) as a requirement under their FRL, which define the strategic priorities, key policies and rolling targets for the three-year period.

II.1.44 The Thirteenth Finance Commission was constituted in terms of Article 280 of the Indian Constitution on November 13, 2007, which will have an award period spanning 2010-2015. As per its terms of reference, the Commission would make recommendations on the distribution between the Union and the States of the net proceeds of taxes, which are to be or may be divided between them, the principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the measures needed to augment the Consolidated Fund of a State to supplement the resources of the *Panchayats* and Municipalities in the State on the basis of the recommendations made by the Finance Commission of the State. Apart from the above, the Commission will also consider, *inter alia*, (a) the impact of the proposed implementation of goods and services tax (GST); (b) the need to improve the quality of public expenditure; and (c) the need to manage ecology, environment and changed climate consistent with sustainable development.

II.1.45 The States, while presenting their budgets for 2008-09, announced a number of policy initiatives aimed at augmenting revenues and directing expenditure towards the priority areas. Allocations for agriculture and water conservation were proposed to be raised in 2008-09 by most of the States, *viz.*, Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Kerala, Maharashtra, Manipur, Meghalaya, Nagaland, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal. All the States proposed higher expenditure on health and education sectors. State Governments of Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Kerala, Maharashtra, Manipur, Punjab, Rajasthan, Uttarakhand, Uttar Pradesh and Tamil Nadu also placed emphasis on development of infrastructure, with higher allocations for development of roads and urban transport. A number of States, *viz.,* Assam, Bihar, Goa, Haryana, Jammu and Kashmir, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh, announced schemes for the power sector. A few States, *viz.*, Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Jharkhand, Manipur, Orissa, Rajasthan, Tamil Nadu, Uttarakhand and Uttar Pradesh, proposed higher allocations for urban development and housing sectors. The State Governments are also undertaking construction of houses for low and middle income group families, slum dwellers and below poverty line families under various schemes, including *Indira Awas Yojana* and Jawaharlal Nehru National Urban Renewal Mission (JNNURM). Several States including Andhra Pradesh, Bihar, Goa, Himachal Pradesh, Jammu and Kashmir, Madhya Pradesh, Manipur, Rajasthan, Uttarakhand and Uttar Pradesh also proposed computerisation of treasuries and tax departments. Maharashtra implemented a computerised budget distribution system in order to improve the cash flow system. Some more States, including Arunachal Pradesh, introduced gender budgeting for the empowerment of women. Kerala announced setting up of a Gender Board. Manipur proposed to set up Guarantee Redemption Fund and Consolidated Sinking Fund.

EXTERNAL SECTOR POLICIES

II.1.46 In the Annual Supplement (2008) to Foreign Trade Policy (2004-09), the Government announced a set of policy measures to strengthen the export sector through sectoral initiatives, promotional measures, relief to sectors affected by rupee appreciation, measures to reduce transaction cost and procedural simplification. Under the promotional measures, the customs duty under the Export Promotion Capital Goods (EPCG) scheme was reduced from 5 per cent to 3 per cent with the objective of modernisation of manufacturing and services exports. The Duty Entitlement Pass Book (DEPB) scheme was extended up to May 2009. As a relief measure to exporters in select sectors affected by the appreciation of rupee, the interest rate subvention already granted to the specified sectors was extended for one more year and the average export obligation under EPCG was reduced for the affected sectors. The other sectoral measures announced comprised specific initiatives for sectors such as IT hardware, telecom, toys and sports goods. These included setting up of a new Export Promotion Council for the telecom sector and inclusion of specific items in the IT hardware sector for benefits under high tech product scheme. The coverage under the Focus Market Scheme (FMS), which aims at increasing export competitiveness to select international markets by offsetting the high freight costs and other externalities to these markets, was extended to include 10 additional countries. The export facilitation measures announced, *inter alia*, included payment of interest to exporters in case of delay in refund of duties; free disposal of waste/scrap/ remnant generated in manufacturing or processing activities of a special economic zone (SEZ) unit/ developer/co-developer in domestic tariff area (DTA), subject to payment of applicable customs duty; withdrawal of requirement of submission of non-availment of MODVAT certificate in specified cases; and inclusion of some additional ports under export promotion schemes for reducing costs and adhering to the delivery schedules. Measures to reduce transaction cost to exporters included Electronic Data Interchange (EDI)-enabling of advance authorisation scheme and EPCG scheme through electronic message exchange; treating all existing EDI ports as a single port; reduction in application fee for duty credit scrips; EPCG authorisations and importer-exporter code number; and reduction of fee in case of supplementary claims. The main procedural simplifications consisted of allowing export oriented units (EOUs) to pay excise duty on a monthly basis against the present system of paying duty on a consignment basis, subject to certain conditions; and allowing pro-rata enhancement/reduction in 'cost, insurance and freight' (CIF) value or duty saved amount beyond 10 per cent under the EPCG scheme.

Foreign Exchange Transactions[1]

II.1.47 During 2007-08, the Reserve Bank continued to take several measures to further simplify and liberalise the external payments regime and deepen the foreign exchange market. The policy initiatives undertaken to further liberalise cross-border capital flows, both inflows and outflows, included, *inter alia*, increase in the overseas investment limits for Indian entities, including mutual funds, and widening of investment avenues for mutual funds and venture capital funds; enhanced limits for portfolio investment in equities of foreign companies where the requirement of reciprocal stake of at least 10 per cent in Indian companies was dispensed with; permission to cancel forward contracts for overseas direct investments (equity and loan) and rebook 50 per cent of such cancelled contracts; permission to hedge currency exposures of resident individuals, small and medium enterprises in respect of inward/outward remittances and enhanced prepayment limits for the external commercial borrowings (ECB). Effective June 2, 2008, companies in the service sector have been permitted to avail of ECB up to US $ 100 million per financial year, for the purpose of import of capital goods under the approval route.

II.1.48 With regard to current account transactions, important liberalisation measures taken during 2007-08 included enhancement of limits for remittances under the Liberalised Remittance Scheme (LRS) for resident individuals (from US $ 50,000 to US $ 100,000 per financial year in May 2007 and further to US $ 200,000 per financial year in September 2007), subject to certain conditions; permission to allow refund of export proceeds for goods to be re-imported into India on account of poor quality; enhancement of limits for consultancy services for infrastructure projects; and enhancement of limits for imports of rough diamonds.

II.1.49 Keeping in view the prevailing macroeconomic situation and experience gained in administering the ECB policy, a review of the ECB guidelines was undertaken in August 2007. Accordingly, the exemption for utilisation of ECB proceeds for development of integrated township was dispensed with. Furthermore, ECB up to US $ 500 million per borrower per financial year was permitted only for foreign currency expenditure for permissible end-uses of ECB under the automatic route and funds were required to be parked abroad. For meeting rupee expenditure for permissible end-uses, ECB up to US $ 20 million (raised in June 2008 to US $ 100 million for borrowers in infrastructure sector and to US $ 50 million for other borrowers) would be considered by the Reserve Bank under the approval route. The all-in-cost ceilings for ECBs were reduced in May 2007 (but were subsequently restored in May 2008).

MONETARY POLICY FRAMEWORK[2]

II.1.50 The conduct of monetary policy during 2007-08 was shaped by the need to meet the challenges arising out of large capital flows, turbulence in global financial markets and increase in inflation and inflationary expectations due to both global and domestic factors. Framed against the backdrop of intensified demand pressures coupled with supply-side constraints resulting from the slowdown in

[1] A detailed discussion of policies relating to foreign exchange transactions is presented in Chapter V (Development and Regulation of Financial Markets) of the Report.
[2] A detailed discussion of monetary management is presented in Chapter III (Monetary Policy Operations) of the Report.

agricultural growth rate, the Annual Policy Statement for 2007-08 (April 2007) emphasised that in order to achieve a judicious balancing of weights assigned to monetary policy objectives, priority needed to be accorded to stability in order to support sustainable growth. The stance of monetary policy was "to respond swiftly with all possible measures as appropriate to the evolving global and domestic situation impinging on inflation expectations and the growth momentum" (April 2007). While the macroeconomic performance in the first quarter of 2007-08 was favourable both in terms of growth and inflation, monetary policy, nevertheless, emphasised the need to continuously assess the overall inflation outlook. Under-pricing and wide diffusion of risks in global financial markets imparted considerable uncertainty. The stance of monetary policy, as set out in the First Quarter Review, therefore, indicated that while there would be continued emphasis on price stability and well-anchored inflation expectations to sustain the growth momentum, "contextually, financial stability may assume greater importance in the months to come" (July 2007). Accordingly, higher priority was accorded to managing appropriate liquidity conditions in the policy hierarchy. Monetary policy was faced with the challenge of managing large capital flows and the attendant implications for liquidity and overall stability, particularly in the context of growing threats to inflation emanating from global factors. Beginning July 2007, global financial markets experienced unusual volatility, strained liquidity and heightened risk aversion. In view of the heightened global uncertainties and unconventional policy responses by the central banks, the Mid-term Review resolved to take recourse to all possible options for maintaining stability and growth momentum in the economy, even while persisting with the stance as articulated in the Annual Policy Statement for 2007-08 and the First Quarter Review. During the third quarter of 2007-08, while domestic outlook remained positive, global economic outlook worsened, with the sub-prime crisis and volatile global prices of food, fuel and metal, accentuating the risks to both growth and inflation. The stance of monetary policy was, therefore, "to monitor the evolving heightened global uncertainties and domestic situation impinging on inflation expectations, financial stability and growth momentum in order to respond swiftly with both conventional and unconventional measures, as appropriate" (January 2008).

II.1.51 The Annual Policy Statement for 2008-09 (April 2008) recognised the increased threats to growth and stability from global developments with a highly uncertain likelihood of early resolution. The Statement, however, noted that the policy setting would continue to be dominated by domestic factors with contextual emphasis on inflationary expectations. Accordingly, the overall stance of monetary policy was set in terms of ensuring a monetary and interest rate environment that accorded high priority to price stability, well-anchored inflation expectations and orderly conditions in financial markets while being conducive to the continuation of the growth momentum. The policy resolved to respond swiftly on a continuous basis to the evolving constellation of adverse international developments and to the domestic situation impinging on inflation expectations, financial stability and growth momentum, with both conventional and unconventional measures, as appropriate. This stance was reiterated in the First Quarter Review of the Annual Policy Statement (July 2008) which noted that in view of the unprecedented uncertainties and dilemmas, "it is important to take informed judgements with regard to the timing and magnitude of policy actions; and such judgements need to have the benefit of evaluation of incoming information on a continuous basis."

II.1.52 In recognition of the cumulative and lagged effects of monetary policy, the withdrawal of monetary accommodation, which began in September 2004, continued in 2007-08 and 2008-09 so far. The cash reserve ratio (CRR) was raised by a total of 150 basis points during 2007-08. In view of the progressive building up of underlying inflationary pressures besides oil prices during 2008-09 so far, monetary policy recognised the need to smoothen and enable the adjustment of demand on an economy-wide basis so that inflation expectations are contained. Accordingly, the Reserve Bank has been acting preemptively. The CRR was raised by a total of 125 basis points during 2008-09 (up to end-July 2008) and will be raised further by 25 basis points with effect from the fortnight beginning August 30, 2008. The cumulative increase in the CRR since September 2004 would aggregate to 450 basis points. Furthermore, the Reserve Bank also increased the repo rate by a total of 125 basis points during June-July 2008 to 9.0 per cent, while keeping other policy interest rates unchanged.

CREDIT DELIVERY[3]

II.1.53 During 2007-08, the Reserve Bank continued with its policy to improve the credit delivery mechanism to the small borrowers, particularly to the agriculture and small enterprises sector by creating a conducive environment for banks to provide adequate and timely finance at reasonable rates without procedural hassles. The Reserve Bank also emphasised the importance of greater financial inclusion, promotion of credit delivery for employment generation in rural areas, encouraging financial literacy and improving credit quality. Towards this end, it continued to take a number of initiatives including revision of guidelines on lending to priority sector, strengthening of the rural co-operatives and regional rural banks, encouraging multiple channels of lending such as self-help groups (SHGs), micro-finance institutions (MFIs), adoption of business facilitator (BF)/business correspondent (BC) model and information and communication technology (ICT) solutions for achieving greater outreach and reducing transaction cost. During 2008-09, the Reserve Bank continued to place emphasis on credit quality as well as credit delivery, in particular, for employment-intensive sectors, while pursuing financial inclusion.

FINANCIAL SECTOR POLICIES[4]

II.1.54 The regulatory purview of the Reserve Bank extends to a large segment of the financial system including commercial banks, co-operative banks, non-banking financial institutions and various segments of the financial market (money market, government securities market and foreign exchange market). During 2007-08, the Reserve Bank continued to undertake measures to facilitate the appropriate development of the financial system with a view to support sustained economic growth and ensure financial stability. The focus of various policy measures continued to be on appropriate safeguards by way of prudential regulations and disclosure standards, and strengthening of supervisory processes and risk management systems. The financial sector remained resilient in the face of the recent global financial market turmoil.

II.1.55 Foreign banks and Indian banks with overseas presence smoothly migrated to the Basel II framework on March 31, 2008. Guidelines were issued by the Reserve Bank on Pillar 2 of the Basel II framework. Banks were allowed newer avenues of raising capital to enable them to meet the Basel II requirement. An important initiative in the area of corporate governance included guidelines on ‘fit and proper’ criteria for elected directors on the boards of public sector banks. Another initiative in this direction was the issue of guidelines on corporate social responsibility, sustainable development and non-financial reporting. Significant measures were also undertaken in the area of anti-money laundering (AML) and know your customer (KYC) guidelines and customer service including guidelines for recovery agents, grievance redressal mechanism and national do-not-call registry. Policy measures emanating from the Vision Document for urban cooperative banks (UCBs) placed emphasis on enhanced prudential standards, continuance of differentiated regulatory regime for smaller UCBs with limited outreach and various other customer service and business facilitation related measures including permitting ATM-cum-debit card and money transfer. The process of mergers and amalgamation in the UCBs sector gained further momentum during the year. The Reserve Bank continued its efforts to strengthen the non-banking financial institutions (NBFIs) in order to make them more vibrant and healthy. Important developments included the

[3] A detailed discussion of policies relating to credit delivery is presented in Chapter IV (Credit Delivery) of the Report.

[4] A detailed discussion of financial sector policies is presented in Chapter V (Development and Regulation of Financial Markets) and Chapter VI (Financial Regulation and Supervision) of the Report.

issuance of guidelines on registration and operations of mortgage guarantee companies (MGCs) and prudential norms and investment directions applicable to them; move towards transparency on interest rates charged; FIMMDA reporting platform for corporate bond transactions; and measures for application of KYC norms.

Policies for Financial Markets

II.1.56 The Reserve Bank continued to take measures to broaden and deepen the financial markets and allow operational flexibility to market participants within an environment secured by effective regulation and oversight. With the withdrawal of the Reserve Bank from the primary market in accordance with the provision of the Fiscal Responsibility and Budget Management Act, 2003, measures were initiated to strengthen the Government securities market. These included permitting the cover leg of short sales transactions and "when issued" to be undertaken outside order matching segment of negotiated dealing system (NDS-OM); extending the facility of indirect access through the constituents' subsidiary general ledger (CSGL) route to the NDS-OM to the systemically important non-deposit taking NBFCs (NBFC-ND-SI); and introducing a new settlement mechanism in the Government securities segment (Multi-Modal Settlement) through designated settlement banks for non-bank/non-primary dealer(PD) entities such as mutual funds.

II.1.57 Capital market policies during 2007-08 were directed at making the Indian capital market efficient, transparent and investor friendly. To enable well established and compliant listed companies to access the Indian primary market in a time effective manner through follow-on public offerings and rights issues, the Securities and Exchange Board of India (SEBI) allowed listed companies satisfying certain specified requirements to make fast track issues (FTIs). Fees were revised downwards for (a) filing an offer document for public issue, (b) rights issue and (c) buy back of securities. As a first step to progressively encourage markets to move onshore, SEBI approved, in principle, the introduction of new derivative products for the Indian market based on the interim recommendations made by the SEBI Committee on Derivatives. Another major initiative undertaken was the introduction of short selling for all classes of investors subject to a broad framework. SEBI decided to set up a full-fledged securities lending and borrowing (SLB) scheme for all participants in the market under the overall framework of "Securities Lending Scheme, 1997".

II.1.58 A number of initiatives were taken to make the operations of mutual funds more transparent and investor-friendly. This included waiver of entry load for direct applicants in mutual funds, removal of issue expenses for close-end schemes and removal of entry as well as exit load on bonus units and on units allotted on reinvestment of dividend. Furthermore, the aggregate ceiling for overseas investments by mutual funds was raised to US $ 5 billion in September 2007 and further to US $ 7 billion in April 2008.

II.1.59 To encourage foreign investments in the Indian capital market, SEBI allowed foreign institutional investors to provide AAA-rated foreign government securities as collateral for margins against transactions in the derivatives segment. SEBI decided to further enhance the cumulative debt investment limit available for investments by FIIs/sub-accounts in Government securities/Treasury bills to US $ 3.2 billion in January 2008 and further to US $ 5 billion in June 2008. Unregulated foreign entities were banned from issuing participatory notes (P-Notes). To accommodate more investors through the registration route, SEBI made several modifications in the registration criteria. The broad-based criterion was modified to include entities having at least 20 investors with no single investor allowed to hold more than 49 per cent (instead of 10 per cent at present). The SEBI Board also advised that entities such as foundations, endowments, university funds and charitable trusts or societies, which are not regulated with any regulatory authority, may be registered as FIIs.

II.1.60 Several measures were also initiated during 2007-08 to develop the private corporate debt market. SEBI institutionalised the setting up of corporate bond trading platform following which trading platforms were set up at the Bombay Stock Exchange Limited (BSE) and National Stock Exchange of India Limited (NSE). SEBI rationalised the provisions of continuous disclosures made by issuers who have listed their debt securities. SEBI also implemented measures to streamline the activity in the corporate bond market by reducing the shut period in corporate bonds in line with Government securities, reducing the tradable lots in corporate bonds in respect of all entities, including qualified institutional investors (QII) to Rs.1 lakh and standardising the day count convention[5]. With regard to safety of investors, SEBI made it mandatory that the companies issuing debentures and the respective debenture trustees/stock exchanges shall disseminate all information regarding the debentures to the investors by displaying information through respective websites and press releases. Furthermore, SEBI amended Disclosure and Investor Protection (DIP) Guidelines, 2000 to facilitate issuance of below investment grade bonds.

II.1.61 The Union Budget 2008-09 announced measures to develop bond, currency and derivatives markets that will include launching exchange-traded currency and interest rate futures and developing a transparent credit derivatives market with appropriate safeguards. Subsequently, in view of certain adverse developments witnessed in international financial markets, particularly the credit markets, the Reserve Bank decided that the time was not opportune to introduce credit derivatives in India for the present. To enhance the tradability of domestic convertible bonds, the Budget proposed to put in place a mechanism that would enable investors to separate the embedded equity option from the convertible bond and trade it separately. The Budget also proposed to exempt corporate debt instruments issued in demat form and listed on recognised stock exchanges from TDS. Effective August 6, 2008, trading in currency futures were permitted at recognised exchanges for Indian entities, including banks.

Legal Framework

II.1.62 The Government Securities Act, 2006 and the Government Securities Regulations, 2007 were notified on December 1, 2007 (Box II.3).

II.1.63 To enable the Reserve Bank to transfer its shareholding in State Bank of India (SBI) in favour of the Central Government, certain amendments were carried out in the State Bank of India Act, 1995 through State Bank of India (Amendment) Ordinance,

Box II.3
Government Securities Act, 2006 and Government Securities Regulations, 2007

The Government Securities Act, 2006 (GS Act) enacted in August 2006 replaced the Public Debt Act, 1944 and repealed the Indian Securities Act, 1920. The Government Securities Regulations, 2007 (GS Regulations) were framed by the Reserve Bank in terms of Section 32(1) of the GS Act, which along with the GS Act, came into force with effect from December 1, 2007.

The main features of the GS Act and the GS Regulations include: (i) investor friendly automatic redemption facility, *i.e.,* no physical discharge is required if the investors submit bank account details for receiving redemption proceeds of Government security held in the form of bond ledger account (BLA), subsidiary general ledger (SGL) or stock certificate; (ii) facility of pledge or hypothecation or lien of Government security; (iii) legal recognition of beneficial ownership of constituents in respect of Government securities held in the constituents' subsidiary general ledger (CSGL) account; (iv) simplified procedure/documentation for recognition of title to a Government security of a deceased holder; (v) nomination facility for Government securities held in the form of stock certificate and BLAs; (vi) stripping of a Government security separately for principal and interest and reconstitution thereof; (vii) simplified procedure for issue of duplicate Government securities; (viii) simplified procedure for making vesting order; and (ix) debarring holders of SGL account from trading in case of misuse of SGL account. The GS Act empowers the Reserve Bank to call for information, cause inspection and issue directions in relation to Government security as also to impose penalty up to Rupees five lakh in case of contravention of the GS Act and further penalty of Rupees five thousand for every day after first day during which such contravention continues.

For better customer service, the investor friendly features of the GS Act and the GS Regulations have been widely disseminated through a press release. Frequently Asked Questions (FAQs) on the GS Act and the GS Regulations, in an easy to understand language, have also been prepared and placed on the Reserve Bank's website for the benefit of investors/agency banks. Furthermore, an advertisement, highlighting the investor friendly features of the GS Act and the GS Regulations, is also being released in print media in English and vernacular languages.

[5] The day count convention is used to determine the number of days between coupon dates which is important in calculating the accrued interest for bonds and present value when the next coupon payment is less than a full coupon period away.

2007, which came into force on June 29, 2007. The Ordinance was later replaced by the State Bank of India (Amendment) Act, 2007 (which by a deeming provision also came into force on June 29, 2007).

II.1.64 The Micro Financial Sector (Development and Regulations) Bill, 2007 was introduced in the Lok Sabha on March 20, 2007. The Bill, *inter alia*, includes provisions for (i) constitution of Micro Finance Development Council; (ii) registration of micro finance organisations with NABARD; (iii) settlement of disputes through micro finance ombudsman; and (iv) penalties relating to offences. The Bill has been referred to the Standing Committee on Finance.

II.1.65 The Securities Contracts (Regulation) Amendment Act, 2007, which had amended the Securities Contract (Regulation) Act, 1956 so as to provide a legal framework for trading in securitised debt, including mortgage backed debt, was passed in May 2007. The Act, *inter alia*, provides for (a) including securitisation certificates or instruments under the definition of 'securities'; and (b) obtaining approval from SEBI for issue of securitisation certificate or instrument and procedure thereof.

II.1.66 The State Bank of India (Subsidiary Banks Laws) Amendment Act, 2007, which had amended the State Bank of Saurashtra Act, 1950, the State Bank of Hyderabad Act, 1956 and the State Bank of India (Subsidiary Banks) Act, 1959, came into effect on July 9, 2007. The Act, *inter alia*, provides for enhancing the capital of the subsidiary banks; enables them to raise resources from the market; and provides flexibility in the management of these banks. The major provisions of the Act include (a) increasing the authorised capital of subsidiary banks of the SBI to Rs.500 crore; (b) fixing of their issued capital by SBI with the approval of the Reserve Bank; (c) raising of such issued capital through preferential allotment/private placement/public issue in accordance with the specified procedure, with the approval of SBI and the Reserve Bank; (d) issuance of bonus shares to the equity shareholders with the approval of SBI and the Reserve Bank; and (e) reduction of SBI's mandatory shareholding from 55 per cent to 51 per cent of the issued capital consisting of equity shares.

II.1.67 A comprehensive legislation in the form of Payment and Settlement Systems Act, 2007 was enacted on December 20, 2007, to ensure smooth operations of the payment and settlement systems, to authorise the Reserve Bank to regulate and supervise the payment systems in India, and to give a legal recognition to the netting procedure and settlement finality (Box II.4).

Box II.4
Payment and Settlement Systems Act, 2007

Payment and Settlement systems need to function on a well founded legal basis. The Reserve Bank presently uses its powers derived from the Banking Regulation Act, 1949 as the regulator of the banking system to ensure smooth and efficient functioning of the payment systems in the country. In order to address the need for an explicit law to facilitate the direct regulation and oversight of the diverse payment systems in the country, the Payment and Settlement Systems Act, 2007 was enacted in December 2007 and has been brought into force from August 12, 2008. The Act gives legal recognition to the netting procedure and settlement finality.

The Act empowers the Reserve Bank to (*a*) regulate and oversee the various payment systems in the country, including those operated by non-banks like CCIL, card companies, other payment system providers and the organisation for payments to be set up in future; (*b*) lay down the procedure for authorisation of payment systems as well as revocation of authorisation; (*c*) lay down operational and technical standards for the various payment systems; (*d*) call for information and returns and documents from the service providers; (*e*) issue directions and guidelines to the system providers; (*f*) audit and inspect the systems and premises of the system providers; (*g*) lay down the duties of the system providers; and (*h*) levy fines and impose penalties for not providing information or documents or wrongfully disclosing information.

The Reserve Bank is empowered under the Act to make regulations to operationalise the provisions of the Act. Accordingly, two sets of regulations, *viz.,* (i) Board for Regulation and Supervision of Payments and Settlement Systems Regulations, 2008; and (ii) Payments and Settlement Systems Regulations, 2008 were framed by the Reserve Bank and were notified on August 12, 2008.

II. THE REAL ECONOMY

II.2.1 The Indian economy maintained high growth momentum during 2007-08 for the fifth year in succession, although there was some moderation. Real GDP growth was placed at 9.0 per cent during 2007-08 as compared with 9.6 per cent in 2006-07, reflecting moderation in industry and services. The industrial growth slowed down during 2007-08 from the strong growth performance during previous year, while the services sector growth moderated for the first time since 2000-01. A positive feature during the year, however, was a recovery in the growth of real GDP originating in the agricultural sector after the slowdown experienced a year ago (Table 2.1 and Appendix Tables 2 and 3). Despite moderation, the overall growth performance was strong during 2007-08 and India remained one of the fastest growing economies among the major advanced and emerging market economies.

II.2.2 The real GDP growth for 2007-08 was higher than the average growth for the Tenth Five Year Plan as also for the current decade so far. During the last five years (2003-04 to 2007-08), the agriculture sector contributed 11.1 per cent to GDP growth, while industry contributed 18.3 per cent. The services sector continued to be the mainstay of the economy, contributing 70.6 per cent to overall growth, thereby providing resilience to the growth process.

II.2.3 The growth performance of the Indian economy was also noteworthy in the global context. As per World Economic Outlook (July 2008), the world economy expanded at 5.0 per cent in 2007, India and China grew at a faster pace. In the face of slowing down of the global economy in 2007-08, India and China remained the main drivers of global growth backed by strong productivity gains and progressive integration into the global economy. According to the World Bank estimates of purchasing power parity (PPP), based on International Comparison Programme (ICP), India and China's shares in the global GDP in PPP terms were placed higher in 2007 than those in 2006.

Table 2.1: Growth Rates of Real GDP (at 1999-2000 Prices)

(per cent)

Sector	1990-91 to 1999-2000 (Average)	2000-01 to 2007-08 (Average)	2002-03 to 2006-07 (10th Plan)	2005-06@	2006-07*	2007-08#	2007-08 Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9	10	11
1. Agriculture and Allied Activities	**3.2**	**2.9**	**2.5**	**5.9 (19.6)**	**3.8 (18.5)**	**4.5 (17.8)**	**4.4**	**4.7**	**6.0**	**2.9**
1.1 Agriculture	3.3	n.a	2.5	6.1	3.8	n.a.	n.a.	n.a.	n.a.	n.a.
2. Industry	**5.7**	**7.1**	**8.0**	**8.0 (19.4)**	**10.6 (19.5)**	**8.1 (19.4)**	**9.6**	**8.6**	**8.6**	**5.8**
2.1 Mining and Quarrying	4.8	4.9	6.1	4.9	5.7	4.7	1.7	5.5	5.7	5.9
2.2 Manufacturing	5.6	7.8	8.6	9.0	12.0	8.8	10.9	9.2	9.6	5.8
2.3 Electricity, Gas and Water Supply	7.3	4.8	5.6	4.7	6.0	6.3	7.9	6.9	4.8	5.6
3. Services	**7.1**	**9.0**	**9.7**	**11.0 (61.1)**	**11.2 (61.9)**	**10.7 (62.9)**	**10.6**	**10.7**	**10.0**	**11.4**
3.1 Trade, Hotels, Transport Storage and Communication	7.5	10.3	11.1	11.5	11.8	12.0	13.1	11.0	11.5	12.4
3.2 Financing, Insurance, Real Estate and Business Services	8.1	8.8	9.5	11.4	13.9	11.8	12.6	12.4	11.9	10.5
3.3 Community, Social and Personal Services	6.5	5.8	6.1	7.2	6.9	7.3	5.2	7.7	6.2	9.5
3.4 Construction	5.6	10.6	12.9	16.5	12.0	9.8	7.7	11.8	7.1	12.6
4. Real GDP at Factor Cost	**5.7**	**7.3**	**7.8**	**9.4 (100.0)**	**9.6 (100.0)**	**9.0 (100.0)**	**9.2**	**9.3**	**8.8**	**8.8**

@ : Provisional Estimates. * : Quick Estimates. # : Revised Estimates. n.a. : Not Available.

Note : 1. Figures in parentheses denote percentage shares in real GDP.
2. Q1: First Quarter (April-June); Q2: Second Quarter (July-September); Q3: Third Quarter (October-December); and Q4: Fourth Quarter (January-March).

Source : Central Statistical Organisation.

China's share of global output increased from 10.2 per cent in 2006 to 10.8 per cent in 2007, while that of India from 4.4 per cent to 4.6 per cent during the same period. In purchasing power parity (PPP) exchange rate terms, the Indian economy was the fourth largest economy in 2007 (Box II.5).

Box II.5

International Comparison Programme

The United Nation's *System of National Accounts 1993* (SNA93) provides a common international framework for the measurement of economic activity. The standard method, based on market exchange rates, does not necessarily reflect differences in price levels and may, therefore, understate or overstate the real value of an economy's output and the standard of living of its residents. Therefore, the SNA93 recommended that the real value of economic activity be determined using purchasing power parities.

The need for a more meaningful tool for comparing price levels between economies led to the creation of the International Comparison Programme (ICP). The ICP is a global statistical initiative involving national, regional and international agencies. It produces internationally comparable price levels, expenditure values and purchasing power parity (PPP) estimates for use by the national policymakers, economists, international organisations and academicians.

The program was first established in 1968 as a joint venture of the United Nations and the International Comparisons Unit of the University of Pennsylvania, with financial contributions from the Ford Foundation and the World Bank. Starting with a modest project to undertake comparisons in 10 countries in 1970, further ICP rounds were conducted in 1975, 1980, 1985, 1990, 1993 (only partial) and 2007. At present, the collection of price data and calculation of PPPs in 107 countries of the world is coordinated by the ICP global office in the World Bank. ICP results combined with the Eurostat/OECD PPP Programme would bring the total number of participating countries to about 150, making it the largest international data collection exercise in the world.

The ICP uses 'ring comparison' for the purpose of constructing the PPP based estimates. Ring comparison is a multilateral approach to link regional PPPs to generate global PPPs expressed in a common currency. The multilateral ring comparison requires select countries from each region to participate in a separate comparison, organised specifically to provide a link between regions. The 'ring countries' are expected to price a common global ring product list in addition to their individual regional lists. This approach provides the most robust link between regions because products can be matched between ring countries in any pair of regions.

In the previous approach called 'bridge method', the linking of the regions was often through only one or two countries, in which case the results could turn out to be quite sensitive to the particular link countries. In ICP, a method less sensitive to the choice of countries was adopted. Under the ring system, the parity in each region is achieved by converting the national currency expenditures in each country to a volume in the currency of the *numeraire* country of a region, like Oman in western Asia. The next step is to aggregate these expenditures and parities for each region to a total, like consumption or GDP. In 2005, this was done by EKS method[6], which gives equal weight to Africa, Asia, OECD, South America and Western Asia (Heston, 2008).

Independent evaluations of the previous rounds found the 'bridge method' of linking regions unsatisfactory. Subsequently, the multilateral approach 'ring method' was undertaken. From a global perspective, the 'ring countries' serve as a small sample of countries stratified by regions.

Implications for Global GDP Growth

Following the release of new estimates based on revised PPP estimates under ICP in December 2007, global growth estimates in *World Economic Outlook* (April 2008) released by the IMF were revised downwards by about 0.5 percentage point for the period 2000-07. The revisions to PPP exchange rates imply a substantial reduction in the PPP rates of some key emerging economies and an upward revision in others, including oil exporters. The changes have implications for both aggregate global growth based on PPP exchange rates and the share of global GDP accounted for by individual countries and groups.

As per the *World Economic Outlook* (April 2008), the estimated global growth of 4.9 per cent in 2007 (revised to 5.0 in *World Economic Outlook Update*, July 2008) reflects the 0.5 percentage point reduction, purely due to PPP weights (from 5.2 per cent global growth forecast in the October 2007 *World Economic Outlook*) and a 0.2 percentage point upward revision based on revisions to the estimates of country growth rates since the last *World Economic Outlook* (October 2007).

Although PPP estimates have been revised substantially for a large number of countries, the impact on global growth estimates is driven to a large extent by the implied changes in the relative shares of India, China and the United States in global output. India's share of global output in 2007 was estimated at 4.6 per cent (revised from 6.4 per cent), while that of China was at 10.8 per cent (down from 15.8 per cent) and the United States was at 21.4 per cent (up from 19.3 per cent). Notwithstanding these changes, the broad picture of the global growth does not undergo much alteration. The emerging economies like India and China still continue to be the drivers of the global growth.

References

1. Heston, A (2008): "The 2005 Global Report on Purchasing Power Parity Estimates: A Preliminary Review", *Economic and Political Weekly*, March 15.

2. International Monetary Fund (2008): *World Economic Outlook*, April and *World Economic Outlook Update*, July.

3. World Bank (2008): Resources available at *www.worldbank.org* on ICP and ring methodology.

[6] A multilateral method developed by O. Elteto, P. Koves and B. Szulc [Schultz] that computes the nth root of the product of all possible Fisher indexes between n countries. It has been used at the detailed heading level to obtain heading parities, and also at the GDP level. EKS method has the properties of base-country invariance and transitivity.

AGGREGATE SUPPLY

Agriculture

II.2.4 According to the CSO' s revised estimates, real GDP growth of agriculture and allied activities recovered to 4.5 per cent during 2007-08 from 3.8 per cent during 2006-07 (Table 2.1). This reflected the impact of an all-time peak level of 230.7 million tonnes touched by total foodgrains production, an increase of 6.2 per cent over the previous year (217.3 million tonnes). While kharif production at 121.0 million tonnes recorded a growth of 9.4 per cent, rabi production remained subdued at 109.7 million tonnes, exhibiting a growth of 2.8 per cent. (Appendix Table 4).

II.2.5 During the year 2007, the South-West monsoon turned out to be 5 per cent above normal as against one per cent below normal in 2006 (Table 2.2). The monsoon arrived over Kerala on May 28, 2007, four days ahead of the normal date. After a brief hiatus during early June in the advancement of monsoon due to the formation of a Super Cyclone "Gonu" over the East-Central Arabian Sea, the South-West monsoon advanced progressively and covered the entire country by July 4, 2007, nearly 11 days ahead of the normal schedule. Thus, although monsoon was subdued at the beginning of the season with large rainfall deficiencies observed during the first week of June, third and fourth weeks of July and third week of August 2007, it became well-distributed during the rest of the season. Cumulative rainfall over the country as a whole was always above normal after the last week of June 2007. The month-wise distribution showed that rainfall was above normal in June (19 per cent) and September 2007 (18 per cent), while it was marginally below normal during July (3 per cent) and August 2007(1 per cent). Of the 36 meteorological sub-divisions, cumulative rainfall was excess/normal in 30 sub-divisions (26 sub-divisions during last year) and deficient/scanty/ no rain in 6 sub-divisions (10 sub-divisions during

Table 2.2: Spatial Distribution of Rainfall

	South-West Monsoon (June-September)					North-East Monsoon (October-December)				
Year	Cumulative Rainfall: Above(+)/ Below (-) Normal (per cent)	Excess Rainfall	Normal Rainfall	Deficient Rainfall	Scanty/ No Rain	Cumulative Rainfall: Above(+)/ Below (-) Normal (per cent)	Excess Rainfall	Normal Rainfall	Deficient Rainfall	Scanty/ No Rain
		Number of Sub-Divisions					Number of Sub-Divisions			
1	2	3	4	5	6	7	8	9	10	11
1998	6	12	21	3	0	47	28	6	1	1
1999	-4	3	26	7	0	19	20	7	6	3
2000	-8	5	23	8	0	-47	0	4	13	19
2001	-8	1	30	5	0	13	14	10	9	3
2002	-19	1	14	19	2	-33	3	7	12	14
2003	2	7	26	3	0	9	9	9	6	12
2004	-13	0	23	13	0	-11	8	10	17	1
2005	-1	9	23	4	0	10	11	6	5	14
2006	-1	6	20	10	0	-21	3	6	14	13
2007	5	13	17	6	0	-32	2	7	9	18
2008*	2	10	22	4	0					

* : As on August 13, 2008.

Note : Excess: +20 per cent or more. Normal : +19 per cent to -19 per cent. Deficient : -20 per cent to -59 per cent.
Scanty : - 60 per cent or less. No Rain : -100 per cent.
All distributions are with respect to the long period average.

Source : India Meteorological Department.

last year). Among the four broad homogeneous regions[7] , while the South-West monsoon season rainfall was below normal in the North-West India at 85 per cent of the long-period average (LPA), it was above normal in the South Peninsula (126 per cent of LPA), Central India (108 per cent of LPA) and North-East India (104 per cent of LPA). Five sub-divisions (West Uttar Pradesh, Haryana, Chandigarh and Delhi, Punjab, Himachal Pradesh and East Madhya Pradesh) experienced moderate drought[8] conditions (rainfall deficiency of 26 to 50 per cent) at the end of the season. Water stock in the 81 major reservoirs, accounting for around 72 per cent of the total reservoir capacity of the country, was 79 per cent of the full reservoir level (FRL) at the end of the South-West monsoon season (September 27, 2007), lower than 87 per cent during the corresponding period of the previous year but higher than the average of 67 per cent during the last 10 years. As against the above normal South West monsoon, the North-East monsoon (October 1 to December 31, 2007) was deficient with cumulative rainfall at 32 per cent below normal as compared with 21 per cent below normal during the corresponding period of the previous year.

II.2.6 According to the Fourth Advance Estimates, foodgrains production at 230.7 million tonnes during 2007-08 turned out to be above the target of 221.5 million tonnes for 2007-08 and production of 217.3 million tonnes in the previous year (Table 2.3 and Appendix Table 4). This reflected a record achievement of production levels across all foodgrains, led particularly by coarse cereals and rice due to favourable South-West monsoon. Wheat production, however, increased moderately. In respect of non-food grains, oilseeds and cotton were also estimated to reach an all-time record production during 2007-08. However, jute and mesta and sugarcane were likely to register a decline over the previous year.

Table 2.3 : Agricultural Production

Crop	2004-05	2005-06	2006-07	2007-08#
1	2	3	4	5
1. Growth Rate (Per cent) ##				
All Crops	**-1.6**	**12.1**	**11.6**	**6.6**
a. Foodgrains	-7.1	5.8	3.6	5.7
b. Non-foodgrains	1.6	16.0	15.6	7.9
2. Production (Million Tonnes)				
a. Foodgrains	**198.4**	**208.6**	**217.3**	**230.7**
i. Rice	83.1	91.8	93.4	96.4
ii. Wheat	68.6	69.4	75.8	78.4
iii. Coarse Cereals	33.5	34.1	33.9	40.7
iv. Pulses	13.1	13.4	14.2	15.1
b. Non-foodgrains				
i. Oilseeds+	24.4	28.0	24.3	28.8
ii. Sugarcane	237.1	281.2	355.5	340.6
iii. Cotton@	16.4	18.5	22.6	25.8
iv. Jute and Mesta++	10.3	10.8	11.3	11.2
v. Tea**	893.0	946.0	955.9*	944.7*
vi. Coffee**	275.5	274.0	280.0	262.0

: Production based on Fourth Advance Estimates released on July 9, 2008.
: Growth rates are based on the Index of Agricultural Production with base triennium ended 1993-94=100.
+ : For nine oilseeds out of eleven in all.
@ : Million bales of 170 kg. each.
++ : Million bales of 180 kg. each.
* : Estimated production for April-November.
** : Million kilograms; data for tea on a calendar year basis.
Source : Ministry of Agriculture, Government of India.

II.2.7 Notwithstanding record production of cereals, pulses and oilseeds during 2007-08, there has been some slowdown in the growth of yield of these crops in recent years (Table 2.4). Stagnation in yield emanated from limited varietal breakthrough, decline in agricultural investment, almost non-existent extension services and low resilience to moisture stress and pest infestation. Furthermore, as noted by the Steering Committee on Agriculture and Allied Sectors for the Eleventh Five Year Plan, a number of factors such as land degradation, scarcity of water and slow progress in public and private investment in rural infrastructure (including irrigation) have also contributed to stagnation in the agriculture, especially since the 1990s. While much of agricultural growth has originated from the expansion of irrigation and increased productivity of irrigated land, rain-fed

[7] The four broad homogeneous regions are: (1) North-West India (Uttar Pradesh, Rajasthan, Haryana, Chandigarh and Delhi, Punjab, Uttarakhand, Himachal Pradesh and Jammu and Kashmir); (2) Central India (Madhya Pradesh, Chhattisgarh, Maharashtra, Orissa, Gujarat and Goa); (3)South Peninsula (Andhra Pradesh, Karnataka, Tamil Nadu and Puducherry, Kerala, Lakshadweep and Andaman and Nicobar Islands); and (4) North-East India (Bihar, Jharkhand, West Bengal, Sikkim, Assam, Arunachal Pradesh, Meghalaya, Nagaland, Manipur, Mizoram, Tripura).

[8] According to IMD, the departure of aridity index from the normal value is expressed in percentage and accordingly drought is categorised as severe (more than 50 per cent), moderate (26-50 per cent) and mild (up to 25 per cent).

Table 2.4: Production of Major Crops

(Million tonnes)

Year	Rice	Wheat	Pulses	Total Foodgrains	Oilseeds
1	2	3	4	5	6
1990-91	74.3	55.1	14.3	176.4	18.6
1995-96	77.0	62.1	12.3	180.4	22.1
1996-97	81.7	69.4	14.2	199.4	24.4
1997-98	82.5	66.4	13.0	192.3	21.3
1998-99	86.1	71.3	14.9	203.6	24.8
1999-2000	89.7	76.4	13.4	209.8	20.7
2000-01	85.0	69.7	11.1	196.8	18.4
2001-02	93.3	72.8	13.4	212.9	20.7
2002-03	71.8	65.8	11.1	174.8	14.8
2003-04	88.5	72.2	14.9	213.2	25.2
2004-05	83.1	68.6	13.1	198.4	24.4
2005-06	91.8	69.4	13.4	208.6	28.0
2006-07	93.4	75.8	14.2	217.3	24.3
2007-08	96.4	78.4	15.1	230.7	28.8

Source : Ministry of Agriculture, Government of India.

agricultural productivity has been more or less stagnant. Moreover, as noted by a recent research study conducted by the Reserve Bank, the slower growth in public expenditure in agriculture (real terms) inhibited the development of adequate research and extension system for supporting farming, particularly, in a more open economy. Furthermore, the study also noted that the practice of borrowing short-term credit by farmers for meeting their input needs to maintain continuity in operations without increasing long-term capital formation inhibited investment in agriculture.

II.2.8 Productivity increase in agriculture is critically contingent on enhanced capital formation both from the public and private sectors. Investment in agriculture as a proportion of overall GDP remained stagnant in recent years. However, gross capital formation in agriculture relative to GDP in this sector improved significantly from 9.6 per cent in 2000-01 to 12.5 per cent in 2006-07 (Table 2.5). This, according to the Economic Survey 2007-08, needs to be raised to 16 per cent during the Eleventh Five Year to achieve the target growth of 4 per cent in the agricultural sector.

II.2.9 Inflation in the recent past was triggered, *inter alia*, by the rapid rise in the prices of primary articles, although this phenomenon was not confined to India alone. In an open economy, domestic prices have increasingly become susceptible to the movement of prices of various commodities in the world markets. The transmission of international price shocks combined with stagnation in the production of major agricultural crops continued to pose a challenge to the macroeconomic management.

II.2.10 The Government has accorded top priority to the revival of the agriculture sector. Accordingly, an enhanced outlay was committed for expanding irrigation and improving agriculture research and extension system in the next four years (2008-09 to 2011-12). In addition, a Centrally Sponsored

Table 2.5: Gross Capital Formation in Agriculture (At 1999-2000 prices)

Year	Investment in Agriculture (Rupees crore)			Share in Agricultural Gross Investment (per cent)		Gross Capital formation/ GDP at constant prices)	Investment in Agriculture (per cent of GDP at constant prices)
	Total	Public	Private	Public	Private		
1	2	3	4	5	6	7	8
1999-00	43,473	7,716	35,757	17.7	82.3	10.6	2.4
2000-01	39,027	7,156	31,871	18.3	81.7	9.6	2.1
2001-02	48,215	8,746	39,469	18.1	81.9	11.1	2.4
2002-03	46,823	7,962	38,861	17.0	83.0	11.8	2.3
2003-04	44,833	9,376	35,457	20.9	79.1	10.2	2.0
2004-05	49,108	12,273	36,835	25.0	75.0	11.1	2.1
2005-06	54,905	15,005	39,900	27.3	72.7	11.7	2.1
2006-07	60,762	n.a.	n.a.	n.a.	n.a.	12.5	2.1

n.a. : Not available

Source: Central Statistical Organisation.

Scheme, 'National Food Security Mission' was launched from 2007-08 to step up the production of major foodgrains in the country (see Box II.1).

II.2.11 India is bestowed with varied agro-climatic conditions providing immense potential for growing a large number of horticultural crops. The total production of fruits and vegetables was estimated at 57.7 million tonnes and 111.8 million tonnes, respectively, during 2006-07, constituting 15 per cent and 11 per cent, respectively, of total world production. The horticulture sector in 2005-06 contributed around 28 per cent of GDP in agriculture. The production of horticultural crops, which registered an increase of 8.9 per cent in 2005-06, decelerated to 2.8 per cent in 2006-07, mainly because of the decline in the production of onions and stagnation in the production of spices. Vegetables, fruits, plantation crops and spices contributed 59.8 per cent, 30.9 per cent, 6.5 per cent and 2.1 per cent, respectively, to total horticulture production in 2006-07. India produced 186.9 million tonnes of horticultural crops during 2006-07.

II.2.12 India has one of the largest livestock population in the world. The livestock sector plays a crucial role in the economic development of the country. It has been closely associated with agriculture in India and provides an important source of supplementary income to the small and marginal farmers and women in the rural areas of the country, besides providing cheap nutritional food to millions in the country. It is of special significance in the arid and semi-arid regions of the country, where it is the main source of family income.

II.2.13 The livestock sector contributes over 4 per cent to the total GDP and about a quarter of the GDP originating from agriculture and allied activities. The Eleventh Five Year Plan envisages an overall growth of 6-7 per cent per annum for the sector. In 2006-07, production in this sector contributed 101 million tonnes of milk, 51 billion eggs, 45 million kilograms of wool and 2.3 million tonnes of meat. India ranks first in the world in milk production, which increased from 17 million tonnes in 1950-51 to about 102 million tonnes by 2007-08. The per capita availability of milk also increased from 112 grams per day in 1968-69 to 246 grams during 2006-07. However, it was still lower in comparison with the world average of 265 grams per day.

Food Management

II.2.14 The procurement of foodgrains (rice and wheat) during 2007-08 was 37.4 million tonnes. The procurement of wheat increased from 9.2 million tonnes in 2006-07 to 11.1 million tonnes in 2007-08 (Table 2.6 and Appendix Table 5). The offtake of rice and wheat during 2007-08 at 37.4 million tonnes was higher by 1.8 per cent over the corresponding period of the previous year, mainly due to enhanced offtake under the Targeted Public Distribution System (TPDS). The total stock of foodgrains with the Food Corporation of India (FCI) and other Government agencies increased to 30.7 million tonnes as on May 1, 2008 from 25.1 million tonnes a year ago, which was also higher than the buffer stock norms (16.2 million tonnes as on April 1, 2008). The stocks of both rice (12.9 million tonnes) and wheat (17.7 million tonnes) were higher than their buffer stock norms of 12.2 million tonnes and 4.0 million tonnes, respectively.

II.2.15 Subsequent to liberalisation of the Indian economy beginning with the early 1990s, a series of steps were taken to liberalise the commodity forward markets with gradual opening up of forward trading in several commodities. An institutional framework for orderly development of the commodity futures market commenced with the enactment of Forward Contract (Regulation) Act, 1952, which provided the legal framework for organising forward trading in the country and recognition of exchanges. The commodity futures market got a boost with the establishment and recognition of national exchanges with on-line trading and professional management. Accordingly, the total volume of trade in the commodity futures market rose from Rs. 5.72 lakh crore in 2004-05 to Rs. 40.65 lakh crore in 2007-08. The commodity futures markets facilitate the price discovery process and provide for risk management. Their effectiveness depends on the participation of all the stakeholders. At the same time, it is important to ensure that such trading does not become an instrument for pronounced speculation. Recently,

Table 2.6: Management of Foodstocks

(Million Tonnes)

Year/Month	Opening Stock of Foodgrains			Procurement of Foodgrains			Foodgrains offtake					Closing Stock	Norms
	Rice	Wheat	Total	Rice	Wheat	Total	PDS	OWS	OMS - Domestic	Exports	Total		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2004-05	13.1	6.9	20.7	24.0	16.8	40.8	29.7	10.6	0.2	1.0	41.5	18.0	
2005-06	13.3	4.1	18.0	26.7	14.8	41.5	31.4	9.8	1.1	0.0	42.3	16.6	
2006-07	13.7	2.0	16.6	26.3	9.2	35.5	31.6	5.1	0.0	0.0	36.8	17.9	
2007-08	13.2	4.7	17.9	26.3	11.1	37.4	33.5	3.9	0.0	0.0	37.4	19.8	
2008-09*	13.8	5.8	19.8	4.5 (4.3)	22.5 (11.1)	27.1 (15.4)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
2007													
January	12.0	5.4	17.5	4.3	0.0	4.3	2.7	0.4	0.0	0.0	3.1	18.1	20.0
February	12.6	5.4	18.1	2.4	0.0	2.4	2.7	0.5	0.0	0.0	3.1	19.1	
March	14.0	5.1	19.1	1.2	0.0	1.2	2.7	0.5	0.0	0.0	3.2	17.9	
April	13.2	4.7	17.9	0.9	7.9	8.7	2.6	0.2	0.0	0.0	2.8	25.1	16.2
May	13.5	11.6	25.1	1.5	2.6	4.0	2.8	0.2	0.0	0.0	3.0	25.9	
June	12.6	13.3	25.9	1.3	0.7	2.0	2.7	0.4	0.0	0.0	3.0	23.9	
July	11.0	12.9	23.9	0.8	0.0	0.8	2.9	0.4	0.0	0.0	3.2	21.2	26.9
August	9.2	12.0	21.2	0.1	0.0	0.1	2.8	0.3	0.0	0.0	3.0	17.9	
September	6.9	11.0	17.9	0.1	0.0	0.1	2.7	0.3	0.0	0.0	2.9	15.6	
October	5.5	10.1	15.6	7.4	0.0	7.4	2.7	0.3	0.0	0.0	2.9	19.7	16.2
November	10.7	9.0	19.7	1.8	0.0	1.8	2.7	0.3	0.0	0.0	2.9	18.5	
December	10.1	8.4	18.5	3.5	0.0	3.5	2.7	0.3	0.0	0.0	3.0	19.2	
2008													
January	11.5	7.7	19.2	4.5	0.0	4.5	2.9	0.3	0.0	0.0	3.2	21.4	20.0
February	14.0	7.2	21.4	3.0	0.0	3.0	2.9	0.4	0.0	0.0	3.4	21.4	
March	14.7	6.5	21.4	1.6	0.0	1.6	3.1	0.5	0.0	0.0	3.5	19.8	
April	13.8	5.8	19.8	1.1	12.6	13.7	n.a.	n.a.	n.a.	n.a.	n.a.	30.7	16.2
May	12.9	17.7	30.7	2.1	8.8	10.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
June	n.a.	n.a.	n.a.	1.2	0.9	2.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
July*	n.a.	n.a.	n.a.	0.1	0.2	0.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	26.9

PDS: Public Distribution System. OWS: Other Welfare Schemes. OMS: Open Market Sales. n.a.: Not Available.

* : Procurement up to July 31, 2008.

Note : 1. Closing stock figures may differ from those arrived at by adding the opening stocks and procurement and deducting offtake, as stocks also include coarse grains.

2. Figures in parentheses indicate procurement of foodgrains during the corresponding period of 2007-08.

Source : Ministry of Consumer Affairs, Food and Public Distribution, Government of India.

concerns were raised that excessive speculation in the commodity futures market could be a contributory factor behind the increase in the prices of many agricultural commodities. In response, the Government had appointed a Committee (Chairman: Prof. Abhijit Sen) to study the impact, if any, of futures trading on agricultural commodity prices. The report of the Committee noted that there was no clear evidence of futures trading having either reduced or increased volatility of spot prices. Further, the report also argued that the period during which futures trading had been in operation was too short to discriminate adequately between the effect of opening up of futures markets and what might simply be the normal cyclical adjustment. However, the Committee gave wide ranging recommendations such as enabling wider participation of farmers in the futures market; expediting reforms in agricultural marketing; and designing appropriate contracts to serve the objective of risk management.

II.2.16 However, as noted by the Abhijit Sen Committee, direct participation of the farmers in the commodity futures markets is somewhat difficult at this stage as the large lot size, daily margining and high membership fees work as a deterrent for farmers' participation in these markets. Farmers can directly benefit from the futures market if institutions are allowed to act as aggregators on behalf of farmers. The Forward Market Commission (FMC), the regulatory body for the commodity futures market, has been placing special emphasis on creating awareness about the futures market among the participants in the physical markets, including farmers. The FMC has initiated various steps to attract larger participation of all the stakeholders in the supply-chain so as to make the price discovery process more efficient. The awareness programmes are designed to make farmers aware of the benefits of the futures market and to utilise the price signals emanating from the futures exchanges in taking various decisions.

Industrial Performance

II.2.17 The growth of the industrial sector witnessed moderation during 2007-08. According to the revised estimates released by the CSO, growth in real GDP originating from industry decelerated from 10.6 per cent during 2006-07 to 8.1 per cent during 2007-08, led by a moderation in the manufacturing activity (Table 1.1 and Appendix Table 2). However, the industrial growth was still a shade higher than the average growth of 8.0 per cent achieved during the Tenth Five Year Plan.

II.2.18 In terms of Index of Industrial Production (IIP), the industrial growth moderated to 8.5 per cent during 2007-08 from its peak level of 11.5 per cent in 2006-07. The industrial performance during 2007-08 was marked by several features. First, the IIP recorded double-digit growth in nine months during 2006-07–almost matching the impressive performance witnessed during 1995-96, when IIP registered double–digit growth throughout the year. Thus, to an extent, deceleration during 2007-08 reflected the base effect, particularly during the second half of the year (Table 2.7). Furthermore, barring 2006-07 when the IIP showed exceptional growth, the industrial performance during 2007-08 has remained impressive recording double digit-growth during four months of the year as compared with the fiscal years in the recent past-posting double digit growth only in one month during 2004-05 and in two months during 2005-06 (Appendix Table 6). Accordingly, the IIP growth during 2007-08 remained comparable with the average growth of 8.2 per cent recorded during the Tenth Plan period.

II.2.19 Second, decline in the consumer durables sector and supply side constraints emanating from the sluggish performance of the infrastructure sector also impinged on the pace of industrial expansion. Finally, the continued industrial buoyancy in India even amidst global uncertainties, rise in crude oil prices and commodity prices (which form inputs for the industrial sector) reflects the critical role played by domestic demand in supporting industrial growth.

Table 2.7: Performance of the Industrial Sector - Growth

(Per cent)

Month	Mining and Quarrying		Manufacturing		Electricity		IIP - General	
	2006-07	2007-08 P	2006-07	2007-08 P	2006-07	2007-08 P	2006-07	2007-08 P
1	2	3	4	5	6	7	8	9
April	3.4	2.6	11.0	12.4	5.9	8.7	9.9	11.3
May	2.9	3.8	13.3	11.3	5.0	9.4	11.7	10.6
June	4.7	1.5	10.7	9.7	4.9	6.8	9.7	8.9
July	5.1	3.2	14.3	8.8	8.9	7.5	13.2	8.3
August	-1.7	14.7	11.9	10.7	4.1	9.2	10.3	10.9
September	4.3	4.9	12.7	7.4	11.3	4.5	12.0	7.0
October	5.9	5.1	3.8	13.8	9.7	4.2	4.5	12.2
November	8.8	6.3	17.2	4.7	8.7	5.8	15.8	4.9
December	6.1	5.0	14.5	8.6	9.1	3.8	13.4	8.0
January	7.7	2.9	12.3	6.7	8.3	3.7	11.6	6.2
February	7.5	7.9	12.0	9.6	3.3	9.8	11.0	9.5
March	8.0	4.9	16.0	5.7	7.9	3.7	14.8	5.5
April-March	**5.3**	**5.1**	**12.5**	**9.0**	**7.3**	**6.4**	**11.5**	**8.5**

P: Provisional.
Source: Central Statistical Organisation, Government of India.

II.2.20 The slowdown in industrial growth was mainly observed in the manufacturing sector, with its relative contribution in the IIP growth declining from 91.1 per cent during 2006-07 to 89.5 per cent during 2007-08. The mining and electricity sectors also grew at a slower pace during 2007-08 (Chart II.1). The impressive growth, which was observed in the electricity sector during the first half of the year, moderated in the second half on account of lower power generation in all the three plants, *viz.*, thermal, hydro and nuclear power.

II.2.21 The manufacturing sector, which had powered industrial growth beginning 2002-03, turned sluggish during 2007-08. The growth of index of manufacturing production at 9.0 per cent during 2007-08 was the lowest in the last four years (Table 2.8 and Appendix Table 6). Eleven industry groups accounting for 56.0 per cent weight in the IIP (including 'textile products', 'non-metallic mineral products', 'metal products and parts', 'cotton textiles', 'paper and paper products' and 'transport equipment and parts'), registered a lower growth during 2007-08. On the other hand, 'wood and wood products' and 'jute and other vegetable fibres' registered improved performance during 2007-08 in comparison with 2006-07. The 'chemicals and chemical products', 'basic metal and alloy industries'

Chart II.1: Index of Industrial Production - Sectoral Growth Trends

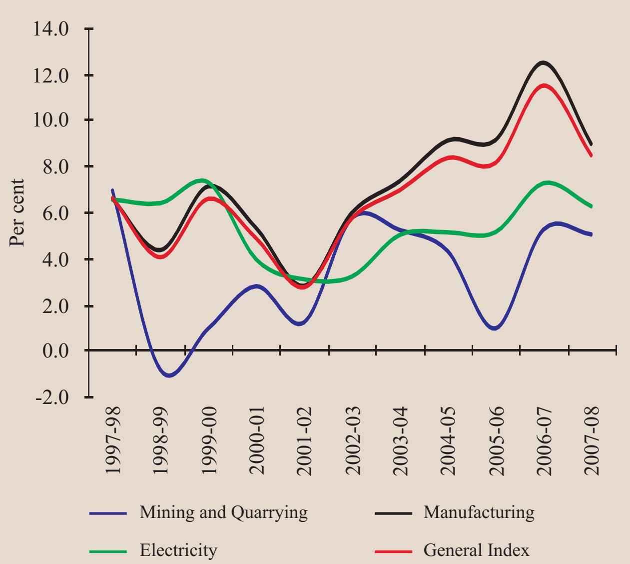


Table 2.8: Index of Industrial Production: Sectoral and Use-Based Classification of Industries

(Per cent)

Industry Group	Weight in the IIP	Growth Rate		Weighted Contribution #	
		2006-07	2007-08 P	2006-07	2007-08 P
1	2	3	4	5	6
Sectoral Classification					
Mining	10.5	5.3	5.1	3.4	4.2
Manufacturing	79.4	12.5	9.0	91.1	89.5
Electricity	10.2	7.3	6.3	5.5	6.3
Use-Based Classification					
Basic Goods	35.6	10.3	7.0	27.2	24.7
Capital Goods	9.3	18.2	18.0	17.6	25.0
Intermediate Goods	26.5	12.0	8.9	27.0	27.4
Consumer Goods (a+b)	28.7	10.1	6.1	28.5	22.9
a) Consumer Durables	5.4	9.2	-1.0	6.7	-1.0
b) Consumer Non-durables	23.3	10.4	8.5	21.8	24.0
General	**100.0**	**11.5**	**8.3**	**100.0**	**100.0**

P : Provisional. # : Figures may not add up to 100 due to rounding off.
Source : Central Statistical Organisation.

and 'machinery and equipments' groups remained the main drivers, contributing over 54.8 per cent to the manufacturing growth. At the two-digit level classification, 16 out of 17 manufacturing industry groups registered positive growth during the year (Appendix Tables 7 and 8).

II.2.22 In terms of use-based classification, the industrial activity moderated across all the sectors during 2007-08, with a marked slowdown in the consumer goods sector. The basic goods sector, which registered double-digit growth in the first half of 2007-08, lost momentum in the second half mainly on account of slowdown in cement, electricity, nitrogenous and phosphatic fertiliser segments, and some steel products (such as carbon steel, steel wires, coil and H.R. sheets) (Appendix Table 9). The intermediate goods sector also recorded lower growth on account of base effect and moderation in growth in production of cotton yarn, filament yarn, polyester fibre, viscose staple fibre, auto ancillary and parts, and some chemicals alongwith decline in production of certain chemical dyes, tin metal containers, and ball and roller bearings.

II.2.23 The growth of the capital goods sector, which accelerated from 10.5 per cent 2002-03 to 18.2 per cent in 2006-07, moderated to 18.0 per cent during 2007-08. The moderation was more pronounced in the machinery and equipment segment, which was impacted by decline in production of complete tractors, telephone instruments, cutting tools and material handling equipments. Notwithstanding the moderation, growth in the capital goods sector remained strong. Certain capital goods segments such as printing machinery, industrial machinery, laboratory and scientific instruments and agricultural implements recorded over 27 per cent growth in production during 2007-08, while growth of the exports of machinery (in US dollar terms) also remained high at 25 per cent. The exports of engineering goods, which mainly represent the capital goods, increased by over 20 per cent during the year. This implies that the performance of the capital goods industries was driven by strong domestic as well as export demand. The continued buoyancy in capital goods production facilitated capacity expansions across industries such as electricity sector, metal and metal products, chemicals, and machinery and transport equipments.

II.2.24 The consumer goods sector (with a weight of 28.7 per cent) lost momentum with its growth being placed at 6.1 per cent during 2007-08 as compared with 10.1 per cent during 2006-07 and 12.0 per cent during in 2005-06. While the growth of non-durables, which have relatively inelastic demand, moderated, the production of consumer durables declined, adversely affecting the overall performance of the consumer goods sector (Table 2.9). Out of 63 non-durable items (with a weight of 23.3 per cent in the IIP), 20 items accounting for 7.4 per cent weight, recorded a decline in production during 2007-08. Furthermore, lower growth in respect of sugar (with weight of 2.2 per cent in the IIP) and some other non-durables such as chocolate and sugar confectionery, beer and edible oils also led to moderation in the non-durables. Unfavourable weather conditions in Rajasthan and Madhya Pradesh adversely affected the production of edible oils.

II.2.25 In the context of the sluggish performance of consumer durables, the current series of the IIP (with 1993-94 as base year) based on the product baskets and weights assigned in the last decade does not adequately capture the changing dynamics of the consumer durables sector (Box II.6).

Capacity Utilisation

II.2.26 The capacity utilisation of the Indian industries was estimated higher at 83.9 per cent during 2007-08 as compared with 81.8 per cent

Table 2.9: Trends in Growth of Consumer Goods

(Per cent)

Month	Consumer Goods (28.7)			Consumer Durables (5.4)			Consumer Non-Durables (23.3)		
	2005-06	2006-07	2007-08 P	2005-06	2006-07	2007-08 P	2005-06	2006-07	2007-08 P
1	2	3	4	5	6	7	8	9	10
April	13.5	8.9	14.7	18.7	7.4	2.4	11.9	9.4	18.7
May	18.4	10.5	8.7	17.7	17.5	-0.7	18.6	8.2	12.1
June	23.7	6.1	3.6	12.8	19.9	-3.6	27.5	1.8	6.3
July	4.5	16.8	7.1	3.8	16.1	-2.7	4.7	17.1	10.5
August	9.3	15.0	0.0	13.0	19.0	-6.2	8.0	13.6	2.4
September	11.9	12.1	-0.2	15.2	11.8	-7.3	10.5	12.2	2.6
October	14.6	-2.8	13.7	16.4	0.2	9.0	14.0	-4.1	15.8
November	11.1	13.5	-2.9	16.2	10.1	-5.5	9.3	14.8	-2.0
December	7.3	10.7	8.7	12.0	1.8	2.8	6.0	13.5	10.3
January	8.0	8.2	8.4	15.9	5.3	-0.5	5.7	9.1	11.1
February	12.5	7.4	11.7	20.3	1.8	3.1	10.1	9.3	14.3
March	12.4	15.8	0.9	21.0	3.8	-1.8	9.5	20.2	1.9
April-March	**12.0**	**10.1**	**6.1**	**15.3**	**9.2**	**-1.0**	**10.9**	**10.4**	**8.5**

P : Provisional.

Note : Figures in brackets indicate weights in IIP.

Source : Central Statistical Organisation, Government of India.

Box II.6: Recent Performance of the Consumer Durables Sector: Some Perspectives

The sluggish performance of the consumer goods sector for the second year in succession during 2007-08 raised concerns about the sustainability of the overall growth momentum of the industrial sector. The production of consumer durables (5.4 per cent weight in the IIP) declined during 2007-08 as against the robust performance in three consecutive years from 2003-04 to 2005-06, with the average growth rate being 13.8 per cent. The decline in production of consumer durables segment could be attributed to sluggish demand. Certain industry quarters have attributed the slackness in demand to hardening of interest rates.

A disaggregated analysis of the consumer durables sector, however, reveals that hardening of interest rates may not have been a critical factor affecting demand. Six out of 26 items in the consumer durables segment are usually characterised by interest elastic demand as they may require loan financing. Of these interest sensitive segments, except for two-wheelers, other segments such as passenger cars, refrigerators, air conditioners and washing machines recorded reasonably good growth during 2007-08, *albeit* with some moderation. Second, it may be noted that out of the remaining items, ten items (such as tape recorders, telephone instruments, typewriters, wrist watches, alarm time-pieces) with weight of 2.2 per cent in the IIP and nearly 41 per cent weight in the consumer durables recorded a decline, which led to the lacklustre performance of the consumer durables segment. A closer examination of the composition of this subset of the consumer durables sector shows that these items have, in fact, become obsolete both on account of supply side and demand side factors. On the supply side, with the advancement in technology and innovations, newer variants of consumer durables have flooded the market, while on the demand side, growing prosperity of the middle-class households and consumerism have seen a growing market for an array of high technology, semi-luxury and luxury durables. The changing demand patterns in the economy have turned the luxuries of the yesteryears into necessities as evident in the case of mobile phones. The emergence of multi-use products, product obsolescence and replacement by newer products, have rendered a setback to production of certain durables such as telephone instruments, television sets, tape recorders and typewriters, among others. Hence, the decline in production of the products, which have become redundant with the emergence of high technology options, cannot be overlooked while examining the growth performance of consumer durables. The relative switch from traditional consumer durables towards new products, however, is not adequately reflected in the IIP with base 1993-94. This brings to the fore the issue of revision of the IIP basket to include the new products.

The IIP basket revision in 1997-98 (with 1993-94 as the base year) resulted in increase in the number of consumer items, while the number in the case of basic and capital goods sectors remained the same and, in fact, declined in respect of intermediate goods sector. The weight of consumer goods in the IIP was augmented by 5.0 percentage points to 28.7 per cent (from 23.7 per cent earlier), and more than half of the incremental weight was added to consumer durables, thereby enlarging the durables weight from 2.6 per cent (1980-81 series) to 5.4 per cent (1993-94 series). The current IIP series for consumer durables in India comprises goods in the categories such as rubber, plastic, petroleum and coal products; metal utensils; electronic equipments, transport equipments, and other manufacturing industries. The index revision in the last decade reflected the shifting demand patterns and growing preference for durable luxury goods such as washing/laundry machines (also micro-electronic equipments). However, such contemporary choice variations over time do not appear to be captured well by the current IIP index with base 1993-94.

References

1. Rajesh, Raj and Naveen Kumar (2008), “Recent Performance of the Consumer Goods Sector in India: Some Fact Finding”, *RBI Staff Studies* (Forthcoming).
2. Government of India (2007), *Mid-Year Review of the Indian Economy 2007-08*, Ministry of Finance.
3. Nagaraj R. (2008). “India’s Recent Economic Growth: A Closer Look”, *Economic and Political Weekly*, Vol. XLIII, No. 15, April 12-18.

estimated for the previous year, as per the peak-output approach (Table 2.10). The capacity utilisation in respect of several industries (such as paints, enamels and varnishes, matches, asbestos cement pressure and building pipes, textiles machinery, lighting, fitting and fixtures, electric fans and zip fasteners, which are mainly in the SSI sector, and other sectors such as diesel engines, optical whitening agents, air and gas compressors, power and distribution transformers, soaps, electric motors, bolts and nuts, paper and paper board, pipes and tubes, steel wires, machine tools, stainless/alloy steel, biscuits, steel castings, Indian type leather footwear, cotton yarn, ferro manganese, ferro alloys, ferro chrome, carbon black, fluorescent tubes and oxygen) was more than 95 per cent during the year. However, capacity utilisation in some industries such as petroleum coke calcined, groundnut oil, vitamin C, til seed oil, salt and di-methyl tetrapthalate (DMT) was less than 40 per cent during the year.

Infrastructure Industries

II.2.27 The infrastructure sector, which gained momentum during 2006-07, decelerated significantly

Table 2.10: Capacity Utilisation

(Per cent)

Industry	Weight	Capacity Utilisation		
		2005-06	2006-07	2007-08
1	2	3	4	5
Food products	9.08	66.1	67.8	68.9
Beverages, tobacco and related products	2.38	84.2	84.2	83.4
Cotton textiles	5.52	97.4	94.6	96.5
Wool, silk and man-made fibre textiles	2.26	90.8	87.4	86.8
Jute and other vegetable fibre textiles (except cotton)	0.59	83.5	71.4	90.4
Textile products (including wearing apparel)	2.54	92.7	92.3	95.6
Wood and wood products, furniture and fixtures	2.70	81.4	69.6	88.9
Paper and paper products and printing, publishing and allied activities	2.65	88.2	93.8	93.3
Leather, and leather and fur products	1.14	77.5	81.1	89.1
Chemicals and chemical products except products of petroleum and coal	14.0	81.2	79.2	81.1
Rubber, plastic, petroleum and coal products	5.73	86.1	86.8	86.5
Non-metallic mineral products	4.40	82.5	85.8	86.8
Basic metal and alloy Industries	7.45	82.8	83.4	85.3
Metal products and parts (except machinery and equipment)	2.81	68.8	65.3	74.2
Machinery and equipment other than transport equipment	9.57	75.0	74.9	77.0
Transport equipment and parts	3.98	82.3	80.7	81.4
Other manufacturing industries	2.56	71.7	73.4	73.4
Manufacturing Industry	**79.36**	**80.7**	**80.1**	**82.5**
Mining and Quarrying	**10.47**	**85.3**	**83.2**	**83.3**
Electricity	**10.17**	**94.0**	**93.4**	**95.9**
All Industries	**100**	**82.5**	**81.8**	**83.9**

Note : 1. Data are provisional.
2. Capacity utilisation has been calculated from the production data for 296 industries supplied by the Ministry of Statistics and Programme Implementation.
3. Capacity utilisation has been estimated using the peak output approach. Under this approach, the peak monthly output during a financial year for a particular industry is regarded as its installed productive capacity for that year, while the monthly actual output is regarded as its actual utilisation level for that month. Accordingly, monthly capacity utilisation of a particular industry is the ratio of monthly production to the peak level of production during the year. The average of twelve months' utilisation is considered as the annual capacity utilisation for that industry.
4. The capacity utilisation estimated under the peak-output approach is only indicative of the trends and may not be viewed as reflecting the actual capacity utilisation levels. In the absence of any other data or indicator on capacity utilisation, peak-output approach is used as a proxy for capacity utilisation.

Source : Based on data from Ministry of Statistics and Programme Implementation, Government of India.

during 2007-08. The sector (with a weight of 26.7 per cent in the IIP) recorded growth of 5.6 per cent during 2007-08 as compared with 9.2 per cent during the previous year (Chart II.2). All the segments of the infrastructure sector, barring coal, recorded decelerated growth during 2007-08. The electricity sector recorded deceleration on account of decline in power generation in all the segments, *viz.*, thermal, hydro and nuclear. Furthermore, adverse 'balance of plants'[9] situation in respect of new thermal plants hampered their commercial operationalisation and stemmed thermal power generation. Hydro power generation turned out to be lower due to inadequate water inflows, whereas nuclear power generation suffered a setback due to shortage of uranium. The capacity constraints faced by major steel and cement producers adversely affected their production. The decline in production in plants of Oil India Limited (OIL) and Oil and Natural Gas Company (ONGC) due to inadequate availability of off-shore rigs coupled with lower than anticipated gains from new wells contributed to the decelerated growth in crude oil production. The decline in the production in certain public sector refineries along

[9] Adverse 'balance of plants' situation implies inability of auxiliary plants to be in readiness for putting new thermal units into commercial operations. Auxiliary plants refer to coal handling plants, ash handling plants and pre-heating plants.

Chart II.2: Infrastructure Industries - Sector-wise Growth

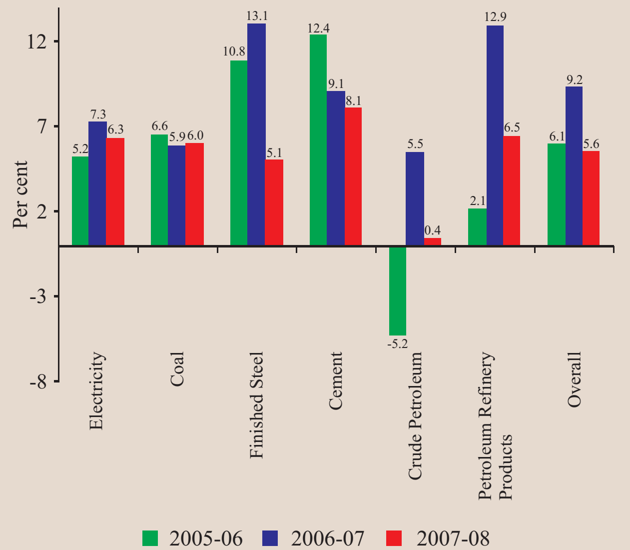


Table 2.12: Performance of Central Sector Projects

(end-March)

Item	2001	2005	2006	2007	2008#
1	2	3	4	5	6
1. Number of Projects (a to d)	187	327	396	491	514
(a) Ahead	5	16	6	6	18
(b) On Schedule	58	65	113	179	138
(c) Delayed*	65	125	149	171	221
(d) Without Date of Commissioning	59	121	128	135	137
2. Cost Overrun of Total Projects (Rupees crore)	40,303	39,585	47,337	39,741	40,313
3. Cost Overrun of Total Projects (% of original cost)	36.4	19.2	18.2	12.4	11.5
4. Cost Overrun of Delayed Projects (Rupees crore)	23,374	25,388	29,655	20,808	22,786
5. Cost Overrun of Delayed Projects (% of original cost)	91.6	45.2	35.6	19.8	15.1

* : Includes some of the projects for which information about the delay is not available, but have date of commissioning.

: Data for 2008 are up to end-February.

Source : Ministry of Statistics and Programme Implementation, Government of India.

with high base effect led to moderated growth in petroleum refineries.

II.2.28 The production of shipping and railways carriages and petroleum refinery products exceeded the targets set for 2007-08. The power, finished steel and crude petroleum sectors, however, achieved less than targeted production during 2007-08, in addition to the shortfalls in coal and natural gas production (Table 2.11). The significance of infrastructure availability and its role in the development process brings to the fore issues in energy availability and infrastructure development (Box II.7).

Performance of Central Sector Projects

II.2.29 The number of delayed central sector projects increased from 171 at end-March 2007 to 221 at end-February 2008. However, the number of projects ahead of schedule saw a steep increase from six projects at end-March 2007 to 18 projects at end-February 2008 (Table 2.12). The problems on account of acquisition of land, environmental

Table 2.11: Targets and Achievements of Infrastructure Industries

Sector	Unit	2006-07			2007-08		
		Target	Achievement	Gap (%)	Target	Achievement	Gap (%)
1	2	3	4	5	6	7	8
Power	Billion Units	663.0	662.5	-0.1	710.0	704.5	-0.8
Coal	Million Tonnes	425.1	425.0	0.0	454.9	450.5	-1.0
Finished Steel	Million Tonnes	52.1	52.5	0.8	57.0	55.2	-3.1
Railways	Million Tonnes	726.0	728.8	0.4	790.0	794.2	0.5
Shipping (Major Ports)	Million Tonnes	465.7	463.8	-0.4	515.3	519.2	0.7
Fertilisers	Million Tonnes	16.3	16.1	-1.1	16.8	14.7	-12.6
Cement	Million Tonnes	159.6	161.7	1.3	n.a.	174.3	n.a.
Crude Petroleum	Million Tonnes	35.4	34.0	-4.1	35.0	34.1	-2.5
Petroleum Refinery Products	Million Tonnes	135.3	146.6	8.3	146.3	156.1	6.7
Natural Gas Production	Million Cubic Meters	31538.0	31747.0	0.7	33241.0	32274.0	-2.9

n.a. : Not available.

Source : Ministry of Statistics and Programme Implementation, Government of India.

Box II.7

Issues in Energy Availability and Infrastructure Development

The significance of infrastructure availability and its role in the development process is well recognised. While demand for infrastructure services increases with furtherance of the development process, any deceleration in growth of core infrastructure sector coupled with slow progress in capacity augmentation limits the availability of such services. The Eleventh Plan Approach paper aptly noted that the absence of world class infrastructure is the most critical short-term barrier to economic growth in India. Furthermore, in the backdrop of enormous magnitude of infrastructure deficit and the resource constrained environment, the role of private sector is regarded as imperative.

Availability of affordable energy resources is critical to meet the development aspirations of an economy. In India, diversified resource base and differential geographical settings call for region and sector-specific energy resource planning. In this context, the policy focus needs to be on reliably meeting the overall demand for energy in the economy. The issues relating to energy and infrastructure thus form the core of any development strategy. In this backdrop, the sector-specific issues have been addressed below.

India's coal mining potential has not been adequately exploited as in the comparably endowed countries. The Mines and Minerals Act, the Mineral Concession Rules, and the FDI policy have time and again sought to encourage private investment in exploration of mineral deposits and operation of mines, but only meager investments have come forth. The mining activity continues to be hampered by land acquisition and rehabilitation problems, and difficulties relating to transport of coal to the utilities. Other issues relate to inferior quality of domestic coal and surging prices of superior quality imported coal. The Integrated Energy Policy Committee (Chairman: Kirit Parikh) advocated promoting coal imports, and augmenting domestic production through allotment of coal blocks to Central / State public sector units and captive mines to the notified end-users. Despite the initiatives, the progress of captive mining has remained inadequate.

In the electricity sector, power shortages (10 per cent annual), resulting from less than targeted power generation and slow pace of capacity additions are the foremost concerns, while the demand is increasing at a fast pace. High T&D losses and low plant load factors (65 per cent for thermal units) caused by the old grids, obsolete machinery and technology, and pilferages are the persistent problems. Forced outages for repairs, renovation and modernisation of plants besides being highly capital intensive also impede generation activities. Adverse balance of plants situation, arising from indisposition of auxiliary plants such as coal handling, ash handling and pre-heating plants, hamper the progress of putting new thermal units into commercial operations. Government initiatives on various fronts to develop the sector have included encouragement to the Independent Power Producers (IPP), Merchant Power Producers (MPP) and captive power plants in the private sector, though their contribution to the supplies has remained limited to around 8.4 per cent of the installed capacity. Power trading which seeks to improve utilisation of existing capacities, ensure avoiding power shortages and reduce the average cost of power to power utilities as well as the consumers is at a nascent stage. Under the provisions of the Electricity Act 2003, trading is now a licensed and regulated activity and would facilitate innovative pricing of power, leading to competition and lowering of tariffs. Furthermore, the Kirit Parikh Committee report advocated meeting growing power requirements through development of nuclear facilities using country's vast thorium reserves. While almost all major States have already implemented the reforms and adopted measures such as constitution of State Electricity Regulatory Commissions, unbundling of the State Electricity Boards and issue of tariff orders, there are practical concerns, yet to be resolved in this regard. The desired results are elusive, since the reforms process has not been adopted in essence and gaps remain.

Among the renewable energy options in India, hydro power generation forms about 24.7 per cent of the installed capacity and other renewable energy (wind energy, small hydro projects, biomass power) comprised only 7.7 per cent, despite their higher potential. About one lakh megawatt of hydro power potential still remains untapped. The nuclear power capacity constituting about 2.9 per cent of total electricity generation is of late facing shortages of uranium, and resultantly the nuclear plants are operating at around 50 per cent of the plant load factor.

During 2007-08, production of crude oil met about 22 per cent of the domestic oil demand (refinery crude throughput). The spiraling international crude oil prices have led to a spurt in the import bill. The sporadic pass through of price rise has resulted in a hike in inflation and fiscal imbalances. The sector presently faces hurdles in terms of stoppage of air injection in oil fields, meager capacity additions, environmental issues, less than anticipated gains from new wells, less base potential, less than planned contribution from exploratory drilling and blockades/local problems. In contrast with the crude oil, the petroleum refinery capacity in the country has increased considerably, making India a net exporter of POL products.

The energy challenges are apparent, which, *inter alia*, include financing of energy projects, the necessity to facilitate further market reforms (in gas and power), and encouraging investments. To overcome the constraints, efforts are on to promote a combination of public investment, public-private partnerships (PPPs) and exclusive private investments, wherever feasible - to ensure strengthening and consolidation of infrastructure related initiatives. Towards this end, the investment requirement in infrastructure has been estimated at over US $ 500 billion and is envisaged to be increased from the current level of 5 per cent of GDP to around 9 per cent during the Eleventh Plan period.

References

1. Government of India (2005), *Draft Report of the Expert Committee on Integrated Energy Policy*, December.
2. ________, (2006), *Towards Faster and More Inclusive Growth, An Approach to the 11th Five Year Plan*, November.
3. ________, Various Reports on *Indian Coal Scenario: 2007-08 - A Review*, Office of the Coal Controller.
4. Websites of Ministry of Power, Ministry of Petroleum and Natural Gas and Central Electricity Authority, Government of India.

clearances, inappropriate project design leading to changes in plans and lack of complementary infrastructure support in some regions contributed to delays in the execution of projects, especially in the railways, surface transport and power sectors. Despite these impediments, there has been a marked improvement in cost overrun of projects in recent years. The cost overrun of all projects as percentage of original cost declined from 12.4 per cent at end-March 2007 to 11.5 per cent at end-February 2008.

Investment Climate

II.2.30 Notwithstanding moderation in industrial activity, the investment climate continued to be positive during 2007-08 as evident from the higher amount of envisaged investment proposals (Table 2.13).

Mergers and Acquisitions

II.2.31 Mergers and acquisitions activity slowed down considerably during 2007-08 (April-January) in line with general slowdown in mergers and acquisitions globally and moderation in industrial activity domestically (Table 2.14). The acquisition deals in value terms decelerated to 34.8 per cent during April-January 2007-08 over the corresponding period of the previous year. The overseas acquisitions of foreign companies by Indian corporates during the year 2007-08 (April-January) remained subdued. During 2007-08 (April-January), maximum mergers were witnessed in financial services (15.7 per cent), followed by trade (7.0 per cent), chemicals industry (4.7 per cent), industry producing machinery (4.7 per cent), textiles (3.5 per cent) and non-metallic mineral products (3.5 per cent). Acquisition activity was the largest in financial services sector (17.9 per cent), followed by non-metallic mineral products (12.3 per cent), construction (11.6 per cent), chemicals (10.6 per cent), transport equipment (8.3 per cent) and mining (7.5 per cent).

Table 2.13: Industrial Investment Proposals

Year	IEMs		LOI/DILs	
	No. of Proposals	Proposed Investment (Rupees crore)	No. of Proposals	Proposed Investment (Rupees crore)
1	2	3	4	5
2001-02	3,094	70,994	102	1,361
2002-03	3,178	80,824	60	332
2003-04	4,130	1,54,954	145	3,454
2004-05	5,548	2,89,782	101	4,309
2005-06	6,341	3,82,743	135	3,638
2006-07	5,591	6,92,401	87	4,002
2007-08	3,673	12,25,761	131	6,696
Cumulative*	73,471	37,95,419	4,372	1,29,781

* : August 1991 to March 2008.
IEM : Industrial Entrepreneurs Memoranda.
LOI : Letters of Intent.
DILs : Direct Industrial Licences, which have been issued since November 2003.
Source : Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India.

Table 2.14: Mergers and Acquisitions Announced

Year	Total Acquisitions		Total Mergers
	Number	Amount (Rupees crore)	Number
1	2	3	4
2002-03	843	23,785	381
2003-04	830	35,073	291
2004-05	797	60,282	272
2005-06	874	1,00,612	394
2006-07	924	2,04,597	358
2006-07 (April-January)	688	1,16,893	321
2007-08 (April-January)	687	76,229	173

Note : Deals include preferential allotments, buy-back of shares and disinvestment proposals, amongst others.
Source : Centre for Monitoring Indian Economy.

Micro and Small Enterprises

II.2.32 The micro and small enterprises (MSE) sector continues to play an important role in industrial growth and exports, besides providing substantial employment opportunities. In recent years, the MSE sector has consistently registered higher growth in comparison with the overall industrial growth. The MSE sector contributed almost 40 per cent to the gross industrial value added in the economy and accounted for about 47 per cent of the total manufactured exports. The number of MSEs was estimated at about 13 million in India, providing employment to about 31 million people during 2006-07 (Table 2.15). The pattern of MSE exports has shifted gradually in favour of non-traditional products, which constituted about 97.8 per cent of the total exports from the MSE sector during 2005-06.

Table 2.15: Performance of Micro and Small Enterprises

Item	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07 P
1	2	3	4	5	6	7
Number of Units (million)	10.5	11.0	11.4	11.9	12.3	12.8
Employment (million)	25.2	26.4	27.5	28.8	30.0	31.3
Investment (Rupees crore)	1,60,673	1,69,579	1,78,269	1,88,793	1,98,050	2,07,307
Value of Output (Rupees crore)	2,82,270	3,14,850	3,64,547	4,29,796	4,97,842	n.a.
Exports from SSI (Rupees crore)	71,244	86,013	97,644	1,24,417	1,50,242	n.a.

P: Provisional. n.a.: Not available.
Source : Ministry of Micro, Small and Medium Enterprises, Government of India.

Developments during 2008-09

II.2.33 During April-June 2008, the index of industrial production registered a lower growth rate of 5.2 per cent (10.3 per cent a year ago) on account of decelerated growth of the manufacturing sector (5.6 per cent as against 11.1 per cent) and electricity sector (2.0 per cent as against 8.3 per cent). The mining sector growth, however, accelerated to 4.7 per cent (2.7 per cent). In terms of use-based classification, there was moderation across all sectors. Capital goods recorded growth of 6.5 per cent (19.1 per cent). The intermediate and basic goods sector expanded by 2.6 per cent (9.3 per cent) and 3.3 per cent (9.4 per cent), respectively. The consumer goods sector grew by 8.5 per cent (9.0 per cent). During April-June 2008, growth recorded by six infrastructure industries was 3.5 per cent (6.4 per cent a year ago).

Services Sector

II.2.34 According to the revised estimates released by the CSO, real GDP growth originating from the services sector moderated from 11.2 per cent during 2006-07 to 10.7 per cent during 2007-08 due to deceleration in 'financing, insurance, real estate and business services' and 'construction' sub-sectors (Table 1.1 and Appendix Table 2). The growth in 'financing, insurance, real estate and business services' was affected, *inter alia*, by some moderation in bank deposits and credit growth. On the other hand, growth in 'trade, hotels, transport and communication' and 'community, social and personal services' sub-sectors accelerated further, thereby powering the double-digit growth of the services sector for the third year in succession. Continued buoyancy in the civil aviation segments, cargo handled at major ports and new cell phone connections underpinned the growth of the 'trade, hotels, transport and communication' sub-sector (Table 2.16).

II.2.35 The information technology (IT) industry has been playing an important role in India's economic growth in the recent period (Box II.8). Earnings from software services and hardware increased sharply during 2007-08 (Table 2.17). In

Table 2.16: Indicators of Service Sector Activity

(Growth rates in per cent)

Sub-sector	2005-06	2006-07	2007-08
1	2	3	4
Tourist arrivals	12.4	13.0	11.3
Commercial vehicles production	10.6	33.0	4.8
Railway revenue earning freight traffic	10.7	9.2	9.0
New cell phone connections	89.4	85.4	38.3
Cargo handled at major ports	10.4	9.5	11.9
Civil aviation			
a) Export cargo handled	7.3	3.6	7.5
b) Import cargo handled	15.8	19.4	19.7
c) Passengers handled at international terminals	12.8	12.1	11.9
d) Passengers handled at domestic terminals	27.1	34.0	20.6
Cement	12.4	9.1	8.1
Steel	10.8	13.1	5.1
Aggregate deposits of banks	18.1	23.8	22.4
Non-food credit by banks	31.8	28.5	23.0

Source : Ministry of Tourism, Ministry of Commerce and Industry, Ministry of Statistics and Programme Implementation, Centre for Monitoring Indian Economy, RBI.

Box II.8: Contribution of the ICT Sector to the Indian Economy

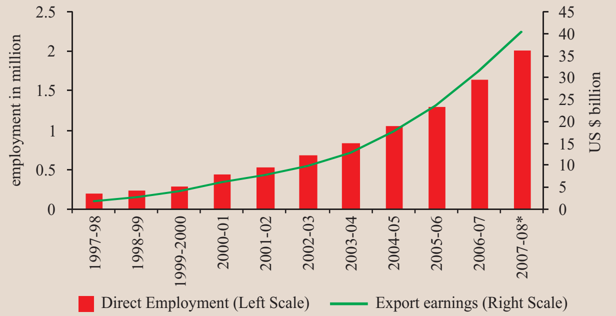
Information and communication technology (ICT) industry consists of hardware, software, networks, and media for collection, storage, processing, transmission, and presentation of information such as voice, data, text and images, among others. The ICT encompasses both manufacturing and service industries that capture, transmit and display data and information electronically. The ICT engineered the global economic revolution during the last quarter of the 20th century (UNCTAD, 2008). It had far reaching implications both through its own growth in the form of production of ICT-related goods and services, and through its diffusion impact on various sectors, which enhanced productivity, competitiveness, growth and human welfare (Dedrick *et al*, 2001).

India has benefitted from ICT growth through a series of institutional innovations and export oriented policy measures introduced in the post-1991 period, which included software development for exports, telecommunications policy reforms, privatisation of the national long-distance and mobile phone markets and development of a more comprehensive approach to the ICT. India has gained from this ICT growth-strategy both in terms of the expanding IT sector as also its technological diffusion effects in the rest of the economy.

The Information Technology and IT enabled services (IT/ITES) now form a major segment of ICT in India and its contribution to the country's GDP has steadily increased from 1.2 per cent in 1997-98 to 6.0 per cent in 2007-08. The export earnings of this industry touched US$ 40.3 billion in 2007-08 (Chart A). The direct employment in the IT/ITES sector was expected to be 2.0 million by end of 2007-08. Employment in the IT/ITES grew at a compound annual average rate of 26 per cent during 2000-01 to 2007-08, making it the largest employer in the organised private sector in the country. Apart from direct contribution of the ICT industry, the application of ICT has driven the growth of other sectors, spurring the growth of first generation entrepreneurs, improving the product/service quality levels, and boosting image of India in the global market.

The multiplier effect of the growth of IT/ITES on output in the Indian economy is demonstrated by the fact that each Re.1 spent by the IT/ITES sector (on domestically sourced goods and services) translates into a total output of about Rs. 2 in the economy - driven by derived demand from firm-level spending (capital expenditure as well as operating expenses) and high level of consumption spending by professionals employed in this sector (NASSCOM, 2008) (Table A). Another study by the NASSCOM indicated that in 2005-06, out of the total revenue of US $ 33.55 billion of the industry, US $ 15.85 billion were spent in the domestic economy *via* non-wage operating expenses, capital expenditure and consumption spending by professionals. This spending, in turn, generated additional output of US$ 15.5 billion *via* direct and indirect backward linkages with other sectors and induced effect of wages and salaries. The sectors, which are the most impacted through this multiplier effect include housing/construction, transport services, communications, consumer durables, food items and clothing.

Chart A : Contribution of ICT



*: Estimates in NASSCOM STRATEGIC REVIEW
Source: NASSCOM.

Innovations in the ICT facilitate in providing a communication platform breaking all traditional physical barriers. The Government can play a critical role in enhancing the ICT adoption by ensuring provision of technical education, creation of skilled workforce for the IT industry, and by providing stable regulatory and enabling environment. Narrowing the digital gap between urban and rural areas would ensure that the benefits of ICT reach all sections of the society.

References

1. Dedrick, Jason, Gurbaxani Vijay, and Kenneth L. Kraemer (2001), "Information Technology and Productivity Growth at the Firm and Country Level", Centre for Research on IT and Organisations, University of California, Irvine.
2. NASSCOM (2008), *Indian IT and ITES Industry: Impacting Economy and Society 2007-08*, NASSCOM.
3. UNCTAD (2008), *Information Economy Report 2007-2008.*

Table A: Multiplier effect of IT/ITES Industry on Other Sectors of the Economy (2005-06)

Sector	Spending by IT sector (US $ billion)	Output multiplier (US $ billion)	Output impact
1	2	3	4
Construction/housing	3.15	6.18	2.0
Transport services	1.28	2.77	2.2
Furnishing/clothing	0.73	1.59	2.2
Communication	1.00	1.59	1.6
Food items	0.56	1.38	2.5
Entertainment/travel	0.63	1.30	2.0
Consumer durables	0.43	1.12	2.6
Health/Insurance	0.58	1.01	1.7
Fuel and power	0.42	0.95	2.3
Hotels/restaurants	0.45	0.95	2.1
Education/research	0.62	0.76	1.2
Automobiles	0.27	0.66	2.5
IT infrastructure	0.20	0.43	2.1
Printing/publishing	0.09	0.19	2.2
Other services	5.45	10.48	1.9
Total	15.83	31.34	2.0

Source : NASSCOM CRISIL Research -The Rising Tide: Employment and Output Linkages of IT/ITES, 2007.

Table 2.17: Indian IT Industry

(US $ billion)

Item	2004-05	2005-06	2006-07	2007-08E
1	2	3	4	5
1. Total Software and Services Revenues (i to iii)	22.5	30.3	39.7	52.0
Exports	17.7	23.6	31.3	40.3
Domestic	4.9	6.7	8.4	11.7
i) IT Services	13.5	17.8	23.5	31.0
Exports	10.0	13.3	18.0	23.1
Domestic	3.5	4.5	5.5	7.9
ii) ITES-BPO	5.2	7.2	9.5	12.5
Exports	4.6	6.3	8.4	10.9
Domestic	0.6	0.9	1.1	1.6
iii) Engineering Services and R&D, Software Products	3.8	5.3	6.5	8.5
Exports	3.1	4.0	4.9	6.3
Domestic	0.7	1.3	1.6	2.2
2. Hardware	5.6	7.1	8.5	12.0
3. Total IT Industry (1+2)	**28.2**	**37.4**	**48.0**	**64.0**
	(4.1)	**(4.8)**	**(5.2)**	**(6.0)**
Memo:				(in thousands)
4. Total Employment (a to c)*	1,058	1,293	1,630	n.a.
a) IT Services	297	398	562	n.a.
b) ITES-BPO	316	415	545	n.a.
c) Engineering Services and R&D and Software Products	93	115	144	n.a.
5. Domestic Market (including user organisation)	352	365	378	n.a.

E : Estimates. n.a. : Not available.
* : Excluding hardware.
Note : Figures in parentheses are percentage to GDP.
Source : National Association of Software and Service Companies.

the post-1991 reform period, the Indian IT/ITES industry contributed significantly to the economic growth in terms of GDP, foreign exchange earnings and employment generation.

Corporate Performance

II.2.36 Moderation in activity in the industrial and services sectors was reflected in the performance of the corporate sector during 2007-08. Growth in sales and net profits of select non-government non-financial companies decelerated from 26.2 per cent and 45.2 per cent, respectively, during 2006-07 to 18.3 and 26.2 per cent, respectively, during 2007-08. Notwithstanding a sharp rise in other income (46.2 per cent as compared with 7.1 per cent), the gross profits of the corporate sector decelerated (22.8 per cent as compared with 41.9 per cent). The depreciation provision increased by 14.8 per cent during 2007-08 as compared with the increase of 15.4 per cent during 2006-07. Interest payments grew by 28.8 per cent during 2007-08 as against 17.4 per cent during 2006-07, but the interest coverage ratio declined marginally to 7.3 per cent from 7.5 per cent in the previous year. The profitability measured in terms of the ratios of gross profits to sales and profits after tax to sales improved during 2007-08 in comparison with 2006-07 (Table 2.18).

AGGREGATE DEMAND

II.2.37 Domestic demand led by consumption and investment continued to be the main driver of growth during 2007-08. According to the revised estimates, growth of real gross domestic fixed capital formation (GFCF) moderated from 15.1 per cent in 2006-07 to 13.8 per cent in 2007-08. However, real GFCF, in relation to GDP, rose from 30.6 per cent of GDP to 31.9 per cent of GDP during the same period. The growth in total final consumption expenditure accelerated in the wake of some recovery in growth of real private final consumption expenditure in 2007-08 after a slowdown in the previous year as well as continued acceleration in government final consumption expenditure. Investment in valuables rose sharply by 13.9 per cent in 2007-08 as compared with that of 14.9 per cent in the previous year (Table 2.19). While 46.6 per cent of the incremental growth in real GDP in 2007-08 (45.5 per cent in 2006-07) was accounted for by gross fixed capital formation, 53.8 per cent was by private consumption demand (43.9 per cent in 2006-07).

II.2.38 The current growth phase in India continues to be driven by domestic demand, *viz.,* consumption and investment. However, some significant changes have occurred in domestic demand in recent years. The share of consumption in GDP declined steadily from 76.5 per cent in 2001-02 to 67.8 per cent in 2007-08, while that of real investment (gross domestic capital formation) increased from 22.2 per cent to 33.8 per cent during the same period (Table 2.20). Thus, the relative significance of investment activity in domestic demand has grown.

II.2.39 The share of private final consumption expenditure (PFCE) also declined from 64.3 per cent

Table 2.18: Corporate Financial Performance

(Per cent)

Item	1991-92 to 1999-2000	2000-01 to 2006-07	2003-04	2004-05	2005-06	2006-07	2007-08	2007-08			
								Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9	10	11	12
Growth Rates (per cent)	(Average)	(Average)									
Sales	14.0	14.2	16.0	24.1	16.3	26.2	18.3	19.2	16.0	18.0	20.6
Other Income	17.0	5.2	22.1	-0.9	17.3	7.1	46.2	106.7	45.2	70.2	28.5
Total Expenditure	14.1	13.6	14.9	23.6	16.7	23.4	18.4	18.0	15.3	18.9	23.3
Depreciation provision	17.3	8.9	6.0	11.2	8.1	15.4	14.8	18.1	15.8	17.9	15.4
Gross profits	12.5	20.4	25.0	32.5	24.6	41.9	22.8	31.9	22.5	20.4	16.8
Interest Payments	15.8	-1.4	-11.9	-5.8	-2.0	17.4	28.8	4.4	18.4	45.7	35.8
Profits after tax	11.8	36.5	59.8	51.2	32.8	45.2	26.2	33.9	22.7	29.4	14.1
Select Ratios (per cent)	(Min.-Max)	(Min.-Max)									
Gross Profits to Sales	(10.5-14.2)	(10.1-15.5)	11.1	11.9	12.2	15.5	16.3	16.7	16.3	16.2	15.0
Profits After Tax to Sales	(3.3-7.8)	(2.6-10.7)	5.9	7.2	8.2	10.7	11.8	11.6	11.5	12.2	10.3
Interest to Sales	(5.3-6.9)	(2.1-6.1)	3.4	2.6	2.2	2.1	2.2	2.0	2.1	2.5	2.2
Interest to Gross Profits	(36.9-62.7)	(13.4-60.0)	30.7	21.8	18.1	13.4	13.8	11.8	12.8	15.3	14.6
Interest to Total Expenditure	(5.4-6.8)	(2.3-6.1)	3.6	2.8	2.4	2.3	2.5	2.2	2.3	2.8	2.4
Interest-Coverage Ratio	(1.6-2.7)	(1.7-7.5)	3.3	4.6	5.5	7.5	7.3	8.5	7.8	6.5	6.8
Debt to Equity	(58.7-99.5)	(43.0-70.5)*	58.6	52.7	43.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Internal Sources of Funds to total sources of funds	(26.1-40.3)	(43.6-65.3)*	53.5	55.5	43.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bank borrowings to total borrowings	(27.5-35.0)	(34.4-58.2)*	48.0	51.7	58.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Memo:											(Amount in Rupees crore)
Number of Companies			2,214	2,214	2,730	2,388	2,359	2,342	2,228	2,329	2,357
Sales			4,42,743	5,49,449	7,35,216	10,41,894	11,41,711	2,80,814	2,97,110	3,06,238	3,50,917
Other Income			12,031	11,927	17,088	23,895	30,958	9,151	8,057	9,221	10,082
Expenditure			3,86,559	4,77,609	6,43,824	8,78,645	9,56,930	2,37,698	2,49,194	2,57,472	3,02,105
Depreciation Provision			20,406	22,697	28,961	37,095	40,664	10,173	10,576	10,961	11,805
Gross Profits			49,278	65,301	90,179	1,61,006	1,86,665	46,780	48,296	49,717	52,583
Interest Payments			15,143	14,268	16,302	21,500	25,677	5,504	6,194	7,609	7,703
Profits after tax			26,182	39,599	60,236	1,11,107	1,34,291	32,699	34,266	37,470	36,109

* : Data pertain to the period 2000-01 to 2005-06.

Note : 1. Data up to 2005-06 are based on audited annual accounts while data for the years 2006-07 and 2007-08 are based abridged financial results of select non-Government non-financial public limited companies.

2. Growth rates are per cent changes in the level for the period under reference over the corresponding period of the previous year for common set of companies.

3. The quarterly data may not add up to annual data due to differences in the number and composition of companies covered in each period.

in 2001-02 to 58.2 per cent in 2007-08. In recent years, the private final consumption expenditure has been pro-cyclical. The GDP growth of the economy increased from 3.8 per cent in 2002-03 to 9.0 per cent in 2007-08, while private consumption increased from 2.7 per cent to 8.3 per cent during the same period. The growth in per capita private consumption expenditure increased from 1.1 per cent in 2002-03 to 6.8 per cent in 2007-08. In terms of share of private final consumption expenditure by type of goods, the share of consumption expenditure of services sector increased, while that of non-durable goods declined correspondingly. The rise in the share of consumption expenditure on services was mainly due to increased expenditure on 'recreation, education and cultural services' and 'furniture, furnishing, appliances and services', which have higher income elasticity.

II.2.40 Some recent studies have observed that current high growth of the Indian economy is productivity driven, particularly in the post-reform period. These studies use the recent analytical concepts and empirical techniques for the estimation of India's productivity (Box II.9).

Saving and Capital Formation

II.2.41 Continuing the rising trends observed during the current decade, gross domestic saving and investment rates reached all-time highs during

Table 2.19: Growth in Select Sources of Real Effective Demand #
(Base Year: 1999-2000)

(Per cent)

Item	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06@	2006-07*	2007-08^
1	2	3	4	5	6	7	8	9
1. Total Final Consumption Expenditure	2.8	5.5	2.2	5.3	4.8	8.2	7.0	8.1
of which:								
Private Final Consumption	3.2	6.1	2.7	5.8	5.2	8.7	7.1	8.3
Government Final Consumption	0.9	2.3	-0.4	2.6	2.6	5.4	6.2	7.0
2. Total Investment +	-3.5	-2.9	17.0	19.9	19.5	19.4	10.9	n.a.
Private Investment ++	-5.4	4.1	18.5	14.1	24.8	18.4	15.0	n.a.
Public Investment ++	-3.0	3.0	-7.0	8.3	14.7	21.5	12.0	n.a.
Valuables ++	-8.1	-5.4	-4.1	66.6	57.2	-2.2	14.9	13.9
3. Total Fixed Investment	0.0	7.4	6.6	13.7	18.9	17.4	15.1	13.8
of which:								
Private Fixed	-0.8	8.9	8.7	14.7	23.6	17.1	14.6	n.a.
Public Fixed	1.9	3.6	1.3	10.8	5.2	18.5	17.0	n.a.

\# : Based on real GDP at market prices. @ : Provisional Estimates.
* : Quick Estimates. ^ : Revised Estimates.
\+ : Adjusted for errors and omissions. ++ : Unadjusted for errors and omissions. n.a : Not Available.
Note : 'Valuables' cover the expenditures made on acquisition of valuables, excluding works of art and antiques.
Source : Central Statistical Organisation.

2006-07. Gross domestic saving (GDS), as per cent of GDP at current market prices, increased from 34.3 per cent in 2005-06 to 34.8 per cent in 2006-07 (Appendix Table 11). The private corporate saving rate improved, for the fifth consecutive year, from a low of 3.4 per cent of GDP in 2001-02 to 6.6 per cent in 2004-05 and further to 7.8 per cent in 2006-07, reflecting continued buoyancy in the retained earnings of the corporate sector. Savings of the household sector, on the other hand, declined marginally to 23.8 per cent of GDP in 2006-07 from 24.2 per cent in 2005-06. Public sector saving – which witnessed a turnaround in 2003-04 from dis-saving to positive saving, largely reflecting higher savings of non-departmental as well as departmental enterprises – improved from 1.1 per cent of GDP in 2003-04 to 3.2 per cent in 2006-07(Chart II.3).

II.2.42 While the domestic savings rate improved by 0.5 percentage point of GDP during 2006-07, domestic investment registered an increase of 0.4 percentage point of GDP. As a result, the domestic investment rate

Table 2.20: Expenditure Side of GDP

(Per cent of GDP at constant market prices)

Item	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07*	2007-08
1	2	3	4	5	6	7	8
1. Total Consumption Expenditure	76.5	75.3	73.2	70.8	70.2	68.4	67.8
2. Private Final Consumption Expenditure	64.3	63.6	62.1	60.3	60.0	58.6	58.2
3. Government Final Consumption Expenditure	12.2	11.7	11.1	10.5	10.2	9.8	9.6
4. Export	13.3	15.6	15.3	18.1	19.0	20.6	20.3
5. Less Import	13.3	14.2	15.3	16.3	21.8	24.7	24.4
6. Gross Domestic Capital Formation (GDCF) #	22.2	25.0	27.7	30.6	33.4	33.8	31.9 ^
7. GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* : Quick Estimates. # : Adjusted for errors and omissions. ^ : Pertains to gross fixed capital formation.
Source : Central Statistical Organisation.

Box II.9
Conceptual Aspects of Productivity

Productivity implies the worth of an input in the production process. The quantum of output an input may bring forth determines the productivity of that input.

Productivity is an important element in growth. It is also an important contributory factor to larger and growing employment. If productivity is increasing in an economy, it means that its factors of production and commodity inputs are manifesting increases in their total efficiency. Given a rate of monetary expansion, productivity improvement helps causing prices to be lower, and this helps in exports.

Traditional Measures of Productivity

a) Single Factor Productivity

The simplest and most commonly used measure of productivity is to choose net output (or net value added) in a sector, or in the economy, as the numerator and the quantity of one of the three factors, *viz.,* land, labour and capital as denominator and obtain ratio of the former to one of the factors. This is termed as the Single Factor Productivity (SFP) measure.

b) Total Gross Output to Total Gross Input

The SFP approach seems to take the relation between physical capital-*cum*-intermediate inputs and capital-*cum*-gross output as one which is generally invariant. Production is generally a relation between gross inputs and gross outputs, *i.e.,* a relation between commodities. There is, therefore, scope for a new measure between total gross output including (a) intermediate inputs, (b) net output and (c) capital, and total gross input including (a) capital and (b) intermediate inputs. This measure is designated as 'Total Gross Output to Total Gross Input' (GOGI) (Brahmananda, 1982).

(c) Incremental Capital-Output Ratio

Incremental capital-output ratio (ICOR) is defined as the ratio of the increase in capital stock to the increase in GDP. Thus, ICOR is the inverse of marginal productivity of capital. The ICOR extrapolates the past experience of the country and predicts the increase in the GDP if the next unit of capital is used as efficiently (Swaleheen, 2007). Operationally, ICOR is calculated as a ratio of gross investment and change in the GDP.

New Measure -Total Factor Productivity

Total factor productivity (TFP) growth is measured as the difference between the growth of output and the growth of inputs. In other words, it is the growth of output not attributable to the growth of inputs. Various methodologies have been developed to capture TFP growth based on neoclassical framework. These methodologies can be categorised into: (a) Growth accounting approach, (b) Econometric approach and (c) Frontier approach.

a) Growth Accounting Approach

On the basis of the neoclassical theory of production and distribution, the growth accounting approach states that payments to factors exhaust total product under the assumption of competitive equilibrium and constant returns to scale. However, with the presence of technological advance, payments to factors would not exhaust total production and a residual output remains, which is not explained by total factor inputs. This residual output, known as 'Solow residual', is used as the basis for measuring and explaining productivity growth.

b) Econometric Approach

The econometric approach to productivity measurement is based on the estimation of either production or cost functions. The econometric approach assumes technological change can be described by shifts in a production function (or cost function), so that if scale and efficiency effects are assumed to be constant at a certain level, the shift in the production function (or cost function) associated with technological change can directly be used as a measurement for productivity. The attractions of the econometric approach are that it provides 'goodness of fit' measures, and allows an examination of important aspects of technological change, and the demand for inputs.

c) Frontier Approach

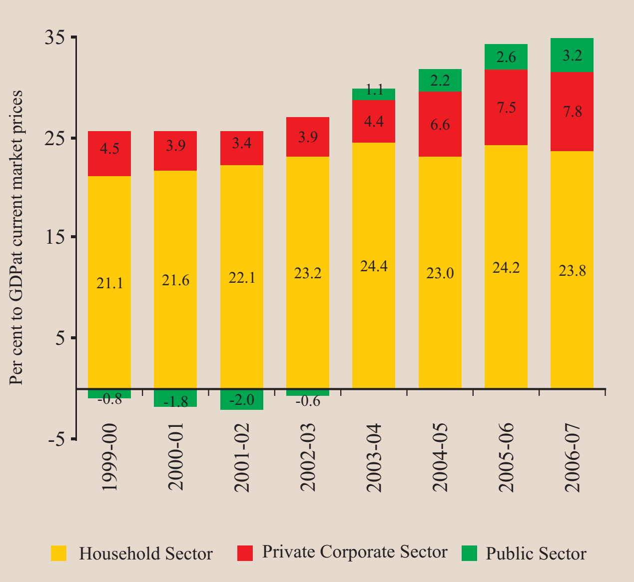
This approach is based on the well known frontier production function relating input quantities to the maximum possible output, as opposed to the realised output which is used in conventional empirical work on productivity growth. It is more in accord with the theoretical definition of a production function. The production frontier, embodying an idea of maximality, serves as a standard against which actual performance of an economic agent can be compared. The frontier approach could be further sub-grouped into deterministic and stochastic approaches. Both approaches have advantages and limitations (Salim, 1999).

Recent empirical studies show that there are some signs of improvement in domestic productivity in the post-reforms period. Various reform measures aimed at increasing the competitiveness appear to be having the desired impact on the productivity of the Indian economy (Mohan, 2008). One study estimated the average growth rate of total factor productivity (TFP) to be 2.0 per cent during 1999-2004 (Bosworth *et al*, 2006). According to another study, during 2003-05, average TFP growth was found to be 3.5 per cent and contribution of TFP to growth was 43.5 per cent (Poddar and Yi, 2007).

References

1. Bosworth B., Susan M. Collins and Arvind Virmani (2006), *Sources of Growth in the Indian Economy*, Brookings Institute, USA.
2. Brahmananda, P. R. (1982), *Productivity in the Indian Economy*, Himalaya Publishing House, Mumbai.
3. Poddar, T. and Eva Yi (2007), “India’s Rising Growth Potential”, *Global Economics* Paper No: 152, Goldman Sachs.
4. Mohan Rakesh (2008), “The Growth Record of the Indian Economy, 1950-2008: A Story of Sustained Savings and Investment”, *Reserve Bank of India Bulletin*, March.
5. Salim, R.A. (1999): *Capacity Realization and Productivity Growth in a Developing Country*, Ashgate Publishing Ltd., Aldershot, UK.
6. Swaleheen, M. (2007): “Corruption and Investment Choices: A Panel Data Study”, *Kyklos*, Vol. 60, No. 4, pp. 601-616.

Chart II.3: Gross Domestic Savings



reached 35.9 per cent of GDP in 2006-07 from 35.5 per cent in 2005-06 (Table 2.21).

II.2.43 Preliminary estimates, based on the latest available information, place financial savings (net) of the household sector in 2007-08 at 11.2 per cent of GDP at current market prices, which were lower than the estimates for 2006-07 at 11.7 per cent (Table 2.22). Household financial savings underwent some changes in the preference pattern in 2007-08 *vis-à-vis* 2006-07. Savings in the form of 'currency' and 'investment in shares and debentures' as per cent of GDP increased in 2007-08, while savings in the form of 'deposits', 'claims on Government' and 'contractual savings' as per cent of GDP decreased (Appendix Table 12). The decline in gross financial assets of the household sector at a higher rate of

Table 2.22: Household Saving in Financial Assets

(Amount in Rupees crore)

Item	2005-06P	2006-07P	2007-08#
1	2	3	
A. Financial Assets (Gross)	**5,97,867 (16.7)**	**7,68,967 (18.5)**	**7,34,699 (15.6)**
1. Currency	53,071 (1.5) [8.9]	66,323 (1.6) [8.6]	80,342 (1.7) [10.9]
2. Deposits@	2,80,772 (7.8) [47.0]	4,25,050 (10.3) [55.3]	4,15,245 (8.8) [56.5]
3. Claims on Government	87,168 (2.4) [14.6]	40,627 (1.0) [5.3]	-27,042 (-0.6) [-3.7]
4. Investment in Shares and Debentures+	30,735 (0.9) [5.1]	51,086 (1.2) [6.6]	77,073 (1.6) [10.5]
5. Contractual Savings*	1,46,122 (4.1) [24.4]	1,85,881 (4.5) [24.2]	1,89,081 (4.0) [25.7]
B. Financial Liabilities	**1,83,424 (5.1)**	**2,82,697 (6.8)**	**2,08,666 (4.4)**
C. Saving in Financial Assets (Net) (A-B)	**4,14,444 (11.6)**	**4,86,270 (11.7)**	**5,26,033 (11.2)**

P : Provisional. # : Preliminary.
@ : Comprise bank deposits, non-bank deposits and trade debt (net).
\+ : Includes units of Specified Undertaking of the Unit Trust of India and other mutual funds.
* : Comprise life insurance funds and provident and pension funds.
Note : 1. Components may not add up to the total due to rounding off.
2. Figures in ( ) indicate per cent of GDP at current market prices and [ ] indicate per cent of financial assets (gross).

Table 2.21: Gross Capital Formation

(Per cent of GDP at current market prices)

Item	2001-02	2002-03	2003-04	2004-05	2005-06P	2006-07*
1	2	3	4	5	6	7
1. Household Sector	11.3	12.9	13.0	12.9	12.5	12.5
2. Public Sector	6.9	6.1	6.3	6.9	7.6	7.8
3. Private Corporate Sector	5.4	5.7	6.6	10.5	13.3	14.5
4. Valuables +	0.6	0.6	0.9	1.3	1.2	1.2
5. Gross Domestic Capital Formation (GDCF) #	22.8	25.2	28.2	32.2	35.5	35.9

P : Provisional. * : Quick Estimates.
\+ : 'Valuables' cover the expenditures made on acquisition of valuables, excluding works of art and antiques.
\# : As GDCF is adjusted for errors and omissions, the sector-wise capital formation figures do not add up to the GDCF.
Source : Central Statistical Organisation.

2.9 per cent of GDP as compared with the decline in financial liabilities by 2.4 per cent of GDP resulted in lower rate of net household financial savings in 2007-08.

II.2.44 To sum up, the Indian economy continued to remain on a high growth path during 2007-08, although the growth rate moderated in comparison with the previous year. The year 2007-08 was the third in succession when the growth rate was 9 per cent or above. The average growth of 7.8 per cent during the Tenth Five Year Plan period (2002-03 to 2006-07) has been the highest growth achieved in any Plan period. While the growth process continues to be driven by the services sector supported by industrial activity, a positive feature during 2007-08 was recovery in the agriculture sector. This, apart from improving the overall growth process, also helped in improving the food supply in the economy to some extent. The growth process in India continued to be domestic demand driven. Within domestic demand, the share of consumption declined in the last few years, while that of investment increased, enabled by improvement in the domestic savings rate. The recourse to foreign savings continued to be moderate.

III. MONEY, CREDIT AND PRICES

II.3.1 Monetary and liquidity aggregates continued to expand at a strong pace during 2007-08, reflecting large and persistent capital flows. Broad money (M_3) growth during the year was above the indicative trajectory of 17.0-17.5 per cent for 2007-08 set out in the Annual Policy Statement in April 2007. However, the rate of growth of M_3 dipped from mid-February 2008, reflecting some moderation in the growth of time deposits. Non-food credit growth moderated in 2007-08 and remained marginally lower than the Reserve Bank's policy projection of 24.0-25.0 per cent (April 2007). Banks' investments in SLR securities increased in tandem with growth in deposits. As a result, their SLR investments as a proportion of their NDTL remained almost at the same level as at end-March 2007. The Reserve Bank continued to actively manage liquidity during 2007-08 through the appropriate use of cash reserve ratio (CRR) stipulations and conduct of open market operations (OMO), including issuances of securities under the market stabilisation scheme (MSS) and operations under the liquidity adjustment facility (LAF).

Reserve Money

II.3.2 The expansion in reserve money during 2007-08 was higher than that in the previous year (Chart II.4). The reserve money growth during 2007-08 was at 30.9 per cent as compared with 23.7 per cent a year ago (Table 2.23, Appendix Tables 13 and 14). Adjusted for the first round effect of the hike in the CRR, the reserve money growth at 25.3 per cent was higher than that of 18.9 per cent a year ago.

II.3.3 Movements in reserve money during 2007-08 exhibited large variations mainly reflecting the fluctuations in bankers' deposits with the Reserve Bank in the wake of hikes in the CRR, sizeable expansion in demand and time liabilities and the Reserve Bank's market operations. Bankers' deposits with the Reserve Bank expanded by 66.5 per cent during 2007-08 as compared with 45.6 per cent during 2006-07. Growth in currency in circulation at 17.2 per cent during 2007-08 was marginally higher than that of 17.1 per cent, a year ago.

Chart II.4: Reserve Money Growth

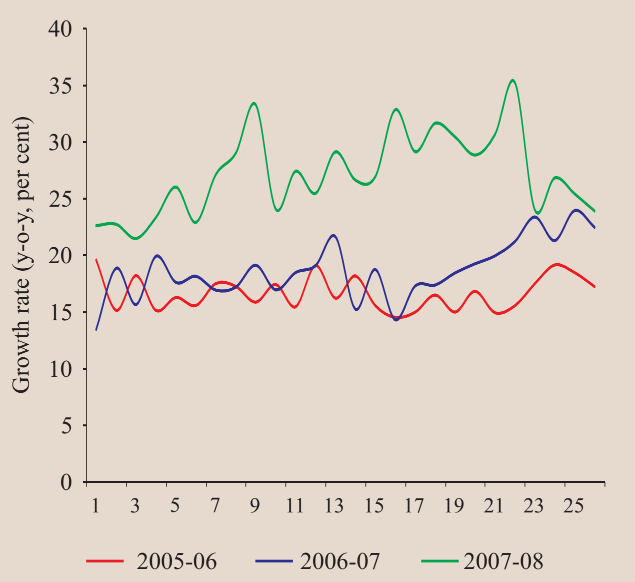


Table 2.23 : Reserve Money

(Amount in Rupees crore)

Item	Outstanding as on March 31, 2008	Variation during					
		2006-07	2007-08	2007-08			
				Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8
Reserve Money	9,28,417	1,35,935 (23.7)	2,19,427 (30.9)	11,630	60,688	26,606	1,20,503
Components (1+2+3)							
1. Currency in Circulation	5,90,901	73,523 (17.1)	86,702 (17.2)	16,866	-13,297	46,781	36,352
2. Bankers' Deposits with RBI	3,28,447	61,784 (45.6)	1,31,152 (66.5)	-4,800	75,464	-19,369	79,857
3. 'Other' Deposits with the RBI	9,069	628 (9.1)	1,573 (21.0)	-436	-1,479	-806	4,294
Sources (1+2+3+4-5)							
1. RBI's net credit to Government	-1,13,209	-4,176	-1,15,632	-22,154	-54,695	-65,787	27,004
of which: to Centre (i+ii+iii+iv-v)	-1,14,636	-3,024	-1,16,772	-21,825	-55,588	-65,078	25,719
i. Loans and Advances	0	0	0	0	0	0	0
ii. Treasury Bills held by the RBI	0	0	0	0	0	0	0
iii. RBI's Holdings of Dated Securities	1,14,593	26,763	17,421	-34,284	4,019	20,874	26,812
iv. RBI's Holdings of Rupee coins	132	-143	121	128	20	3	-31
v. Central Government Deposits	2,29,361	29,644	1,34,314	-12,330	59,627	85,956	1,062
2. RBI's credit to banks and commercial sector	6,378	1,990	-2,794	-6,450	-1,256	848	4,064
3. NFEA of RBI	12,36,130	1,93,170 (28.7)	3,69,977 (42.7)	-2,745	1,19,430	94,681	1,58,610
of which :FCA, adjusted for revaluation		1,64,601	3,70,550	47,728	1,18,074	1,00,888	1,03,860
4. Governments' Currency Liabilities to the Public	9,324	-493	1,064	166	354	312	232
5. Net Non-Monetary liabilities of RBI	2,10,206	54,556	33,187	-42,812	3,145	3,448	69,406
Memo:							
Net Domestic Assets	-3,07,713	-57,234	-1,50,550	14,375	-58,743	-68,075	-38,107
LAF- Repos (+) / Reverse Repos (-)	50,350	36,435	21,165	-32,182	9,067	16,300	27,980
Net Open Market Sales # *		5,125	-5,923	1,246	1,560	-3,919	-4,810
Centre's Surplus	76,686	1,164	26,594	-34,597	15,376	54,765	-8,950
Mobilisation under MSS	1,68,392	33,912	1,05,419	19,643	48,855	31,192	5,728
Net Purchases(+)/Sales(-) from Authorised Dealers		1,18,994	3,12,054	38,873	1,01,814	87,596	83,771
NFEA/Reserve Money @	133.1	122.2	133.1	119.8	125.8	133.4	133.1
NFEA/Currency @	209.2	171.8	209.2	165.7	193.6	194.3	209.2

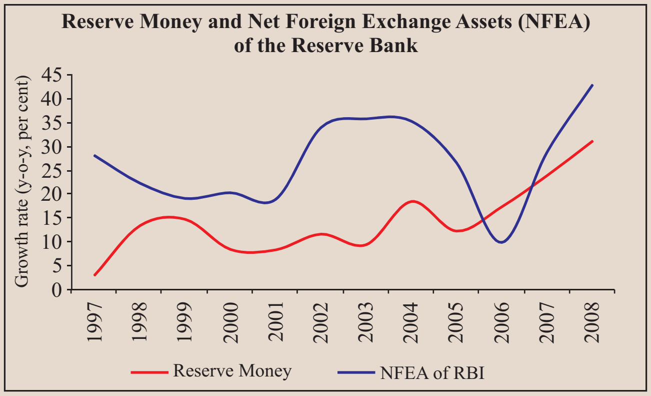
NFEA: Net Foreign Exchange Assets. FCA: Foreign Currency Assets. LAF: Liquidity Adjustment Facility.
*: At face value. # : Excludes Treasury Bills. @ : Per cent, end of period.

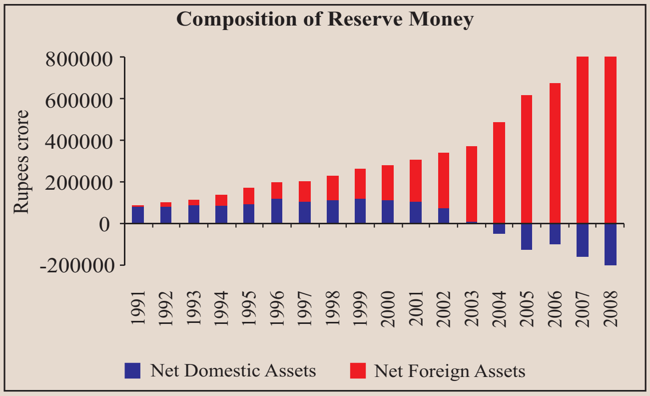
Note: 1. Data are based on March 31 for Q4 and last reporting Friday for all other quarters.
2. Figures in parentheses are percentage variations during the fiscal year.

II.3.4 On the sources side, reserve money continued to be driven by the Reserve Bank's foreign currency assets (adjusted for revaluation), which increased by Rs.3,70,550 crore during 2007-08 as compared with Rs.1,64,601 crore during the previous year. The share of foreign currency assets in reserve money has remained above/around 100 per cent since October 2004. In March 2008, it reached 133.1 per cent from 122.2 per cent in the previous year (Chart II.5).

II.3.5 Movements in the Reserve Bank's net credit to the Central Government during 2007-08 largely reflected the liquidity management operations by the Reserve Bank and movements in Government deposits with the Reserve Bank. The sterilisation operations of the Reserve Bank under the MSS led to an increase in Central Government deposits with the Reserve Bank. Surplus cash balances of the Central Government with the Reserve Bank also increased. The Reserve Bank's holdings of Central Government dated securities increased on account of injection of liquidity under the LAF. Reflecting these developments, the Reserve Bank's net credit to the Centre declined by Rs.1,16,772 crore during

Chart II.5: Sources: Reserve Money





2007-08 as compared with the decline of Rs. 3,024 crore during 2006-07.

Developments during 2008-09

II.3.6 The year-on-year (y-o-y) reserve money growth was 31.1 per cent as on August 15, 2008 as compared with 24.1 per cent, a year ago. Adjusted for the first round effect of the hike in CRR, reserve money growth was 24.3 per cent as compared with 14.2 per cent a year ago. The Reserve Bank's foreign currency assets (adjusted for revaluation), on a y-o-y basis, increased by Rs.2,51,201 crore as compared with an increase of Rs.2,40,618 crore a year ago. The Reserve Bank's net credit to the Centre increased, y-o-y, by Rs.6,125 crore as against a decline of Rs.78,935 crore, a year ago.

Monetary Survey

II.3.7 Broad money (M_3) growth, on a year-on-year (y-o-y) basis, at 20.8 per cent as at end-March 2008 was lower than that of 21.5 per cent a year ago, reflecting some deceleration in time deposits from mid-February 2008. Broad money growth, nevertheless, was strong with expansion in aggregate deposits, y-o-y, remaining higher than the projection of Rs. 4,90,000 crore for 2007-08 set out in the Annual Policy Statement (April 2007). Accretion to net foreign exchange assets continued to be a major source of monetary expansion, while growth of bank credit to the commercial sector moderated (Table 2.24, Appendix Table 15 and Chart II.6). On a monthly average basis, broad money growth expanded by 21.8 per cent during 2007-08 as compared with 19.6 per cent during 2006-07.

II.3.8 Expansion in the residency-based new monetary aggregate (NM_3) – which does not directly reckon non-resident foreign currency deposits such as FCNR(B) deposits – was marginally higher at 21.3 per cent during 2007-08 as compared with 21.0 per cent a year ago (Appendix Tables 16 and 17). Growth in liquidity aggregate, L_1, at 20.6 per cent at end-March 2008 was same as a year ago.

II.3.9 Expansion in currency with the public remained subdued for a large part of 2007-08, except in November 2007 when it increased sharply on account of festive season currency demand. Currency with public again picked up in the month of March and increased by 17.5 per cent, y-o-y, as at end-March 2008, marginally higher than the increase of 16.9 per cent a year ago (Chart II.7). Growth in demand deposits, y-o-y, as at end-March 2008 at 20.8 per cent was higher than that of 17.1 per cent a year ago. Accordingly, growth in narrow money (M_1), y-o-y, at 19.1 per cent at end-March 2008 was higher than 16.9 per cent recorded a year ago. The expansion in time deposits continued in 2007-08, although some moderation was observed during the last quarter of 2007-08. Growth in time deposits was 21.5 per cent, y-o-y, at end-March 2008 as compared with 23.5 per cent a year ago. The strong growth in time deposits could be attributed, *inter alia,* to robust economic activity, higher interest rates on bank deposits relative to postal deposits and extension of tax benefits under Section 80C for bank deposits.

Table 2.24: Monetary Indicators

(Amount in Rupees crore)

Item	Outstanding as on March 31, 2008	Variation during March 31, 2007		Variation during March 31, 2008	
		Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6
I. Reserve Money	9,28,417	1,35,935	23.7	2,19,427	30.9
I. Narrow Money (M_1)	11,50,953	1,39,714	16.9	1,84,864	19.1
III. Broad Money (M_3)	40,06,722	5,86,548	21.5	6,90,629	20.8
a) Currency with the Public	5,67,476	69,786	16.9	84,571	17.5
b) Aggregate Deposits	34,30,177	5,16,134	22.3	6,04,485	21.4
i) Demand Deposits	5,74,408	69,300	17.1	98,721	20.8
ii) Time Deposits	28,55,769	4,46,834	23.5	5,05,765	21.5
of which: Non-Resident Foreign Currency Deposits	56,935	8,185	13.8	-10,525	-15.6
IV. NM_3	40,32,699	5,77,013	21.0	7,08,101	21.3
of which: Call Term Funding from FIs	1,06,504	2,692	3.2	20,668	24.1
V. a) L_1	41,47,550	5,88,644	20.6	7,07,403	20.6
of which: Postal Deposits	1,14,851	11,631	11.2	-698	-0.6
b) L_2	41,50,482	5,88,644	20.6	7,07,403	20.5
c) L_3	41,76,450	5,90,718	20.5	7,08,674	20.4
VI. Major Sources of Broad Money					
a) Net Bank Credit to the Government (i+ii)	9,07,077	69,177	9.0	72,842	8.7
i) Net Reserve Bank Credit to Government	-1,13,209	-4,176		-1,15,632	
of which: to the Centre	-1,14,636	-3,024		-1,16,772	
ii) Other Banks' Credit to Government	10,20,286	73,353	9.7	1,88,474	22.7
b) Bank Credit to Commercial Sector	25,69,912	4,37,074	25.8	4,39,834	20.6
c) Net Foreign Exchange Assets of the Banking Sector	12,95,131	1,86,985	25.7	3,81,952	41.8
d) Government Currency Liability to Public	9,324	-493	-5.6	1,064	12.9
e) Net Non-Monetary Liabilities of the Banking Sector	7,74,723	1,06,195	22.9	2,05,063	36.0
Memo:					
Aggregate Deposits of SCBs	31,96,939	5,02,885	23.8	5,85,006	22.4
Non-food Credit of SCBs	23,17,515	4,18,282	28.5	4,32,846	23.0

SCBs: Scheduled Commercial Banks. FIs: Financial Institutions. NBFCs: Non-Banking Financial Companies.

NM_3 is the residency-based broad money aggregate and L_1, L_2 and L_3 are liquidity aggregates compiled on the basis of the recommendations of the Working Group on Money Supply (Chairman: Dr. Y.V. Reddy, 1998). Liquidity aggregates are defined as follows.

$L_1 = NM_3$ + Select deposits with the post office savings bank.

$L_2 = L_1$ +Term deposits with term lending institutions and refinancing institutions + Term borrowing by FIs + Certificates of deposit issued by FIs.

$L_3 = L_2$ + Public deposits of NBFCs.

Note: 1. Data are provisional. Wherever data are not available, the estimates for the last available month have been repeated.

During 2007-08, accretion to postal deposits decelerated significantly up to November 2007. However, in December 2007 there were net outflows from small saving schemes (Chart II.8). In order to

Chart II.6: Monetary Aggergates

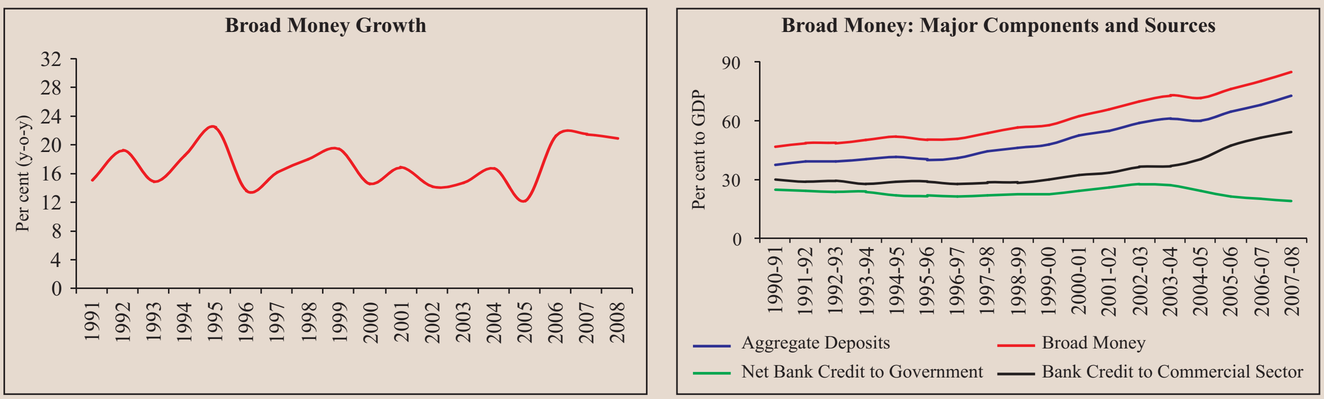
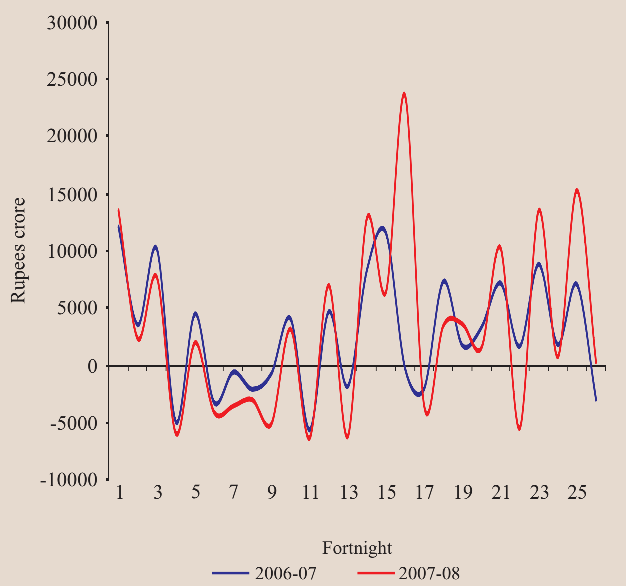


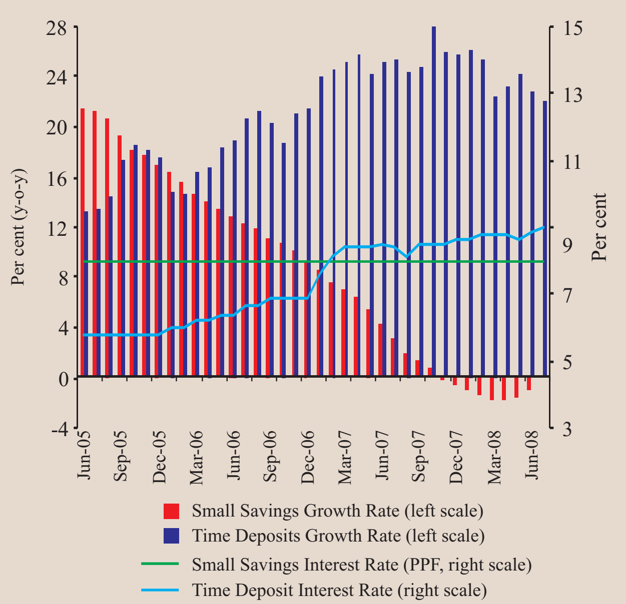
Chart II.7: Fortnightly Variation in Currency in Circulation



revive interest in postal deposits, the Government announced in December 2007 some incentives, including tax benefits for certain postal deposits. However, the data suggest that net outflows continued up to June 2008, the latest period for which the data are available.

II.3.10 Non-food credit by scheduled commercial banks (SCBs) expanded by 23.0 per cent, y-o-y, as on March 28, 2008 as compared with 28.5 per cent a year ago (Table 2.25, Appendix Tables 18 and 19 and Chart II.9). Annual average non-food credit growth during 2007-08 was 23.9 per cent as compared with 31.3 per cent a year ago. Growth in non-food credit was marginally lower than the Reserve Bank's projected target of 24.0-25.0 per cent as indicated in the Annual Policy Statement (April, 2007). Growth in non-food credit averaged 27.7 per cent during the three-year period 2004-05 to 2007-08 as compared with an average growth of 16.4 per cent during the period 2000-2004 and 15.4 per cent during the 1990s. The deceleration in credit growth and acceleration in deposit growth in 2007-08 led to a decline in the incremental credit-deposit ratio to 73.6 per cent, y-o-y, as on March 28, 2008 from 84.3 per cent a year ago (Chart II.10).

Chart II.8: Time Deposits and Small Savings



II.3.11 As credit growth exceeded nominal GDP growth by a large margin for consecutive years, the credit-GDP ratio witnessed further increase during 2007-08. The credit-GDP ratio increased from 29 per cent at end-March 2000 and 47 per cent at end-March 2006 to 51 per cent at end-March 2007 and further to 55 per cent at end-March 2008.

II.3.12 During 2003-04 to 2007-08, India experienced an average real GDP growth of 8.8 per cent and average money supply growth of 17.6 per cent. During this period, average WPI inflation remained around 5.5 per cent. In this context, the relation between money, output and prices has attracted the attention of researchers and policy makers (Box II.10).

II.3.13 Disaggregated sectoral data during 2007-08 show that about 43 per cent of incremental non-food credit (y-o-y) was absorbed by industry as compared with 37 per cent in the previous year. The expansion of incremental non-food credit to industry during this period was led by infrastructure (power, port and telecommunication), iron and steel, textiles, food processing, chemicals, engineering, construction and vehicles industries. The infrastructure sector alone accounted for 34 per cent of the incremental credit to industry as compared with 21 per cent in the previous year. The agricultural

Table 2.25 : Operations of Scheduled Commercial Banks

(Amount in Rupees crore)

Item	Outstanding as on March 28, 2008	Variation during 2006-07	2007-08	2007-08 Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8
C.I. Aggregate Deposits of Residents (C.I.1+C.I.2)	31,40,004	4,94,699	5,95,531	58,993	2,08,191	67,544	2,60,803
C.I.1 Demand Deposits	5,24,310	65,091	94,579	-41,898	57,771	-7,894	86,600
C.I.2 Time Deposits of Residents (C.I.2.1+C.I.2.2)	26,15,695	4,29,609	5,00,952	1,00,890	1,50,420	75,439	1,74,204
C.I.2.1 Short-term Time Deposits	11,77,063	1,93,324	2,25,429	45,401	67,689	33,947	78,392
C.I.2.1.1 Certificates of Deposits	1,66,642	52,943	69,200	9,315	11,953	7,994	39,937
C.I.2.2 Long-term Time Deposits	14,38,632	2,36,285	2,75,524	55,490	82,731	41,491	95,812
C.II. Call/Term Funding from Financial Institutions	1,06,504	2,692	20,668	-2,984	5,756	7,441	10,455
S.I. Domestic Credit (S.I.1+S.I.2)	35,07,759	5,01,718	6,41,799	36,539	2,03,739	1,22,404	2,79,116
S.I.1 Credit to the Government	9,58,661	75,316	1,82,603	50,067	68,965	27,436	36,136
S.I.2 Credit to the Commercial Sector (S.I.2.1+S.I.2.2+S.I.2.3+S.I.2.4)	25,49,097	4,26,402	4,59,196	-13,527	1,34,775	94,969	2,42,980
S.I.2.1 Bank Credit	23,61,914	4,24,112	4,30,724	-36,348	1,42,638	87,012	2,37,422
S.I.2.1.1 Non-food Credit	23,17,515	4,18,282	4,32,846	-33,784	1,49,586	83,752	2,33,291
S.I.2.2 Net Credit to Primary Dealers	3,521	-1,570	721	-282	780	1,370	-1,146
S.I.2.3 Investments in Other Approved Securities	13,053	-1,255	-2,405	-384	-1,010	-654	-357
S.I.2.4 Other Investments (in non-SLR Securities)	1,70,609	5,114	30,155	23,487	-7,634	7,241	7,061
S.II. Net Foreign Currency Assets of Commercial Banks (S.II.1-S.II.2-S.II.3)	-70,196	5,004	-29,585	2,817	-16,584	974	-16,793
S.II.1 Foreign Currency Assets	31,189	15,260	-27,564	-8,312	-9,934	-781	-8,537
S.II.2 Non-resident Foreign Currency Repatriable Fixed Deposits	56,935	8,185	-10,525	-4,202	-1,181	-3,490	-1,653
S.II.3 Overseas Foreign Currency Borrowings	44,451	2,071	12,546	-6,928	7,830	1,734	9,909
S.III. Net Bank Reserves (S.III.1+S.III.2-.III.3)	2,71,166	51,497	81,050	6,468	76,009	-22,695	21,268
S.III.1 Balances with the RBI	2,57,122	53,161	76,900	378	73,969	-20,646	23,199
S.III.2 Cash in Hand	18,044	3,093	1,905	-54	2,003	-1,271	1,227
S.III.3 Loans and Advances from the RBI	4,000	4,757	-2,245	-6,144	-37	778	3,158
S.IV. Capital Account	2,72,622	25,074	69,821	26,813	24,184	6,887	11,937
S.V. Other items (net) (S.I+S.II+S.III-S.IV-C.I-C.II)	1,89,598	35,754	7,244	-36,996	25,032	18,811	397

Note : Data relate to the last reporting Friday of each quarter.

sector absorbed around 11 per cent of the incremental non-food bank credit expansion as compared with 14 per cent in the previous year. Personal loans accounted for nearly 12 per cent of

Chart II.9: Bank Credit and Investment in Government Securities

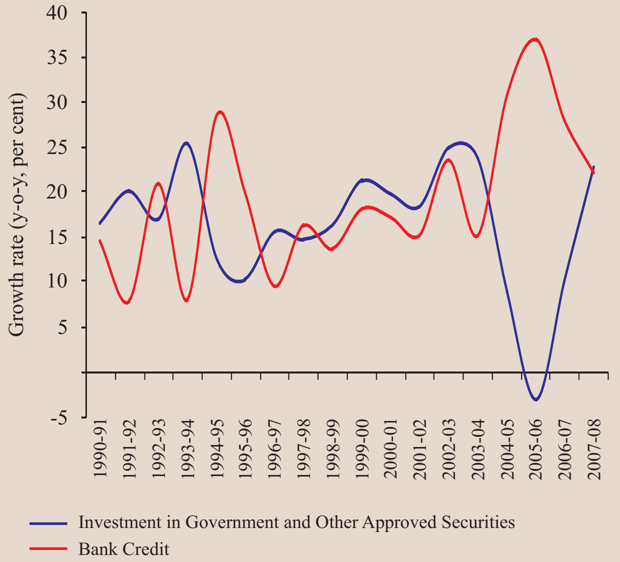
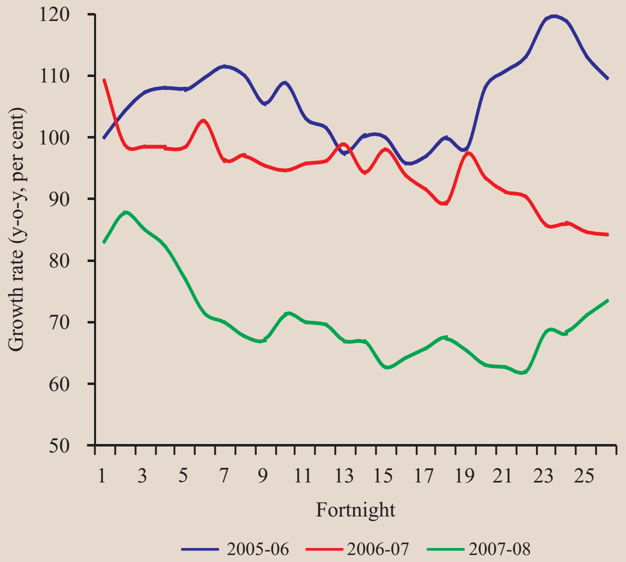


Chart II.10: Incremental Credit Deposit Ratio



Box II.10
Money, Output and Prices

The inter-relationship between money, output and prices has traditionally occupied a central stage both in economic literature and the conduct of monetary policy. Developing from the classical economic view that money is just a *veil*, Keynes integrated the monetary and real sectors of the economy by emphasising the role played by the interest rate in influencing the level of investment demand in the economy. During the 1970s, the new-classical economists assuming rational expectations of market participants and a market-clearing approach without rigidity, argued that anticipated monetary policy measures do not matter and only unanticipated monetary policy can have some real but temporary impact. Therefore, in order to avoid generating such surprises on market participants, rule-based monetary and fiscal policy measures were recommended. The rational expectation paradigm influenced the conduct of future monetary policy for a long time. Economists of new-Keynesians genre (Fischer and Phelps; and Taylor), who broadly conformed to Keynesian ideas, argued that anticipated monetary policy measures could have real effects both in the short and long run as in reality markets do not clear.

In India, inflation accelerated during the 1970s due to both supply and demand shocks. The supply shocks emanated mainly from oil and food prices. On the other hand, sharp increase in money supply – even as output growth decelerated during 1970s – added to demand pressure, pushing up the average inflation to 9.0 per cent. During the 1980s, demand pressures emanating from an expansionary fiscal policy and its monetisation coupled with intermittent supply shocks kept inflation high, averaging 8.0 per cent. Empirical evidence from Rangarajan and Arif (1990) also confirmed the adverse effect of excessive monetary expansion, emanating from the monetisation of the fiscal deficit on inflation. Inflation reached 11.0 per cent in the first half of the1990s for several reasons such as sharp depreciation (more than 11 per cent) in the exchange rate, high monetary growth, increase in procurement prices along with supply-demand imbalances in essential commodities like pulses and oilseeds. Inflation, however, moderated beginning the mid-1990s as the Reserve Bank contained money supply successfully to the level consistent with the indicative inflation projection, in spite of large capital flows, while net Reserve Bank credit to the Central Government recorded a decline in contrast to double digit growth over the last decade. There was a sharp deceleration in the M_3 growth rate from around 18 per cent during 1990-95 to around 16 per cent during 1995-2004 even as real GDP growth accelerated from 5.0 per cent to 6.1 per cent over the same period.

An empirical study for the period 1970-71 to 1989-90, after examining the relationship between money, output and prices, found that the lagged effects of a change in M_3 on prices were significant for about three years following the change and petered out progressively (Sarma, 1991). Another study for the period 1970-71 to 1992-93 found that average price change over a period of four to five years was predicted with reasonable accuracy (Rangarajan, 2000). Subsequent to 1994-95, India experienced many structural changes, including those in the monetary and fiscal sectors. These changes led to new linkages in the system. Furthermore, changes in the monetary policy framework and monetary management resulted in sharp focus on the transmission mechanism of monetary policy. A study found that monetary expansion was more inflationary in nature and its impact on the real sector, in terms of rise in real output, worked out to be small (Sastry, Singh and Bhattacharyya, 2004). Studies on monetary policy transmission mechanism conducted at different points of time found increasing importance of the various channels including rate channels (RBI, 1998), bank lending channel (Mohan, 2007) and others. These studies recognised that monetary policy operates cumulatively, and with variable and often long lags. Transmission lags are also surrounded by a great deal of uncertainty in view of structural changes and shift in monetary policy operating framework (Mohan, *op cit*).

The macroeconomic dynamics of money, output and price relationship has evolved further in India since 2003-04 with broad money supply growth being higher than the indicative trajectory, a strong GDP growth and moderate WPI inflation. A number of factors appeared to have contributed to this development. First, though the money supply growth remained high in recent years, a part of it was on account of some policy induced shifts from postal deposits to time deposits of banks, which did not change the underlying demand pressures. Second, increase in productivity and integration of the domestic economy with the global economy enabled the producers to adjust their supply easily to the changing demand conditions, without impinging on inflation. Third, in India bank credit to productive purposes played an important role facilitating production across various sectors. In recent months, inflation has become a global phenomenon and India is no exception. Escalation in inflation rates in recent months in India reflects commodity price pressures in international markets and build up of some underlying demand pressures in domestic markets apart from other supply side factors. The recent phase of large monetary expansion and increase in inflation rates necessitate re-examination of the dynamics of money, output and prices in a global environment.

References

1. Mohan, Rakesh (2007), “Monetary Policy Transmission in India”, *Reserve Bank of India Bulletin*, April.
2. Rangarajan, C (2000), “Monetary Policy Revisited”, Published in Rangarajan C(ed) Essays on Money and Finance, page 20-29.
3. Rangarajan, C and R.R. Arif (1990), “Money, Output and Prices: A Macroeconomic Model” Economic and Political Weekly, 21 April.
4. Sarma, Y S R (2003), “Money, Output and Prices”, published in A. Vasudevan (ed)Money and Banking.
5. Sasrty, Singh and Bhattacharyya (2004), “Money, Output and Prices: A Small Macro-Econometric Model Relating to The Indian Economy”, published in Romer Correa and Burange L. G. (ed) Reforms, Institutions and Policies:Challenges Conforting the Indian Economy.
6. Singh, Balwant (2005), “A Forcasting and Policy Simulation Oriented Small Macro-model for the Indian Economy”, Journal of Policy Modelling 27(2005), 1025-1049.

incremental non-food credit; within personal loans, the share of incremental housing loans was at 51 per cent. Growth in loans to commercial real estate remained high, notwithstanding moderation (Table 2.26 and Appendix Tables 20 and 21).

II.3.14 According to the Basic Statistical Returns (BSR) data, the share of personal loans in total bank credit extended by SCBs which was 23.3 per cent at end-March 2006, declined marginally to 22.3 per cent as at end-March 2007, mainly due to decline in the share of non-housing credit (in overall credit) to 10.5 per cent at end-March 2007 from 11.3 per cent in 2006. The share of housing credit declined to 11.8 per cent from 12.0 per cent. Credit to agriculture (direct and indirect) accounted for 11.8 per cent of total credit in March 2007 as against 11.4 per cent at end-March 2006; direct credit accounted for 8.8 per cent of total credit at end-March 2007 compared with 8.2 per cent at end-March 2006. The share of industry in total credit increased during 2006-07 from 37.4 per cent to 38.1 per cent. The share of trade (wholesale and retail) and professional and other services sectors in total credit increased during 2006-07, while those of transport operators and 'all others' sectors registered a decline.

Table 2.26: Non-food Bank Credit - Sectoral Deployment

(Amount in Rupees crore)

Sector/Industry	Outstanding as on March 28, 2008	Year-on-Year Variations			
		March 31, 2007		March 28, 2008	
		Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6
Non-food Gross Bank Credit (1 to 4)	**22,03,038**	**3,96,399**	**28.2**	**4,01,799**	**22.3**
1. Agriculture and Allied Activities	**2,73,658**	**56,426**	**32.4**	**43,260**	**18.8**
2. Industry (Small, Medium and Large)	**8,71,900**	**1,46,890**	**26.7**	**1,74,566**	**25.0**
Small Scale Industries	1,55,804	26,668	29.2	37,924	32.2
3. Personal Loans	**5,05,390**	**96,486**	**26.8**	**48,656**	**10.7**
Housing	2,55,653	45,791	24.7	24,659	10.7
Advances against Fixed Deposits	45,031	5,822	16.9	4,792	11.9
Credit Cards	19,259	4,330	47.7	5,843	43.6
Education	20,547	5,247	52.7	5,338	35.1
Consumer Durables	8,663	2,083	29.3	-526	-5.7
4. Services	**5,46,516**	**96,596**	**30.2**	**1,29,743**	**31.1**
Transport Operators	37,447	9,178	52.9	10,928	41.2
Professional & Other Services	29,756	8,643	56.6	5,830	24.4
Trade	1,22,297	23,077	27.6	15,685	14.7
Real Estate Loans	62,276	18,483	69.2	17,070	37.8
Non-Banking Financial Companies	75,301	14,722	42.9	26,274	53.6
Memo:					
Priority Sector	**7,38,686**	**1,23,404**	**24.2**	**1,04,544**	**16.5**
Industry (Small, Medium and Large)	**8,71,900**	**1,46,890**	**26.7**	**1,74,566**	**25.0**
Food Processing	50,221	9,053	29.3	10,222	25.6
Textiles	95,935	20,499	35.1	16,964	21.5
Paper & Paper Products	13,622	2,440	26.7	2,034	17.6
Petroleum, Coal Products & Nuclear Fuels	41,738	10,736	42.7	5,852	16.3
Chemicals and Chemical Products	64,391	7,136	14.7	8,617	15.4
Rubber, Plastic & their Products	10,410	2,000	27.6	1,160	12.5
Iron and Steel	80,790	12,886	25.3	16,913	26.5
Other Metal & Metal Products	23,929	5,088	34.1	3,936	19.7
Engineering	52,442	9,148	26.2	8,416	19.1
Vehicles, Vehicle Parts and Transport Equipments	29,152	2,294	12.3	8,230	39.3
Gems & Jewellery	24,995	3,291	16.0	1,145	4.8
Construction	28,298	6,667	50.1	8,328	41.7
Infrastructure	2,02,296	30,122	26.7	59,321	41.5

Note: 1. Data are provisional and relate to select scheduled commercial banks.
2. Data also include the figures of Bharat Overseas Bank, which was merged with Indian Overseas Bank on March 31, 2007.

II.3.15 The share of total bank credit extended by SCBs (as estimated through BSR data) to GDP at factor cost at current prices worked out to around 51 per cent as at end-March 2007, which was 5 percentage points higher than that at end-March 2006. The ratio of agricultural credit to agricultural GDP increased to around 33 per cent at end-March 2007 from around 28 per cent at end-March 2006. Similarly, the ratio of industrial credit to industrial GDP also increased from around 84 per cent to around 94 per cent. However, excluding credit to the construction sector from industrial credit, the ratios were around 71 per cent and 80 per cent, at end-March 2006 and end-March 2007, respectively.

II.3.16 Apart from credit from banks, the corporate sector continued to meet its funding requirements from a variety of non-bank sources such as capital markets, external commercial borrowings and internal generation of funds. Resources raised through domestic equity issuances during 2007-08 (Rs.48,153 crore) were 68 per cent higher than a year ago. Net mobilisation through external commercial borrowings (ECBs) during 2007-08 increased by 54 per cent over the previous year. Mobilisation through issuances of commercial paper (CPs) during 2007-08 was nearly three times than that of the issuances during the previous year. Internal generation of funds continued to provide support to the funding requirements of the corporate sector, despite the profits after tax of select non-financial non-government companies during 2007-08 witnessing some deceleration as compared with the previous year (Table 2.27 and See Table 2.18 in Chapter II.2). Resources raised in the form of equity issuances through American depository receipts (ADRs) and global depository receipts (GDRs) during 2007-08 (Rs.13,023 crore) were 20 per cent lower than a year ago.

II.3.17 Scheduled commercial banks' increased their investments (SCBs) in Government and other approved securities during 2007-08 in tandem with the increase in their net demand and time liabilities. Investments in SLR securities by SCBs increased by 22.8 per cent, y-o-y, as at end-March, 2008 as compared with 10.3 per cent, a year ago. Commercial banks' holdings of such securities at end-March 2008 remained at 27.8 per cent of their NDTL – almost the same as at end-March 2007 (Chart II.11). Excess

Table 2.27: Select Sources of Funds to Industry

(Rupees crore)

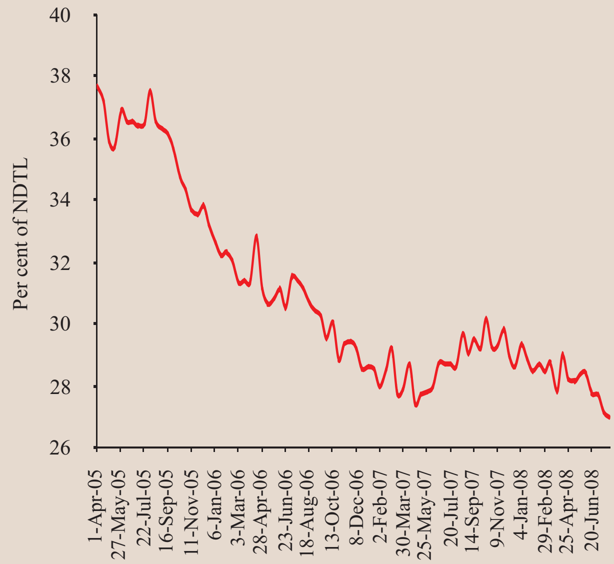
Item	2006-07	2007-08 P
1	2	3
A. Bank Credit to Industry #	1,46,890	1,74,566
B. Flow from Non-banks to Corporates		
1. Capital Issues (i+ii)	29,178	51,479
i) Non-Government Public Ltd. Companies (a+b)	29,178	48,962
a) Bonds/Debentures	585	809
b) Shares	28,593	48,153
ii) PSUs and Government Companies	0	2,517
2. ADR/GDR Issues	16,184	13,023
3. External Commercial Borrowings (ECBs)	1,04,046	1,60,221
4. Issue of CPs	5,145	14,903
C. Depreciation Provision +	37,095	40,664
D. Profit after Tax +	1,11,107	1,34,291

\+ : Data are based on abridged financial results of the select non-financial non-Government public limited companies.

\# : Data pertain to select scheduled commercial banks.

Note: 1. Data are provisional.
2. Data on capital issues pertain to gross issuances, excluding issues by banks and financial institutions. Figures are not adjusted for banks' investments in capital issues, which are not expected to be significant.
3. Data on ADR/GDR issues exclude issuances by banks and financial institutions.
4. Data on external commercial borrowings include short-term credit.

Chart II.11: SLR Investments of Scheduled Commercial Banks



SLR investments of SCBs increased to Rs.98,033 crore at end-March 2008 from Rs.81,484 crore a year ago.

II.3.18 Scheduled commercial banks' investments in commercial papers, shares, and bonds witnessed a large expansion during 2007-08 (Table 2.28). Non-food credit extended by scheduled commercial banks, including their non-SLR investments, moderated to 22.6 per cent during 2007-08 as compared with 27.3 per cent during 2006-07.

II.3.19 Commercial banks' recourse to foreign borrowings during 2007-08 was higher than a year ago. They also reduced holdings of foreign currency assets during the year in contrast to the build-up in the previous year. Accretion to banks' capital and reserves was higher than a year ago.

Developments during 2008-09

II.3.20 On a year-on-year basis, growth in broad money (M_3) was 19.6 per cent as on August 1, 2008 as compared with 21.8 per cent a year ago. Amongst the major components, aggregate deposits expanded by 20.0 per cent as compared with 23.1 per cent a year ago. On the sources side, scheduled commercial banks' non-food credit registered a growth of 26.2 per cent as on August 1, 2008 marginally higher than 23.5 per cent in the previous year, while their investment in Government securities expanded by 15.4 per cent as compared with 12.9 per cent a year ago.

Table 2.28: Scheduled Commercial Banks' Non-SLR Investments

(Rupees crore)

Item	Mar 18 2005	Mar 31 2006	Mar 30 2007	Mar 28 2008
1	2	3	4	5
Commercial Paper	3,891	4,821	8,978	13,045
Units of Mutual Funds	12,623	10,345	11,659	18,692
Shares issued by:	13,470	15,085	20,252	28,748
By Public Sector Undertakings	1,613	2,274	2,127	3,023
By Private Corporate Sector	10,288	10,501	16,225	23,387
By Public Financial Institutions	1,525	2,270	1,826	2,044
Others	44	41	74	294
Bonds/debentures issued by:	1,13,695	1,03,170	98,201	1,08,791
By Public Sector Undertakings	45,937	32,345	28,595	27,382
By Private Corporate Sector	31,934	29,523	27,620	28,668
By Public Financial Institutions	29,190	26,402	24,362	23,511
Others	6,633	14,899	17,623	29,230
Total	**1,43,679**	**1,33,421**	**1,39,090**	**1,69,277**

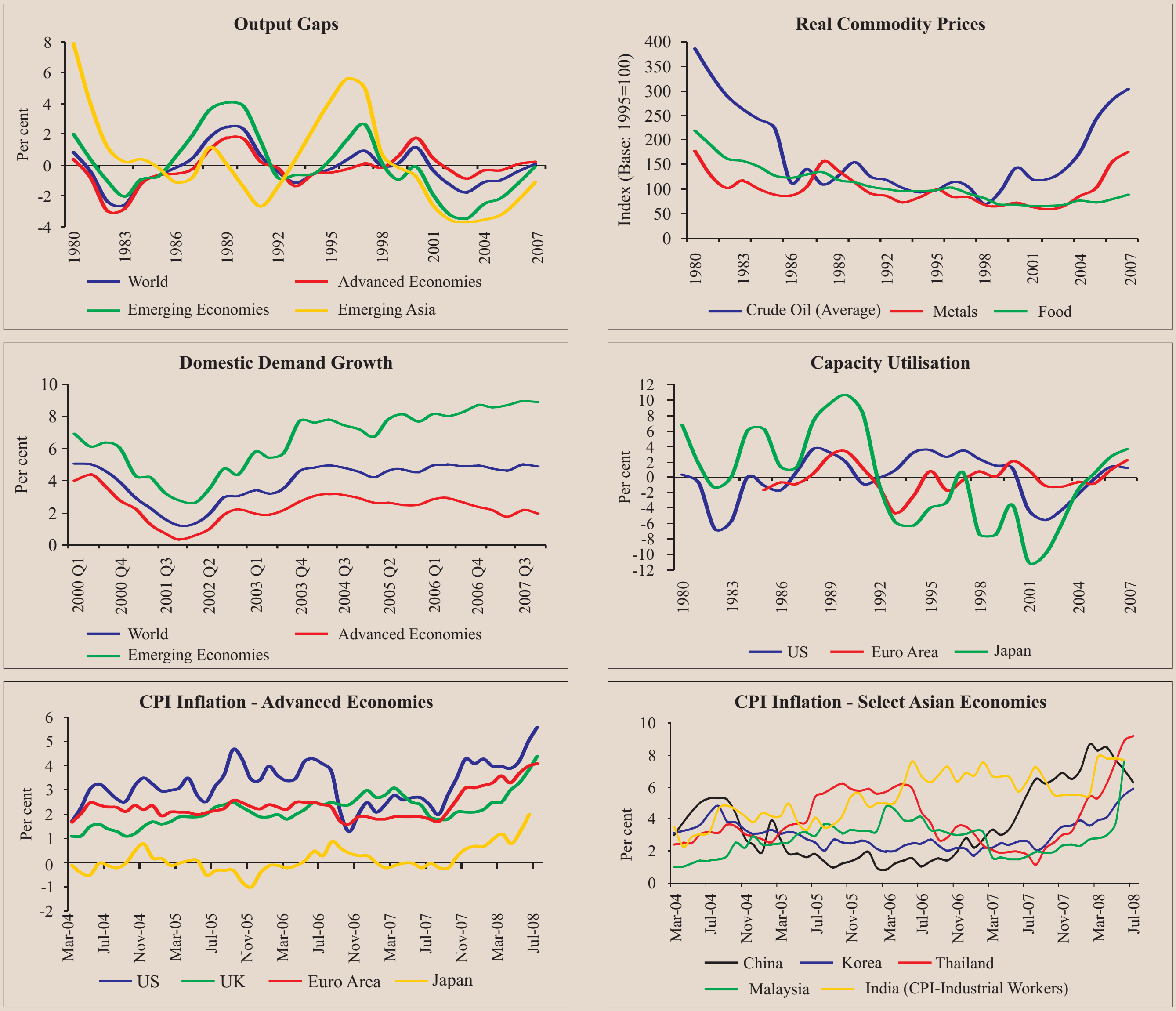
Note: Data are provisional and exclude regional rural banks.

PRICE SITUATION

Global Inflation

II.3.21 Global headline inflation, which began to firm up during the second half of 2007-08, intensified during the first quarter of 2008-09, reflecting the combined impact of higher food and fuel prices as well as strong demand conditions, especially in emerging markets (Chart II.12). Although the slowdown in demand growth following the housing market correction alleviated to some extent the pressure on resources in the advanced economies, especially in the US, the increase in oil prices to record highs during the year continued to raise inflation concerns in the advanced economies. On the other hand, emerging economies continued to face inflation risks not only from higher food and oil prices, which account for a large share of their consumption baskets, but also from the rapidly closing output gaps following strong growth. According to the International Monetary Fund (IMF), consumer price inflation in advanced economies was 2.2 per cent in the calendar year 2007, lower than 2.4 per cent a year ago, but higher than that of 1.9 per cent during the preceding 5-year period (2001-2005). Consumer price inflation in Developing Asia rose from an average of 3.0 per cent during 2001-2005 and 4.1 per cent in 2006 to 5.3 per cent in 2007. In the OECD countries, consumer price inflation, which had eased from 2.5 per cent in March 2007 to 1.9 per cent in August 2007, increased thereafter to 3.6 per cent in March 2008 (mainly due to higher energy and food prices, which increased, year-on-year, by 13.3 per cent and 5.1 per cent, respectively, in March 2008). It hardened further to 4.4 per cent in June 2008. Core inflation also remained firm in major advanced economies. In the OECD countries, CPI inflation (excluding food and energy) was in the range of 1.9-2.2 per cent during March 2007 to June 2008. Producer price inflation rose sharply from 3.2 per cent in September 2007 to 8.7 per cent in June 2008.

Chart II.12: Global Inflation



Note : 1. Output gaps (actual - potential) are expressed as per cent of potential GDP.

2. Capacity utilisation is measured as deviations from averages during 1980-2007 (per cent of total capacity) for the US and as deviations during 1985-2007 for the euro area (per cent of industry capacity), and for Japan represent operation rate index for the manufacturing sector.

Source : World Economic Outlook, April 2008, IMF; International Financial Statistics, IMF and official websites of respective countries.

II.3.22 Globally, the monetary policy responses to the growing inflation concerns were, however, mixed during 2007-08. While during the first half of 2007-08, many central banks in developed countries raised/maintained policy rates at elevated levels, there was a general easing of monetary policy during the second half of the year, particularly in the US, the UK and Canada in view of heightened concerns about the implications of credit crunch arising out of the US sub-prime crisis on financial stability and economic growth. The US Federal Reserve System also reduced the discount rate to improve market liquidity. Apart from independent actions, there was also a co-ordinated move by central banks in major advanced countries in terms of injection of short-term liquidity aimed at easing strains on the money markets. Amongst other advanced economies, the Reserve Bank of Australia, the European Central

Bank (ECB), Reserve Bank of New Zealand, Norges Bank (Norway) and Sveriges Riksbank (Sweden) raised their policy rates during 2007-08. Notwithstanding concerns about the implications of international financial market turbulence and the US economic slowdown on the future growth prospects, many central banks in emerging economies [such as People's Bank of China (PBC), Bank of Korea and South African Reserve Bank] continued with pre-emptive monetary tightening to contain inflation and inflationary expectations amidst strong growth and ample liquidity. The PBC also raised the cash reserve requirements to address concerns regarding excess liquidity.

II.3.23 In the US, headline inflation firmed up from August 2007 led by food, energy and transportation prices. However, according to the latest assessment of the US Federal Open Market Committee (FOMC) on August 5, 2008, inflation is expected to moderate later this year and next year, but the inflation outlook remains highly uncertain. Against this backdrop, after cutting the target for the federal funds rate by 325 basis points during September 2007-April 2008 to 2.0 per cent, the FOMC left it unchanged thereafter. The discount rate was also cut by a total of 400 basis points beginning August 2007 to a level of 2.25 per cent to improve market liquidity. Apart from these measures, the US Fed also injected liquidity by auctioning term funds to depository institutions against a wide variety of collaterals at the discount window and through a broader range of counterparties and established foreign exchange swap lines with the ECB and the Swiss National Bank. According to the FOMC, although tight credit conditions, the ongoing housing contraction, and elevated energy prices are likely to weigh on economic growth over the next few quarters, the substantial easing of monetary policy combined with the ongoing measures to foster market liquidity should help promote moderate growth over time.

II.3.24 In the UK, according to the Monetary Policy Committee (MPC), CPI inflation would peak around the end of 2008 and then begin to fall back towards the target of 2 per cent within a period of two years. According to the latest assessment of the Committee, the immediate prospect for CPI inflation was to move substantially further above the target of 2 per cent, and for output to be broadly flat. The weakness of economic activity would open up a margin of spare capacity, which was likely to be necessary in order to return inflation to the target in the medium term. However, there were significant risks to the inflation outlook relating to the extent of the slowdown and to the persistence of the pick-up in inflation. Against this backdrop, after cutting its policy rate by a total of 75 basis points during December 2007-April 2008 to 5.00 per cent, the Bank of England left it unchanged thereafter (Table 2.29). It had earlier raised the policy rate by 125 basis points during August 2006 - July 2007. In the euro area, inflation continued to rise significantly and was expected to remain well above the level consistent with price stability for a more protracted period than previously thought. According to the ECB, continued vigorous money and credit growth, and the absence of significant constraints on bank loan supply in a context of ongoing financial market tensions confirm its assessment of upside risks to price stability over the medium term. At the same time, according to the Governing Council of the ECB, while the latest data confirmed the expected weakening of real GDP growth in mid-2008 after exceptionally strong growth in the first quarter, economic fundamentals of the euro area were sound. Against this backdrop, the ECB raised its key policy rates by 25 basis points effective July 9, 2008 – after keeping it unchanged for almost one year – to prevent broadly based second-round effects and to counteract the increasing upside risks to price stability over the medium term. According to the Bank of Japan (BoJ), inflation is expected to be somewhat higher over the coming months but to moderate gradually thereafter. Economic growth, after remaining sluggish for the time, is expected to return gradually onto a moderate growth path as commodity prices level out and overseas economies move out of their deceleration phase. Against this backdrop, the BoJ has kept its policy rate unchanged at each of its meetings held since February 2007, when it had raised the uncollateralised overnight call rate (the operating target of monetary policy since March 2006) by 25 basis points to 0.50 per cent.

Table 2.29: Global Inflation Indicators

(Per cent)

Country/ Region	Key Policy Rate	Policy Rate (Latest)	Changes in Policy Rates (basis points)			CPI Inflation (y-o-y)			Real GDP Growth (y-o-y)		
			2006-07 (Apr-Mar)	2007-08 (Apr-Mar)	Since end-March 2008	2007	July 2007	July 2008	2007	2007 (Q1)	2008 (Q1)
1	2	3	4	5	6	7	8	9	10	11	12
Developed Economies											
Australia	Cash Rate	7.25 (Mar. 5, 2008)	75	100	0	2.3	2.1^	4.5^	3.9	3.8	3.6
Canada	Overnight Rate	3.00 (Apr.22, 2008)	50	(-)75	(-) 50	2.1	2.2*	3.1*	2.7	2.0	1.7
Euro area	Interest Rate on Main Refinancing Operations	4.25 (Jul. 9, 2008)	125	25	25	2.1	1.8	4.0	2.6	2.5^	1.5^
Japan	Uncollateralised Overnight Call Rate	0.50 (Feb. 21, 2007)	50	0	0	0.0	-0.2*	2.0*	2.1	1.6^	1.0^
UK	Official Bank Rate	5.00 (Apr.10, 2008)	75	0	(-) 25	2.3	1.9	4.4	3.1	3.1^	1.6^
US	Federal Funds Rate	2.00 (Apr. 30, 2008)	50	(-)300	(-) 25	2.9	2.4	5.6	2.2	1.9^	1.8^
Developing Economies											
Brazil	Selic Rate	13.00 (Jul. 23, 2008)	(-)375	(-)150	175	3.6	3.7	6.4	5.4	4.3	5.8
India	Reverse Repo Rate	6.00 (Jul. 25, 2006)	50	0	0						
	Repo Rate	9.00 (Jul. 30, 2008)	125	0	125	6.2	5.7*	7.7*	9.0	9.7	8.8
			(100)	(150)	(150)#						
China	Benchmark 1-year Lending Rate	7.47 (Dec. 21, 2007)	81	108	0	4.8	5.6	6.3	11.9	11.5^	10.1^
			(250)	(550)	(200)						
Indonesia	BI Rate	9.00 (Aug. 5, 2008)	(-)375	(-)100	100	6.4	5.3	11.9	6.3	6.3^	6.4^
Israel	Key Rate	4.00 (Jul. 28, 2008)	(-)75	(-)25	25	0.5	0.3	4.8	5.3	5.4	5.2
Korea	Base Rate **	5.25 (Aug. 7, 2008)	50	50	25	2.5	2.5	5.9	5.0	5.0^	4.8^
			(80)								
Philippines	Reverse Repo Rate	5.75 (Jul. 17, 2008) +	0	(-)250	75	2.8	2.6	12.2	7.3	6.9	5.1
Russia	Refinancing Rate	11.00 (Jul.14, 2008)	(-)150	(-)25	75						
			(150)	(200)	(300)++	9.0	8.7	14.7	8.1	7.9	8.5
South Africa	Repo Rate	12.00 (Jun. 13, 2008)	200	200	100	7.1	7.0*	12.2*	5.1	5.0^	4.5^
Thailand	14-day Repurchase Rate	5.00 (Jun. 7, 2006)	50								
	1-day Repurchase Rate	3.50 (Jul.16, 2008)	(-)44@	(-)125	25	2.2	1.7	9.2	4.8	4.3	6.0

^ : Second Quarter. * : June.

@ : Change over January 16, 2007. Effective January 17, 2007, the 1-day repurchase rate replaced the 14-day repurchase rate as the policy rate.

\+ : The tiering system on placement with the BSP was removed and interest rates were adjusted to 6.0 per cent for the reverse repo rate and 8.0 per cent for the repo rate effective July 13, 2007.

** : Since March 2008, the policy rate has been changed from overnight call rate to "the Bank of Korea Rate or (Base Rate)" and fixed at the same level as the call rate target of 5.0 per cent on March 7, 2008.

++ : Includes the 150 basis points hike to be effective from September 1, 2008.

: Includes the 25 basis points hike announced on July 29, 2008 which will be effective from August 30, 2008.

Note : 1. For India, data on inflation pertain to CPI for Industrial Workers. Data on inflation and GDP growth for 2007 pertain to fiscal year 2007-08.
2. Figures in parentheses in column (3) indicate the date when the policy rates were last revised.
3. Figures in parentheses in columns (4), (5) and (6) indicate the variation in cash reserve ratios during the period.

Source : International Monetary Fund, websites of respective central banks and The Economist.

II.3.25 Notwithstanding the appreciation of exchange rates in major emerging market economies (EMEs) during 2007-08, inflation remained firm amidst strong growth and ample liquidity. Consumer price inflation in China increased to 8.3 per cent in March 2008 from 3.3 per cent a year earlier mainly due to higher food prices. Subsequently it eased to 6.3 per cent in July 2008. In order to strengthen liquidity management in the banking system and guide the appropriate growth of money and credit, the PBC increased the benchmark 1-year lending rate by a total of 189 basis points beginning April 2006 to 7.47 per cent on December 21, 2007 and the cash reserve ratio (CRR) by a total of 1000 basis points to 17.5 per cent between July 2006 and June 2008. In Korea, consumer price inflation has picked up its pace due to the direct and knock-on effects of high oil prices, and inflation seems likely to remain significantly high for quite some time. According to the MPC, there still remains a high degree of uncertainty surrounding future economic developments, largely due to the increased volatility of international oil prices, international financial market unrest and the US economic slowdown. Against this backdrop, after keeping the policy rate unchanged for almost a year at 5.0 per cent, the Bank of Korea raised rate by 25 basis points to 5.25 per cent on August 7, 2008. In Thailand, headline inflation accelerated as a result of significant increase in energy and raw food prices. According to the MPC, risks to inflation have risen markedly, which would affect private sector confidence, making it increasingly difficult to ensure economic stability going forward, and impact potential growth as well as the competitiveness of the Thai economy in the long-run. Against this backdrop, after keeping it unchanged at 3.25 per cent since July 2007 (when the policy rate was cut by 25 basis points), the MPC in its latest meeting held on July 16, 2008 raised the policy rate by 25 basis points to 3.50 per cent. According to Bank Indonesia, the economy still faces the risk of future inflationary pressures from turbulent oil and food prices on the world market, in addition to domestic demand pressures. CPI inflation is projected in the range of 11.5-12.5 per cent at end-2008. The Bank Indonesia, which had cut its policy rate by a total of 475 basis points during May 2006-December 2007, therefore, raised rate subsequently by a total of 100 basis points to 9.0 per cent by August 5, 2008.

II.3.26 Amongst other emerging economies, consumer price inflation remained high in Russia amidst strong growth. With growth in money supply (M_2) remaining high, *albeit* with some moderation, the Bank of Russia raised the required reserve ratio on credit institutions' liabilities to non-resident banks in rubles and foreign currency by 100 basis points each effective January 15, 2008 and March 1, 2008 and by 150 basis points effective July 1, 2008 and another 150 basis points to be effective from September 1, 2008 to 8.5 per cent (it was earlier reduced by 100 basis points effective October 11, 2007). The refinancing rate was also raised by a total of 100 basis points from February 2008 to 11.0 per cent effective July 14, 2008; it was earlier cut by 50 basis points effective June 19, 2007. In South Africa, the upward trend in inflation continued to be driven by rising energy and food prices. According to the South African Reserve Bank, CPI excluding interest rates on mortgage bonds (CPIX) inflation was expected to peak at around 13 per cent in the third quarter of 2008 and fall below the upper end of the inflation target range by the second quarter of 2010. Against this backdrop, the South African Reserve Bank raised its policy rate further by 100 basis points during the first quarter of 2008-09 to 12.0 per cent. The policy rate has thus been raised by 500 basis points since the tightening began in June 2006. The central bank of Brazil raised its policy rate by 175 basis points since end-March 2008 to 13.0 per cent on July 23, 2008. The policy rate was earlier reduced by 850 basis points between September 2005 and September 2007. The Bank of Israel, which had earlier raised it policy rate by 75 basis points during August 2007-January 2008, cut its policy rate by 50 basis points each effective March and April 2008 before raising rate again by 25 basis points each effective June, July and August 2008 to 4.0 per cent to bring inflation to the price stability target range of 1-3 per cent.

II.3.27 In March 2008, real policy rates generally declined compared to March 2007 in the select emerging economies as well as in the advanced economies, barring the UK (Table 2.30). As compared

Table 2.30: Nominal and Real Policy Rates : Select Countries

(Per cent)

Country	Nominal Policy Rate			Real Policy Rate		
	March 2007	March 2008	August* 2008	March 2007	March 2008	August* 2008
1	2	3	4	5	6	7
Developed Economies						
US	5.25	2.25	2.00	2.45	-1.75	-3.60
UK	5.25	5.25	5.00	2.15	2.75	0.60
Euro area	3.75	4.00	4.25	1.85	0.40	0.25
Developing Economies						
Brazil	12.75	11.25	13.00	9.75	6.55	6.60
China	6.39	7.47	7.47	3.09	-0.83	1.17
India	7.75	7.75	9.00	1.05	-0.15	1.30
				(1.85)	(0.00)	-3.63
Indonesia	9.00	8.00	9.00	2.50	-0.20	-2.90
Israel	4.00	3.75	4.00	4.90	0.05	-0.80
Korea	4.50	5.00	5.25	2.30	1.10	-0.65
Russia	10.50	10.25	11.00	3.10	-3.05	-3.70
South Africa	9.00	11.00	12.00	2.90	0.40	-0.20
Thailand	4.50	3.25	3.50	2.50	-2.05	-5.70

* : As on August 22, 2008. Real policy rates for August 2008 are based on latest available inflation rates.

Note: 1. Real policy rate is the policy rate less year-on-year consumer price inflation. For India, repo rate is taken as the policy rate, while inflation refers to that for CPI-Industrial Workers.

2. Figures in parentheses for India are based on wholesale price inflation.

Source: International Monetary Fund, The Economist and official websites of respective central banks.

with March 2008, real policy rates in August 2008 generally eased further in most economies. In most countries, except Brazil, real policy rates ranged between (-)5.7 per cent and 1.3 per cent in August 2008. In India, real policy rates turned positive in August 2008 as compared to March 2008. Of the select emerging economies, real policy rates were the highest in Brazil and the lowest in Russia and Thailand.

Global Commodity Prices

II.3.28 Notwithstanding concerns about slowing growth and financial market turbulence in major advanced economies, international commodity prices firmed up during 2007-08, reflecting demand-supply imbalance for key commodities. The World Bank's non-energy commodities price index rose by 42.2 per cent, year-on-year, in March 2008 led by 66.9 per cent increase in food prices. The sharp increase in food prices reflected increased demand and low stocks of major commodities. Crude oil prices reached new peaks during the year. After witnessing some moderation during June-December 2007, metal prices rose again during January-March 2008, taking the year-on-year increase in the World Bank's metals and minerals index to 22.1 per cent in March 2008 (Table 2.31).

II.3.29 International crude oil prices, represented by the West Texas Intermediate (WTI) increased sharply beginning June 2007, reflecting tight supply-demand balance, geo-political tensions, weakening of the US dollar against major currencies and increased interest from investors and financial market participants. It touched a high of US $ 110.2 a barrel level during 2007-08 (on March 13, 2008). After witnessing some corrections on the back of deepening concerns about slowdown in the US – the biggest consumer of oil – WTI prices recovered in

Table 2.31: International Commodity Prices

Commodity	Unit	2004 (Market Price)	Index					Variation (Per cent)
			2004	2005	2006	2007	2008 March	March 2008 over March 2007
1	2	3	4	5	6	7	8	9
Energy								
Coal	$/mt	53.0	100	90	93	124	223	113.5
Crude oil (Average)	$/bbl	37.7	100	142	170	188	270	68.1
Non-Energy Commodities								
Palm oil	$/mt	471.3	100	90	101	165	265	100.8
Soybean oil	$/mt	616.0	100	88	97	143	240	105.6
Soybeans	$/mt	306.5	100	90	88	125	188	78.6
Rice	$/mt	237.7	100	120	128	137	250	86.4
Wheat	$/mt	156.9	100	97	122	163	280	120.8
Maize	$/mt	111.8	100	88	109	146	210	37.5
Sugar	c/kg	15.8	100	138	206	141	184	26.4
Cotton A Index	c/kg	136.6	100	89	93	102	129	37.4
Aluminium	$/mt	1716.0	100	111	150	154	175	8.8
Copper	$/mt	2866.0	100	128	235	248	294	30.8
Gold	$/toz	409.2	100	109	148	170	237	47.9
Silver	c/toz	669.0	100	110	173	200	287	46.0
Steel Products Index	1990=100	121.5	100	113	111	111	148	35.3
Steel cold-rolled coilsheet	$/mt	607.1	100	121	114	107	132	23.1
Steel hot-rolled coilsheet	$/mt	502.5	100	126	119	109	149	36.4
Tin	c/kg	851.3	100	87	103	171	233	42.5
Zinc	c/kg	104.8	100	132	313	309	240	-23.2
Memo:								
Non-energy Commodities Index		1990=100	107.4	121.9	151.8	175.7	237.3	42.2
Food Index		1990=100	110.0	109.9	120.6	146.0	218.1	66.9
Metals and Minerals Index		1990=100	112.4	142.5	215.0	244.9	298.8	22.1

$: US dollar. c: US cent. bbl: barrel. mt: metric tonne. kg: Kilogram. toz: troy oz.

Source : Based on World Bank's actual commodity price data. The year 2004 has been taken as the base to better exhibit price trends over the relevant period.

view of continued robustness in demand from EMEs and reached a historical peak of US $ 145.3 a barrel level on July 3, 2008 supported by the fall in US crude inventories, supply disruptions in Nigeria and heightened tensions between Iran and Israel raising new concerns about future supplies. Subsequently, crude prices eased to US $ 114.4 per barrel by August 19, 2008. Amongst the oil substitutes, coal prices increased by almost 114 per cent, year-on-year, in March 2008, reflecting supply bottlenecks, especially in Australia and South Africa, and rise in demand.

II.3.30 Metal prices eased during May-December 2007, reflecting concerns about slowing manufacturing demand and some improvement in supply. They, however, rose sharply thereafter to more than offset the previous decline amidst supply concerns and strong demand from emerging economies, especially China. According to the IMF, China accounted for almost 90 per cent of the increase in global demand for main base metals such as aluminium, copper, nickel and zinc. The World Bank's metals and minerals price index, which had declined by about 17 per cent between May and December 2007, rose by almost 34 per cent between December 2007 and March 2008. After remaining flat during the first half of 2007-08, international steel prices rose by almost 33 per cent during the second half despite increase in global crude steel production, reflecting rising input costs on account of iron ore, energy and freight charges. Metals prices have eased somewhat beginning April 2008, while steel prices continued to increase.

II.3.31 Food prices firmed up, especially in the second half of 2007-08, led by wheat, rice, and oilseeds/edible oils, reflecting surge in demand (both consumption demand and demand for non-food uses such as bio-fuels production) and low stocks of major crops. Drought conditions (by reducing supply) and higher oil prices (by raising production costs) also contributed to the price rise. Reflecting these factors, international prices of wheat, rice, soybeans, soybean oil and palm oil increased by 120.8 per cent, 86.4 per cent, 78.6 per cent, 105.6 per cent and 100.8 per cent, respectively, year-on-year, in March 2008. The IMF food price index increased by 45.3 per cent, on a year-on-year basis, in March 2008 surpassing the previous largest increase, which was last seen in 1980. While wheat prices eased by almost 25 per cent up to July 2008 over March 2008, rice prices increased sharply by almost 23 per cent over the same period. Prices of other food items continued to be firm in the international markets.

II.3.32 Apart from energy prices, food prices were a major driver of headline inflation in both developed and developing economies. The contribution of food items to headline inflation in 2007 was the highest for Developing Asia (67.5 per cent) and the lowest for advanced economies (19.5 per cent) (Table 2.32). In the emerging economies, headline inflation rose more markedly, reflecting both strong demand growth and the greater weight of energy and, in particular, food in the consumption basket. The weight of food items in the consumption basket is around 30 per cent in Developing Asia as compared with 10-20 per cent in the OECD countries.

II.3.33 In response to high food prices, especially of wheat, rice, corns and oilseeds/edible oils and their implications for headline inflation and inflationary expectations, the Governments in both developed and developing countries resorted to several market interventions in the form of price controls, reduction of import barriers and/or imposition of export restrictions to contain price increases and protect consumption by vulnerable population (Box II.11).

Table 2.32 : Major Contributors to Global Headline Inflation in 2007

(Per cent)

Region	Headline	Food		Fuel	
	Inflation	Inflation	Contribution to Headline	Inflation	Contribution to Headline
1	2	3	4	5	6
World	3.9	6.2	44.3	4.1	8.0
Advanced Economies	2.2	3.0	19.5	3.8	12.1
Africa	7.4	8.7	43.6	6.7	6.5
Developing Asia	4.9	10.0	67.5	3.1	3.4
Middle East	10.1	13.6	42.3	10.1	24.4
Western Hemisphere	5.4	8.5	40.8	2.3	3.4

Source: World Economic Outlook, April 2008.

Box II.11
Controlling Food Price Inflation: Cross-country Measures

Several measures were undertaken by the Governments in both importing and exporting countries to limit the adverse impact of surges in food prices on domestic inflation. In Asia, the Chinese Government introduced export duties of 20 per cent on wheat, buckwheat, barley and oats and 5 per cent on rice, maize, sorghum, millet and soybeans effective January 1, 2008 following removal of the value added tax (VAT) export rebate on wheat, rice, maize and soybeans in December 2007. It also imposed a 25 per cent export duty on wheat flour and starch and 10 per cent on the flours of maize, rice and soybeans. The Government also announced a number of agricultural production support measures in the form of increases in the minimum purchase prices of wheat and rice, and agricultural inputs subsidies. In Pakistan, the Government imposed a 35 per cent duty on wheat and wheat products exports along with banning of private wheat exports to Afghanistan. It also raised wheat support prices by 23 per cent in an attempt to build up strategic reserves. The Government of Indonesia removed the 5 per cent duty on wheat import and suspended a 10 per cent duty on imported soybeans. In the Republic of Korea, for a period of six months beginning January 2008, import duties on milling wheat were reduced from 1 per cent to 0.5 per cent; on maize from 1.5 per cent to 0.5 per cent, and on soybeans and feed maize from 2 per cent to 'nil'. The Government of Japan announced the establishment of a special department in-charge of food security and urgent measures to diversify its purchases from world markets. The Government of Mongolia removed value-added tax from imported wheat and flour with effect from January 1, 2008. The Government of Turkey cut import duties on wheat from 130 per cent to 8 per cent; on maize from 130 per cent to 35 per cent; and on barley from 100 per cent to 'nil'. The Government of Viet Nam extended the ban on rice exports until June 2008 along with reducing total rice exports permitted during 2008 to 3.5 million tonnes from 4.5 million tonnes fixed earlier. The Government in the Philippines, Bangladesh, Thailand and Malaysia either made available higher stocks or continued with selling rice stocks at subsidised prices.

In Europe, the European Union removed the 10 per cent compulsory set-aside requirement for the 2008 cropping season and subsequently suspended cereal import duties (excluding oats, buckwheat and millet) from December 2007 to June 2008. The Russian Federation raised wheat export duties from 10 per cent to 40 per cent (or no less than •105 per tonne) from end-January 2008. It also announced high purchase prices for grain from domestic producers. The Government of Ukraine announced a plan to set limits on profit margins by the food industry and traders, as part of a package of anti-inflationary measures.

In Latin America and the Caribbean, the Government of Mexico completed removal of quotas and tariffs that were in place beginning 1994 to protect maize, pulses, milk and sugar under the North American Free Trade Agreement (NAFTA) with Canada and the United States starting January 2008. It also announced food production support measures, including its intention to reduce fertiliser prices by one third. In Peru, tariffs on imports of wheat and maize and all flours, which ranged from 17 to 25 per cent, were removed. It also announced in March 2008 the launch of a programme to distribute food to the poorest strata of the population. The Government of Brazil removed the 10 per cent import tariff on 1 million tonnes of non-Mercosur wheat until June 30, 2008. In Bolivia, tariff-free imports of rice, wheat and wheat products, maize, soybean oil and meat were authorised until the end of May 2008, while a ban on exports of grains and meat products was introduced.

In Africa, the Government of Egypt significantly raised food subsidies and signed a bilateral agreement with Kazakhstan for import of one million tonne of wheat at a preferential price to be delivered during 2008. The Government also announced a ban on rice exports from April to October 2008. The Government of Ethiopia banned exports of the main cereals and grain stockpiling as well as suspended local purchases under the World Food Programme (WFP) for emergency interventions. The Government also cancelled the value-added and turnover taxes on food grains and flour, as well as all taxes on cooking oil. In Zimbabwe, the Government continued to control imports of maize, wheat and sorghum which are sold at subsidised prices. In the United Republic of Tanzania, the Government authorised duty-free imports of 3 lakh tonnes of maize, and banned exports of agricultural commodities.

Source: Food and Agricultural Organisation, United Nations.

Inflation Conditions in India

Wholesale Price Inflation

II.3.34 Headline inflation in India, based on movement in the wholesale price index (WPI), increased to 7.7 per cent at end-March 2008 from 5.9 per cent a year ago. Inflation softened initially up to mid-October 2007, partly reflecting moderation in the prices of some primary food articles and some manufactured products items as well as the base effect. Subsequently, however, inflation hardened gradually to reach an intra-year high of 8.0 per cent on March 15, 2008, reflecting partly tightening of supply-side pressures on key commodities in all the three major groups, *viz.,* primary articles, fuel group and manufactured products and surge in international prices. Inflation eased somewhat by the close of the year (March 29, 2008) to 7.7 per cent. The year-on-year (y-o-y) inflation, excluding fuel, at 8.0 per cent, was higher than the headline inflation rate. Reflecting the intra-year movement in headline inflation, the annual average WPI inflation rate (average of 52 weeks) eased from the beginning of June 2007 to reach 4.7 per cent on March 29, 2008 (5.4 per cent a year ago) (Chart II.13). In order to contain inflation and inflationary expectations, the Reserve Bank continued to take pre-emptive monetary measures (see Chapter III). The Government also took fiscal and supply side measures to contain price increases on select commodities.

II.3.35 Headline WPI inflation in 2007-08 was mainly driven by 12 items/groups, *viz.,* rice, wheat, milk, raw cotton, oilseeds, iron ore, coal mining, mineral oils, edible oils, oil cakes, basic heavy inorganic chemicals and metals. These items with a combined weight of about 35 per cent in the WPI basket accounted for almost 82 per cent of WPI inflation, on a year-on-year basis, as on March 29, 2008 (as compared with 56 per cent a year ago). The increase in domestic prices of some of these commodities was partly due to the international commodity price pressures. A comparison over a relatively long period (2004-2007) shows that the increase in domestic food prices was somewhat lower than the global price increase, reflecting large domestic production base, supply management through the public distribution systems as well as timely imports of essential commodities during periods of production shortfalls. The increase in domestic minerals oil prices reflected the partial and lagged pass-through of higher international crude oil prices on account of the burden sharing strategy adopted by the Government. The increases in domestic metals and steel prices moved more or less in line with international prices (Table 2.33).

II.3.36 Among the major groups, primary articles, both food and non-food, exerted upward pressures on inflation during 2007-08, reflecting lower domestic production of some commodities as well as firm international prices. Within food articles, rice, wheat and milk prices increased, year-on-year, by 9.1 per cent, 5.1 per cent and 8.7 per cent, respectively in 2007-08 as compared with 5.7 per cent, 7.3 per cent and 8.4 per cent, respectively, a year ago (Appendix Table 23). Within non-food primary articles, oilseeds and raw cotton prices increased by 20.3 per cent and 14.0 per cent, respectively, on top of 31.6 per cent and 21.9 per cent increase a year ago. The lower order of increase in domestic prices of rice and wheat, in the face of sharp increases in international prices, reflected partly the impact of various supply-side measures undertaken by the Government to improve domestic availability. The continued increase in oilseeds prices was on account of higher demand, lower estimated *rabi* crop as well as rising global prices. Notwithstanding higher domestic production during 2007-08, raw cotton prices increased in line with international price movements. Pulses prices witnessed some decline on a year on-year basis. Overall, primary articles inflation, year-on-year, was 9.7 per cent in 2007-08 as compared with 10.7 per cent, a year ago (Table 2.34).

II.3.37 In order to contain food price inflation, the Government took several measures during 2007-08.

Chart II.13: Inflation Movements

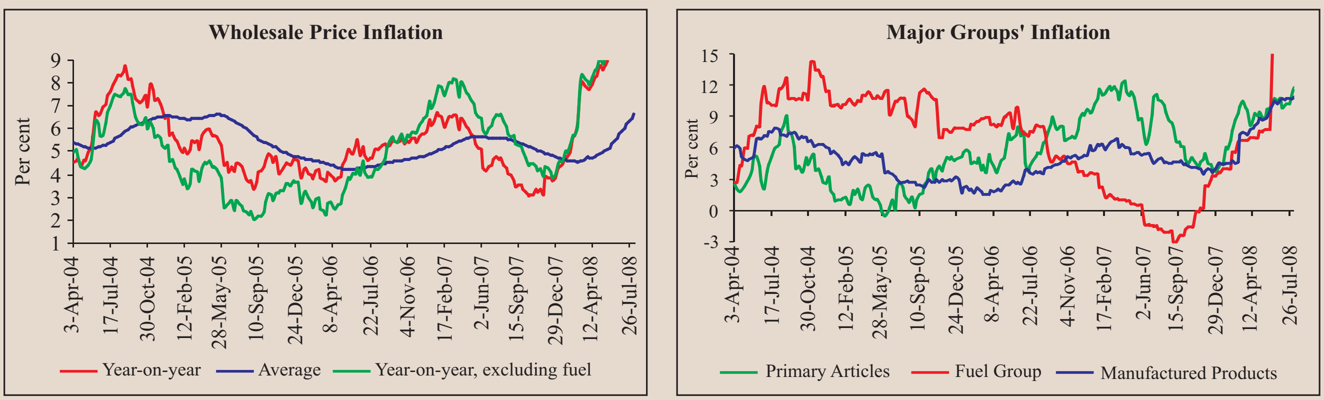


Table 2.33: Key Commodity Price Inflation - Global *vis-à-vis* Domestic

(Per cent)

Item	Average Inflation		Annual Inflation				
			Global (March 2008 over March 2007)	**India***			
				Inflation		Weighted Contribution	
	Global (2004-07)	**India** (2004-05 to 2007-08)		2006-07	2007-08	2006-07	2007-08
1	2	3	4	5	6	7	8
1. Rice	13.6	5.1	86.4	5.7	9.1	2.1	2.5
2. Wheat	15.9	6.1	120.8	7.3	5.1	1.8	1.0
3. Milk	--	4.3	--	8.4	8.7	5.8	4.7
4. Raw Cotton	0.2	2.7	37.4	21.9	14.0	3.5	2.0
5. Oilseeds	12-23	9.4	79-91	31.6	20.3	11.0	6.7
6. Iron Ore	29.7	64.5	66.0	16.9	61.8	2.0	6.3
7. Coal Mining	29.3	6.7	113.5	0.0	9.8	0.0	2.5
8. Minerals Oil	25.8	9.7	68.1	0.5	9.3	1.1	15.1
9. Edible Oils	14-18	5.8	100-106	14.1	20.0	4.7	5.5
10. Oil Cakes	11.9	8.2	71.7	32.9	27.2	7.0	5.6
11. Basic Heavy Inorganic Chemicals	--	9.7	--	-3.5	33.1	-0.7	4.9
12. Basic Metals, Alloys and Products	32.6	11.5	9.4	11.3	20.3	17.4	25.2
- Iron and Steel	3.8	14.0	35.3	8.1	34.2	6.0	20.1
Total						**55.7**	**82.0**

* : Based on WPI as at end-March.

Note : 1. Global price increases are based on the World Bank and IMF primary commodity prices data.
2. Global edible oil prices are represented by palm oil and soybean oil.
3. Global metals is represented by the IMF's metals price index.
4. Global iron and steel is represented by the World Bank's steel products price index.
5. Global minerals oil is represented by crude oil (average) spot prices.

Customs duty on palm oil was reduced by 10 percentage points across the board in April 2007, while import duty on various edible oils was reduced in the range of 5-10 percentage points in July 2007. The 4 per cent additional countervailing duty on all edible oils was also withdrawn. In March 2008, customs duties on crude and refined edible oil were reduced further from a range of 40-75 per cent to 20.0-27.5 per cent. The exports of all edible oils were prohibited with effect from April 1, 2008. Import of wheat at zero duty was allowed by the Government up to end-December 2007. Customs duty on import of pulses was reduced to zero and the period of validity of import of pulses at zero duty available up to March 2007 was extended in stages to March 2009. The period of validity of the ban on export of pulses imposed on June 22, 2006 was extended up to end-March 2009. In March 2008, the customs duty on semi-milled or wholly-milled rice was reduced from 70 per cent to zero per cent up to March 2009. The minimum support price (MSP) for paddy was raised by Rs.125 per tonne for this year and for wheat by Rs.150 for 2007-08 and further by Rs. 150 for 2008-09.

II.3.38 Fuel group inflation, which was negative during June-November 2007, reflecting the base effect as well as the cuts in prices of petrol and diesel in November 2006 and February 2007, turned positive from mid-November 2007 and reached 6.8 per cent on March 29, 2008 (it was 1.0 per cent a year ago). The increase in fuel group inflation beginning November 2007 could be attributed to continuous increase in the prices of non-administered petroleum products such as naphtha, furnace oil, aviation turbine fuel (ATF) and bitumen

Table 2.34: Wholesale Price Inflation in India (year-on-year)

(Per cent)

Commodity	Weight	2006-07 (March 31) Inflation	WC	2007-08 (March 29) Inflation	WC
1	2	3	4	5	6
All Commodities	**100.0**	**5.9**	**100.0**	**7.7**	**100.0**
1. Primary Articles	**22.0**	**10.7**	**39.0**	**9.7**	**28.2**
i. Food Articles	15.4	8.0	20.8	6.5	13.2
ii. Non-Food Articles	6.1	17.2	15.6	11.4	8.8
iii. Minerals	0.5	17.5	2.6	49.9	6.2
2. Fuel, Power, Light and Lubricants	**14.2**	**1.0**	**4.0**	**6.8**	**18.9**
i. Minerals Oil	7.0	0.5	1.1	9.3	15.1
ii. Electricity	5.5	2.3	2.8	1.5	1.4
iii. Coal Mining	1.8	0.0	0.0	9.8	2.5
3. Manufactured Products	**63.8**	**6.1**	**57.3**	**7.3**	**52.8**
i. Food Products	11.5	6.1	10.5	9.4	12.4
ii. Cotton Textiles	4.2	-1.0	-0.6	-6.8	-2.8
iii. Man Made Fibres	4.4	3.9	1.3	2.8	0.7
iv. Chemicals and Products	11.9	3.6	7.1	6.0	8.7
of which : Fertilisers	3.7	1.8	1.0	5.1	2.0
v. Basic Metals, Alloys and Metal Products	8.3	11.3	17.4	20.3	25.2
of which: Iron and Steel	3.6	8.1	6.0	34.2	20.1
vi. Non-Metallic Mineral Products	2.5	9.0	3.6	6.4	2.0
of which: Cement	1.7	11.6	3.2	5.1	1.1
vii. Machinery and Machine Tools	8.4	8.1	8.6	3.5	2.9
of which : Electrical Machinery	5.0	12.9	6.7	4.8	2.0
viii. Transport Equipment and Parts	4.3	2.0	1.2	3.9	1.7
Memo:					
Food Items (Composite)	**26.9**	**7.3**	**31.2**	**7.7**	**25.6**
WPI, Excluding Food	**73.1**	**5.5**	**68.8**	**7.8**	**74.4**
WPI, Excluding Fuel	**85.8**	**7.4**	**96.0**	**8.0**	**81.1**

WC : Weighted Contribution.

as well as the upward revision in the domestic prices of petrol and diesel by Rs. 2 per litre and by Rs. 1 per litre, respectively, effective February 15, 2008 (which came after a gap of almost one year when the prices were cut). International crude oil (Indian basket) prices increased by almost 76 per cent from US $ 56.6 a barrel in February 2007 to US $ 99.3 a barrel in March 2008; in rupee terms, the increase was about 61 per cent reflecting appreciation of Indian rupee against the US dollar by almost 9 per cent over the same period. Over the same period, while the non-administered items within the mineral oil group increased within a range of 39-42 per cent, domestic prices of petrol and diesel increased by 3-4 per cent, with the burden being shared by the Government and oil marketing companies (OMCs). On the other hand, domestic prices of kerosene and liquefied petroleum gas (LPG) were left unchanged during 2007-08 on grounds of societal concerns. Reflecting the burden sharing strategy adopted by the Government, the under-recoveries of oil marketing companies were estimated to have increased sharply by 56 per cent from Rs.49,387 crore during 2006-07 to Rs.77,123 crore during 2007-08.

II.3.39 Manufactured products' inflation, y-o-y, eased initially from 6.4 per cent at the beginning of the year to 3.5 per cent by November 2007, reflecting decline in the prices of sugar, textiles and non-ferrous metals as well as base effects. This was partly responsible for bringing down headline inflation during the year. Subsequently, manufactured products' inflation increased to reach 7.3 per cent on March 29, 2008 (6.1 per cent a year ago) and emerged as a main driver of headline inflation, mainly due to the continued rise in the prices of edible oils/oil cakes, basic heavy inorganic chemicals, and basic metals and alloys (Appendix Table 24). These commodities together contributed about 41 per cent to the overall WPI inflation on March 29, 2008. The increase in the domestic prices of manufactured food products such as edible oil/oil cakes, year-on-year, by 20.0 per cent and 27.2 per cent, respectively, on March 29, 2008 (on top of 14.1 per cent and 32.9 per cent, respectively, a year ago) reflected surge in demand, lower domestic *rabi* 2007 oilseeds production as well as sharp increase in international prices. Amongst non-food manufactured products, metals group prices increased sharply by 20.3 per cent, y-o-y, on March 29, 2008 led by iron and steel (34.2 per cent). The sharp increase in domestic iron and steel prices, especially during the last quarter of 2007-08 was in line with the hardening of international steel prices. Domestic non-ferrous metals prices, however, declined by 8.6 per cent, on a year-on-year basis, in contrast with an increase of 29.3 per cent a year ago. Electrical machinery prices increased by 4.8 per cent on top of 12.9 per cent in the previous year, reflecting higher input costs. Cement prices increased by 5.1 per cent on top of 11.6 per cent in the previous year. In order to reduce the cost of manufacturing, the Government decided to exempt import of portland cement from countervailing duty and special additional customs duty on April 3, 2007; it was earlier exempted from basic customs duty in January 2007. Basic heavy inorganic chemicals prices also increased sharply by 33.1 per cent in 2007-08 as against a decline of 3.5 per cent a year ago. Amongst other items, while sugar prices remained flat reflecting higher domestic production, cotton textiles prices declined reflecting competitive pressures from the global market and lower export demand.

Consumer Price Inflation

II.3.40 During 2007-08, consumer price inflation eased somewhat up to January 2008, mainly reflecting the deceleration in food price inflation. Food price inflation in various measures eased to 5.7-7.0 per cent in January 2008 from a range of 10.9-12.2 per cent in March 2007. Despite this easing, however, CPI inflation was higher than WPI inflation up to January 2008 reflecting the higher weight of food items in the CPI. Subsequently, there has been some increase in CPI inflation measures mainly due to increases in food and fuel prices. Disaggregated data show that food group inflation in various CPI measures increased to 7.8-9.3 per cent in March 2008. The increase in fuel group inflation from a range 3.2-6.9 per cent in March 2007 to a range of 4.6-8.0 per cent in March 2008 also contributed to consumer price inflation. Services prices, proxied by the “miscellaneous group”, generally remained firm during 2007-08. Housing rent exhibited a mixed pattern. While it increased in the CPI-IW, it decelerated as per the CPI-UNME. Accordingly, various measures of consumer price inflation moved up to a range of 6.0-7.9 per cent in March 2008, but remained lower than that of 6.7-9.5 per cent recorded a year ago (Appendix Table 25).

II.3.41 A comparison of major commodity groups in the CPI and WPI reveals that food and fuel prices generally move in tandem, although the extent of movement differs in the various measures of CPI due to the different weighting pattern as well as coverage of items (Table 2.35).

Asset Prices and Inflation

II.3.42 Domestic equity and bullion markets witnessed mixed behaviour during 2007-08. After recording significant gains up to mid-January 2008, domestic equity prices corrected sharply thereafter on the back of heightened uncertainties in the global financial markets and concerns about some slowdown in the domestic economy. Overall, the BSE Sensex recorded an increase of 19.7 per cent, year-on-year, at end-March 2008. Domestic gold prices increased during 2007-08 mirroring movements in international prices. Domestic gold prices increased by about 36 per cent, y-o-y, to around Rs. 12,739 per 10 grams in March 2008 in line with movement in international prices, which increased by almost 48 per cent over the same period. International gold prices touched a peak of US $ 1,011 per ounce on

Table 2.35: Consumer Price Inflation - Major Groups

(Year-on-year variation in per cent)

CPI Measure	Weight	Mar-03	Mar-04	Mar-05	Mar-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	May-08	Jun-08	Jul-08
1	2	3	4	5	6	7	8	9	10	11	12	13	14
CPI-IW (Base: 2001=100)#													
General	**100.0**	**4.1**	**3.5**	**4.2**	**4.9**	**6.7**	**5.7**	**6.4**	**5.5**	**7.9**	**7.8**	**7.7**	**--**
Food Group	46.2	3.7	3.1	1.6	4.9	12.2	8.1	8.7	6.2	9.3	10.7	--	--
Pan, Supari etc.	2.3	1.9	4.2	2.1	3.1	4.4	9.6	10.3	10.3	10.9	7.2	--	--
Fuel and Light	6.4	6.3	6.5	4.9	-2.9	3.2	1.6	2.3	2.3	4.6	3.8	--	--
Housing	15.3	5.4	3.9	20.4	6.6	4.1	4.1	4.0	4.0	4.7	4.7	--	--
Clothing, Bedding etc.	6.6	1.5	2.1	2.3	3.0	3.7	4.4	5.3	3.5	2.6	3.4	--	--
Miscellaneous	23.3	5.3	3.2	3.9	4.6	3.3	4.0	4.0	4.7	6.3	6.3	--	--
CPI-UNME (Base: 1984-85=100)													
General	**100.0**	**3.8**	**3.4**	**4.0**	**5.0**	**7.6**	**6.1**	**5.7**	**5.1**	**6.0**	**6.8**	**7.3**	**--**
Food Group	47.1	2.6	3.0	2.2	5.3	10.9	7.7	7.7	6.2	7.8	9.5	9.6	--
Fuel and Light	5.5	3.1	3.2	9.6	1.9	6.4	7.2	7.0	5.4	4.6	0.9	5.3	--
Housing	16.4	6.3	5.2	7.5	5.5	5.6	5.6	4.9	4.7	4.0	3.8	3.8	--
Clothing, Bedding etc.	7.0	2.6	2.6	2.0	2.9	3.6	4.3	4.0	4.1	4.3	3.9	3.4	--
Miscellaneous	24.0	6.0	2.8	4.4	5.1	4.4	3.7	3.2	3.8	4.8	5.6	6.6	--
CPI-AL (Base: 1986-87=100)													
General	**100.0**	**4.9**	**2.5**	**2.4**	**5.3**	**9.5**	**7.8**	**7.9**	**5.9**	**7.9**	**9.1**	**8.8**	**9.4**
Food Group	69.2	6.0	1.6	2.2	5.5	11.8	8.8	8.8	6.2	8.5	10.0	9.6	10.7
Pan, Supari etc.	3.8	3.5	4.7	-1.3	6.6	5.7	9.1	11.1	11.3	10.4	11.1	11.2	10.8
Fuel and Light	8.4	4.8	3.0	3.0	4.3	6.9	7.4	7.2	6.3	8.0	7.3	8.9	9.3
Clothing, Bedding etc.	7.0	3.0	4.1	2.5	2.2	3.5	2.7	1.9	1.3	1.8	2.9	3.1	3.6
Miscellaneous	11.7	3.1	2.7	5.5	5.5	6.8	6.7	5.5	5.2	6.1	6.3	6.5	7.0
CPI-RL (Base: 1986-87=100)													
General	**100.0**	**4.8**	**2.5**	**2.4**	**5.3**	**9.2**	**7.5**	**7.6**	**5.6**	**7.6**	**8.8**	**8.7**	**9.4**
Food Group	66.8	5.6	1.9	1.9	5.8	11.5	8.5	8.8	6.2	8.2	10.0	9.6	10.5
Pan, Supari etc.	3.7	3.5	4.7	-1.0	6.3	5.7	9.3	11.6	11.5	10.6	11.0	10.9	10.5
Fuel and Light	7.9	4.8	3.0	2.9	4.0	6.9	7.4	7.2	6.3	8.0	7.3	8.9	9.3
Clothing, Bedding etc.	9.8	3.3	3.4	2.8	2.7	3.1	2.6	2.1	2.6	2.8	3.5	4.1	4.3
Miscellaneous	11.9	3.1	3.0	5.5	5.2	6.3	6.2	5.3	5.0	6.2	6.6	6.8	7.0
Memo:													
WPI Inflation (End of period)	100.0	6.5	4.6	5.1	4.1	5.9	4.4	3.4	3.8	7.7	9.3	11.9	12.0
Food (Composite)	26.9	3.9	4.0	1.9	4.2	7.3	4.5	3.7	2.6	7.7	8.6	9.4	8.8
Fuel Group	14.2	10.8	2.5	10.5	8.9	1.0	-1.3	-2.3	3.4	6.8	7.9	16.3	17.1
Textiles	9.8	10.6	8.8	-5.7	-0.5	1.1	2.2	-1.7	-3.7	-4.3	1.9	5.8	6.6
GDP Deflator based Inflation*		3.9	3.7	4.2	4.9	5.5	5.4	3.9	2.7	4.2	--	--	--

: Data prior to January 2006 are based on the old series (Base: 1982=100).
* : Data for March pertain to full year.
IW : Industrial Workers. UNME : Urban Non-Manual Employees.
AL : Agricultural Labourers. RL : Rural Labourers.

March 17, 2008, reflecting weakening of US dollar, hardening of oil prices and increased investor interest following uncertainties surrounding the global financial markets.

Developments during 2008-09

II.3.43 Headline WPI inflation was 12.6 per cent, y-o-y, as on August 9, 2008 as compared with 7.7 per cent at end-March 2008 and 4.2 per cent a year ago. Primary articles inflation was 11.8 per cent (9.5 per cent a year ago) while manufactured products inflation was 10.9 per cent (4.7 per cent). Fuel group inflation rose sharply to 18.0 per cent as against a decline of 2.0 per cent a year ago. The average WPI inflation rate was 6.6 per cent as on August 9, 2008 as compared with 5.5 per cent a year ago. Various measures of consumer price inflation were placed in the range of 7.3 - 9.4 per cent during June/July 2008.

II.3.44 Against the backdrop of continued increase in prices, despite the fiscal measures undertaken during 2007-08, the Government further announced a set of measures during April 2008 to stem the rise in inflation. On April 1, 2008, the Government announced a ban on the export of non-basmati rice and raised the minimum export price (MEP) to US $ 1,200 per tonne in respect of basmati rice. The Government also announced to allow import of crude form of edible oil at zero duty and refined form of edible oil at a duty of 7.5 per cent. Customs duty on margarine and vanaspati was also reduced to 7.5 per cent. The ban on export of pulses was extended by one more year beginning April 1, 2008. Customs duty on maize imported under a Tariff Rate Quota of five lakh metric tonnes was also reduced from 15 per cent to 'nil'. On April 29, 2008, the Government proposed to reduce the basic customs duty on skimmed milk powder from 15 per cent to 5 per cent for a Tariff Rate Quota of 10,000 metric tonnes per annum to ensure adequate availability of milk in lean summer months. Similarly, the Government announced a reduction in customs duty on butter oil, which is used for reconstituting liquid milk from 40 per cent to 30 per cent. The Government also imposed an export duty of Rs.8,000 per tonne on basmati rice along with a commensurate reduction in its minimum export price from US $ 1,200 per tonne to US$ 1,000 per tonne.

II.3.45 In order to disincentivise the export of steel and augment domestic supply, the Government announced a number of measures on April 29, 2008. These included (i) reduction in the basic customs duty on pig iron and mild steel products as well as three critical inputs for manufacture of steel such as metallurgical coke, ferro alloys and zinc from 5 per cent to 'nil', (ii) exemption of import of thermo mechanically treated (TMT) bars from countervailing duty (CVD) which was 14 per cent, (iii) imposition of export duty of 15 per cent on specified primary forms and semi-finished products, and hot rolled coils/ sheet; 10 per cent on specified rolled products including cold-rolled coils/sheets and pipes and tubes; and 5 per cent on galvanised steel in coil/ sheet form. For this purpose, a uniform statutory rate of 20 per cent was incorporated in the Export Schedule. On June 4, 2008, the Government raised prices of petrol and diesel by Rs.5 and Rs. 3 per litre, respectively, and LPG by Rs 50 per cylinder to reduce losses to the oil marketing companies (OMCs). At the same time, Government also reduced customs duty on crude oil from 5 per cent to 'nil' as well as on diesel and petrol from 7.5 per cent to 2.5 per cent each, and on other petroleum products from 10.0 per cent to 5.0 per cent. Excise duty on petrol and diesel was also reduced by Re.1 per litre. Keeping its commitment to the common man, the Government did not increase the price of kerosene at public distribution system (PDS) outlets.

II.3.46 In the present context of rising inflation, at both domestic and global level, understanding the underlying inflationary pressures for the purpose of monetary policy formulations assumes added significance (Box II.12).

II.3.47 To sum up, cross-country experience suggests that food and fuel prices were the major drivers of global inflation during 2007-08. Monetary policy responses were, however, mixed during the year. While monetary policy in most EMEs was tightened in view of continued strong growth in EMEs, monetary policy was eased in many advanced countries in view of persisting financial market turbulence with attendant implications for growth and financial stability. Headline inflation in India hardened, from the second half of 2007-08, reflecting supply side pressures and firming up of international commodity prices. Significant pressures emanated from fuel prices in line with the hardening of international crude oil prices. As in many other developed and developing economies, in India also a number of fiscal and supply-side measures were undertaken by the Government to mitigate the impact of rise in food and fuel inflation. The Reserve Bank also undertook monetary measures in the form of increases in CRR and policy rates in response to the evolving macroeconomic, monetary and liquidity conditions to stabilise inflationary expectations.

Box II.12
Understanding Inflationary Pressures – Relevance of Core Inflation

One of the prime objectives of monetary policy all over the world is price stability. The barometer for measuring price stability is inflation, which is calculated as year-on-year percentage change in the general price level. The resultant inflation is the combined effect of several types of price changes, some having short-run (transient) effects, while others having long-run (permanent) effects. Sometimes the transient shocks emanating from the supply-side get mixed up with the underlying inflationary trend related to demand shocks and, therefore, such measure might provide confusing signals to policy makers. While a negative supply shock may raise the headline inflation, a positive supply shock may reduce the headline inflation for some time even in the face of building up of underlying inflationary pressures. In the event of such supply disturbances, policy actions to counter the impact on the aggregate price level may tend to accentuate the output effects of the disturbances, generating a short-run conflict between the central bank's inflation and output objectives. As monetary policy is best suited to tackle inflationary pressures emerging from demand shocks, central banks, therefore, try to extract information about the underlying inflationary pressures in the economy by alienating the noise (on account of supply shocks) from the headline measures. Such persistent component of inflation is termed as 'core inflation' or underlying trend inflation, which contains long-run properties as well as predictive power of future inflation.

Despite wide spread use of the term 'core inflation', there is no unanimity among the researchers about its definition. However, some of the important properties of core inflation are as follows: (i) it should be computable in real time; (ii) it should be familiar and understandable to the public; (iii) it should show long-term trends in inflation; (iv) it should not be too volatile, *i.e.*, it should not contain high-frequency noise; (v) it should provide useful information for predicting future price movement; (vi) it should not be too biased with respect to observed inflation; (vii) it should highly correlate with the past monetary policy; and (viii) it should be output-neutral in the long-run. Different measures of core inflation and criteria for their choice serve different purposes. It may be the case that some measures serve more than one desirable criterion, but this is an empirical matter, which varies across countries. In most cases, there may well be a trade-off between simplicity and bias.

Similarly, there is no unanimity on the best approach to compute core inflation. However, the most common and the simplest approach in use has been to exclude volatile components such as food and oil prices from the headline inflation. However, a major weakness of the exclusion-based measure of core inflation is that temporary disturbances are not necessarily limited to specific sub-components. Moreover, completely removing the volatile items has the potential risk of a permanent loss of significant information. To overcome these weaknesses, although limited influence estimator approach such as trimmed mean or weighted median are used, by excluding components experiencing a very large relative price change, they run the risks of missing useful information content of such quick-to-rise components that signal a shift in aggregate demand and underlying inflation trend. Furthermore, the role of core inflation for the short-term conduct of monetary policy is also limited in developing countries, because the very economic structure of these countries is such that they are subject to large and persistent shocks. In developing countries, a measure of core inflation excluding food items - which often account for more than half of the weight in the index - may not be very meaningful. Moreover, the loss of information content in the construction of core inflation and the relatively greater public acceptability of the headline inflation make the core measures useful only as indicators of the underlying inflationary process rather than as policy targets.

Given the variety of core inflation methods and their alternative formulations, it is necessary to establish certain criteria by which one can choose from various measures. A number of empirical studies suggest using different combinations of measures. Apparently, no consensus emerges from theses studies. The Reserve Bank of India examines different possible measures of WPI-based core inflation for India using 8 different methodologies, *viz.,* exclusion based measures, mean-standard deviation based measure, median based measure, trimmed mean based measure, measures based on historical standard deviation, Hodrick-Prescott (HP) filter, wavelet filter and structural vector auto-regression (SVAR). These measures are tested against various properties of core inflation. The empirical results show that different measures of core inflation do not produce consistent results and the choice of a particular measure is mostly data-driven.

Accordingly, in the present context of general increase in commodity prices at a global level, the measures of core inflation should be 'contextual' from the perspective of the specific country for understanding the underlying inflation pressures in the economy.

References

1. Blinder, A. S. (1997), 'Commentary." *Federal Reserve Bank of St. Louis Review* (May-June 1997): 157-160.
2. Bryan, M. F., and S. G. Cecchetti (1993), "The Consumer Price Index as a Measure of Inflation." *Federal Reserve Bank of Cleveland Economic Review* (1993:4): 15-24.
3. Quah, D., and S. P. Vahey (1995), 'Measuring Core Inflation', *Economic Journal* 105: 1130-1144.

Table: Alternative Measures of Contextual Core (WPI-based) Inflation in India

(Per cent)

Item	Weight	Apr-07	Jun-07	Sep-07	Dec-07	Mar-08	May-08	Jun-08	Jul-08
1	2	3	4	5	6	7	8	9	10
All Commodities	100	6.0	4.4	3.4	3.8	7.7	8.8	11.9	12.0
Total food items (PA+Mfg.)	26.9	7.6	5.7	3.7	2.6	7.7	8.6	9.4	9.0
Total non-food items (*i.e.,* WPI, ex-food)	73.1	5.5	4.0	3.3	4.3	7.8	8.8	12.8	13.0
WPI, ex-fuel	85.8	7.5	6.1	5.0	4.0	8.0	9.0	10.7	10.6
WPI, ex-total food and fuel	58.8	7.4	6.3	5.7	4.7	8.2	9.2	11.3	11.5
WPI, ex-primary food	84.6	5.3	3.8	3.2	4.2	8.0	9.3	13.0	13.2
Manufactured non-food products	52.2	6.4	5.4	4.8	4.0	6.9	7.9	9.8	10.1
WPI, ex-metals	91.7	5.4	4.2	3.2	4.0	6.4	7.6	10.9	10.9
WPI, ex-metals and minerals	91.2	5.3	4.1	3.3	4.0	5.9	7.2	10.5	10.5
WPI, ex-oilseeds and products	93.2	5.0	3.3	2.3	3.0	6.8	7.7	10.9	11.1
WPI, ex-metals, minerals, oilseeds and products	84.3	4.2	2.9	2.0	3.0	4.7	6.0	9.2	9.3
WPI, ex-metals, minerals, minerals oil	84.2	6.2	5.5	4.3	3.8	5.4	6.6	8.0	7.8

PA : Primary Articles. Mfg : Manufactured Products. ex : Excluding.

IV. GOVERNMENT FINANCES

II.4.1 The combined finances of the Central and State Governments continued to improve in 2007-08. The key deficit indicators, *viz*., gross fiscal deficit (GFD) and revenue deficit were lower by 0.3-0.4 percentage points of GDP than the preceding year; primary balance turned surplus. The improvement was facilitated by a significant increase in revenue receipts, especially direct tax revenues (Table 2.36). The buoyancy in tax revenue of the Central Government as well as the State Governments' own tax revenue reflected the impact of both sustained economic growth and continued efforts at improving the efficiency of the taxation system through moderation of rates and broadening of the base. A noteworthy feature of combined finances was enhanced allocation for development expenditure even while staying on course of fiscal consolidation by both the Centre and the States under the rules-based fiscal framework.

Table 2.36: Major Fiscal Indicators: Combined Finances

(Per cent of GDP)

Item	1990-91	1995-96	2006-07	2007-08 RE
1	2	3	4	5
1. Gross Fiscal Deficit	9.4	6.5	5.6	5.3
2. Revenue Deficit	4.2	3.2	1.3	0.9
3. Primary Deficit	5.0	1.6	0.0	-0.3
4. Revenue Receipts	18.6	18.3	21.2	22.4
(i) Tax Revenues	15.4	14.7	17.5	18.5
Direct Taxes	2.5	3.5	6.5	7.3
Indirect Taxes	12.9	11.2	11.0	11.3
(ii) Non-tax Revenue	3.2	3.6	3.7	3.9
5. Total Expenditure*	28.7	25.4	26.8	28.8
(i) Development Expenditure *	17.1	13.9	14.2	15.6
(ii) Non-development Expenditure	11.5	11.5	12.2	12.8
of which:				
Interest Payments	4.4	5.0	5.6	5.6
6. Debt@	64.7	61.0	77.0	77.0
				Per cent
Capital Outlay/ Total Expenditure	13.1	10.8	14.2	17.6
Interest Payments/ Revenue Receipts	23.6	27.2	26.3	25.0
Revenue Deficit/ Gross Fiscal Deficit	44.6	48.8	24.0	16.5

RE : Revised Estimates.

* : Also includes an amount of Rs.35,531 crore on account of transactions relating to transfer of the Reserve Bank's stake in State Bank of India (SBI) to the Central Government in 2007-08.

@ : Includes 'reserve funds' and 'deposits and advances'.

Note: 1. All indicators are based on combined data of the Centre and the States with inter-Governmental transactions netted out.

2. Data in respect of State Governments relate to budgets of 28 State Governments.

3. The fiscal ratios of combined finances are based on the latest GDP data available from the Central Statistical Organisation, Government of India.

CENTRAL GOVERNMENT FINANCES – 2007-08

Revised Estimates[10]

II.4.2 The revised estimates (RE) of Central Government finances for 2007-08 exhibited an improvement *vis-à-vis* the budget estimates (BE). The key deficit indicators, *viz*., revenue deficit and GFD were placed 0.1-0.2 percentage points of GDP lower than their budgeted levels. Gross primary surplus, as percentage of GDP, was 0.4 per cent higher than that of the budget estimate (BE). In absolute terms, the revenue deficit and GFD were lower than budgeted, while gross primary surplus was significantly higher in the revised estimates than in the budget estimates (Table 2.37 and Appendix Table 26). The improvement in the revenue account was mainly due to higher tax revenue (Appendix Table 27). Collections under all major taxes, except Union excise duties, were higher than budgeted. The buoyancy in revenue receipts more than offset the increase in the revenue expenditure (mainly due to higher interest payment and subsidies), facilitating a reduction of the revenue deficit in the revised estimates. Capital outlay, on the other hand, was

[10] Adjusted for acquisition cost of the Reserve Bank's stake in State Bank of India (SBI) by the Central Government at Rs.35,531 crore and also the surplus transfer from the Reserve Bank to the Central Government on account of sale of Reserve Bank's stake in SBI to the Government at Rs.34,309 crore, wherever applicable.

Table 2.37: Major Fiscal Indicators of the Centre

(Amount in Rupees crore)

Item	2007-08 (BE)	2007-08 (RE)	2008-09 (BE)	Variation (3 over 2)		Variation (4 over 3)	
				Amount	Per cent	Amount	Per cent
1	2	3	4	5	6	7	8
1. Revenue Receipts	4,86,422	5,25,098	6,02,935	38,676	8.0	77,837	14.8
2. Miscellaneous Capital Receipts	1,651*	1,816 @	10,165	165	10.0	8,349	-
3. Revenue Expenditure *of which:*	5,57,900	5,88,586	6,58,119	30,686	5.5	69,533	11.8
a) Interest Payments	1,58,995	1,71,971	1,90,807	12,976	8.2	18,836	11.0
4. Capital Outlay	75,123*	74,264 #	84,522	-859	-1.1	10,258	13.8
of which: Defence	41,922	37,705	48,007	-4,217	-10.1	10,302	27.3
5. Net Lending	5,998	6,495	3,746	497	8.3	-2,749	-42.3
6. Revenue Deficit (3-1)	**71,478**	**63,488**	**55,184**	**-7,990**	**-11.2**	**-8,304**	**-13.1**
	(1.5)	**(1.4)**	**(1.0)**				
7. Gross Fiscal Deficit (4+5+6-2)	**1,50,948**	**1,43,653****	**1,33,287**	**-8,517**	**-5.6**	**-9,144**	**-6.4**
	(3.3)	**(3.1)**	**(2.5)**				
8. Primary Deficit (7-3a)	**-8,047**	**-28,318****	**-57,520**	**-21,493**	**267.1**	**-27,980**	**94.7**
	(-0.2)	**(-0.6)**	**(-1.1)**				

BE : Budget Estimates. RE: Revised Estimates.

* : Adjusted for an amount of Rs. 40,000 crore on account of transactions relating to transfer of the Reserve Bank's stake in the SBI to the Central Government.

@ : Net of Reserve Bank's surplus transfer of Rs.34,309 crore on account of sale of its stake in SBI to the Central Government.

: Net of acquisition cost of Reserve Bank's stake in SBI to the Central Government at Rs.35,531 crore.

** : Includes Rs.1,223 crore, *i.e.*, difference between receipts and expenditure on account of transfer of Reserve Bank's stake in SBI to Government of India.

Note : Figures in parentheses are percentages to GDP.

marginally lower than budgeted on account of decline in defence outlay.

II.4.3 Net market borrowings, which were 0.1 per cent lower than budgeted, financed 77.1 per cent of the GFD in the revised estimates as compared with 73.4 per cent in the budget estimates (Appendix Table 28). 'Deposit and advances' and external assistance financed 5.4 per cent and 6.9 per cent, respectively, of the GFD in the revised estimates as compared with (-)1.6 per cent and 6.0 per cent, respectively, in the budget estimates.

Provisional Accounts

II.4.4 The provisional accounts for 2007-08 released by the Controller General of Accounts indicate that both the revenue deficit and GFD, relative to GDP, narrowed down further by 0.2 percentage point and 0.3 percentage point, respectively, while the primary surplus increased by 0.3 percentage point, *vis-à-vis* the revised estimates, on account of increase in both tax and non-tax revenues (Table 2.38).

Debt position of the Central Government

II.4.5 The decline in GFD notwithstanding, the outstanding domestic liabilities of the Central Government – comprising internal debt and other liabilities such as national small savings fund (NSSF), state provident funds, other accounts, reserve funds and deposits – rose marginally to 59.3 per cent of GDP at end-March 2007 (RE) from 58.8 per cent at end-March 2006. This reflected the increase in off-budget liabilities such as special securities issued to oil companies and fertiliser companies *in lieu* of subsidies. The outstanding liabilities also include securities issued under the market stabilisation scheme, the receipts of which are sequestered in a separate account with the Reserve Bank and are

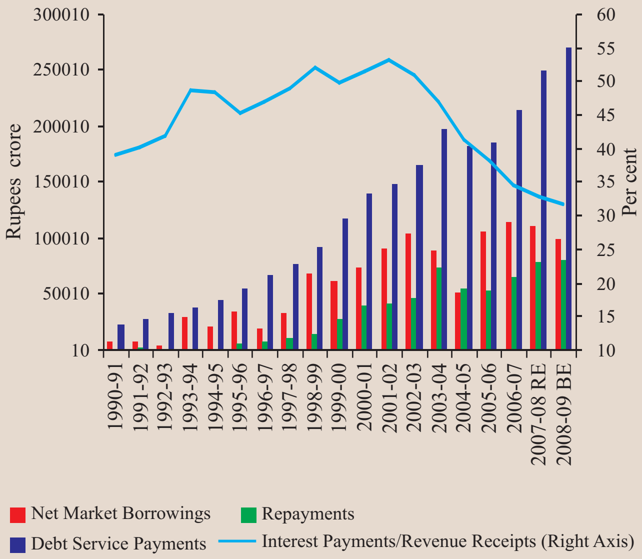
Table 2.38 : Key Deficit Indicators of the Centre for 2007-08 – Provisional Accounts

(Rupees crore)

Indicator	Budget Estimates	Revised Estimates	Provisional Accounts	Variation (per cent)	
				Col. 4 over Col.3	Col.4 over Col.2
1	2	3	4	5	6
Revenue Deficit	71,478	63,488	55,535	-12.5	-22.3
	(1.5)	(1.4)	(1.2)		
Gross Fiscal Deficit	1,50,948	1,43,653	1,29,814	-9.7	-14.8
	(3.3)	(3.1)	(2.8)		
Primary Deficit	-8,047	-28,318	-41,680	-	-
	(-0.2)	(-0.6)	(-0.9)		

Note: Figures in parentheses are percentages to GDP. Figures in parentheses in column 4 are based on CSO's revised estimate for GDP.

Chart II.14: Debt Service Burden of the Central Government



not available to the Central Government for expenditure. However, the outstanding domestic liabilities were lower than 60.5 per cent at end-March 2006 (Appendix Table 29). Internal debt was the largest component of the outstanding liabilities of the Central Government (63.7 per cent of the total debt at end-March 2008), followed by liabilities on account of NSSF, state provident funds and other accounts (27.8 per cent).

II.4.6 The ratio of interest payments to revenue receipts continued to decline during the year. The ratio declined from 53.4 per cent in 2001-02 to 32.8 per cent in 2007-08 (RE), as the growth in the revenue receipts (161.0 per cent between 2001-02 and 2007-08) far exceeded the growth in interest payments (60.0 per cent) (Chart II.14).

II.4.7 The average interest rate on outstanding market loans and state provident funds increased during 2007-08 while that on NSSF and special deposits declined (Table 2.39).

STATE GOVERNMENT FINANCES – 2007-08[11]

II.4.8 The State Governments made further progress in the direction of fiscal correction and consolidation during 2007-08 with 23 States achieving revenue balance and eleven States meeting the GFD target set under their Fiscal Responsibility Legislation (FRL). The consolidated revenue surplus

Table 2.39: Average Interest Rates on Outstanding Domestic Liabilities of the Centre

(Per cent)

Year	Market Loans	Small Savings/ NSSF	State Provident Funds	Special Deposits
1	2	3	4	5
1990-91 to1994-95 (Average)	10.86	10.85	11.63	11.53
1995-96 to 1999-2000 (Average)	12.39	11.62	11.62	10.93
2000-01	12.99	11.60	10.54	9.87
2001-02	12.83	11.61	9.09	10.5
2002-03	12.11	11.56	8.53	8.82
2003-04	11.11	10.88	7.39	7.94
2004-05	9.87	9.37	7.99	7.65
2005-06	10.07	8.90	7.46	7.25
2006-07	8.90	8.91	7.63	6.85
2007-08(RE)	9.45	8.33	7.83	5.67

RE : Revised Estimates.

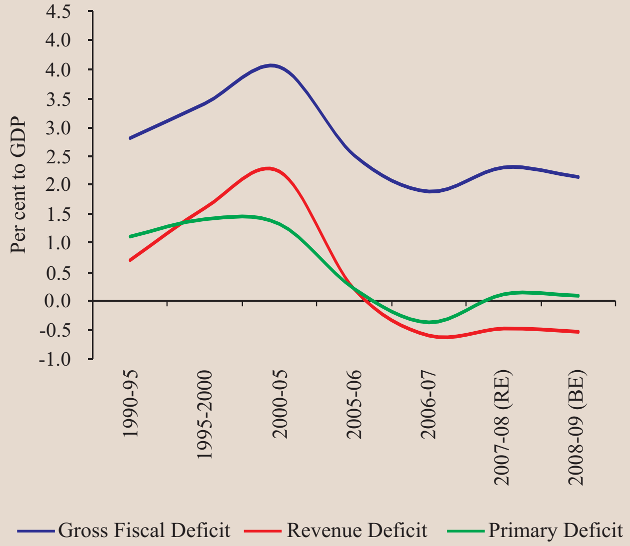
Note: 1. Market loans represent dated securities.
2. Small savings represent small saving deposits, certificates and public provident fund. Since 1999-2000, interest on small savings represents interest on Central Government Special Securities issued to the National Small Savings Fund (NSSF).
3. The Government notified the freezing of the corpus of the Special Deposit Scheme as on June 30, 2003.
4. The interest rate for each component is computed by dividing the interest payments in a year by the outstanding liabilities at the end of the preceding year.

[11] The analysis of State finances and combined finances for 2007-08 (Revised Estimates) and 2008-09 (Budget Estimates) is based on the budgets of 28 State Governments.

of the State Governments in 2007-08 (RE) was placed at Rs.22,526 crore (0.5 per cent of GDP) as compared with Rs.11,973 crore (0.3 per cent of GDP) in 2007-08 (BE). Twenty three State Governments recorded revenue surplus in 2007-08 (RE), one year ahead of the target prescribed by the Twelfth Finance Commission (TFC) for achieving revenue balance. The increase in revenue surplus in 2007-08 (RE) over the budget estimates of the year was on account of buoyant revenue receipts (3.6 per cent above the budgeted level), which more than offset the slippage in revenue expenditure (1.9 per cent above the budgeted level). Increase in shareable taxes (8.8 per cent), grants from the Centre (6.2 per cent) and States' own non-tax revenue (5.7 per cent) over their respective budgeted levels contributed to the higher than budgeted revenue receipts in 2007-08 (RE). The States' own tax revenue, however, was marginally lower by 0.2 per cent than the budget estimates. Reflecting the substantial improvement in the revenue account, the consolidated GFD of the States at Rs.1,07,958 crore, was marginally lower by Rs.364 crore in 2007-08 (RE) than the budget estimates despite higher capital outlay over the budgeted level. The capital outlay was higher in respect of irrigation and flood control, transport, and water supply and sanitation. All the major deficit indicators, as percentage of GDP, were placed much lower in 2007-08 (RE) than their average levels during the period 2000-05 (Chart II.15 and Appendix Table 30).

II.4.9 The financing pattern of GFD of the State Governments underwent a compositional shift, with the market borrowings emerging as the major source of financing of GFD in 2007-08 (RE) (58.9 per cent of GFD). Owing to the sharp decline in the collections under small savings, the special securities issued to NSSF, the major contributor of GFD financing from 1999-2000, financed 9.1 per cent of GFD in 2007-08 (RE) as compared with 72.9 per cent in 2006-07. Significantly, withdrawal of surplus cash balances financed 22.3 per cent of GFD during 2007-08 (RE) (Appendix Table 31).

Chart II.15: Major Deficit Indicators of the State Governments



COMBINED GOVERNMENT BUDGETARY POSITION OF THE CENTRE AND STATES – 2007-08

II.4.10 The combined finances of the Centre and States in terms of the key deficit indicators showed an improvement during 2007-08 (RE) over the budget estimates. Buoyant tax collections in the revised estimates, both direct and indirect taxes, and significantly higher non-tax receipts enabled a lower revenue deficit than was budgeted (Table 2.40 and Appendix Table 32). Aggregate expenditure was higher than budgeted on account of an increase non-development expenditure, particularly in interest payments, fiscal and administrative services. Development expenditure was moderately lower than the budget estimates in 2007-08 (RE).

Combined Debt

II.4.11 The combined outstanding liabilities as a proportion to GDP at 77.0 per cent at end-March 2008(RE) were the same as at end-March 2007, mainly on account of an increase in the outstanding liabilities of the Central Government, which offset the decline in the liabilities of the State Governments (Table 2.41).

Table 2.40: Indicators of Combined Finances of the Centre and States

(Amount in Rupees crore)

Items	1990-91	1995-96	2000-01	2006-07	2007-08 BE	2007-08 RE	Variation (RE over BE)	
							Amount	Per cent
1	2	3	4	5	6	7	8	9
Gross Fiscal Deficit [II-IA-IB(a)]	**53,580**	**77,671**	**1,99,852**	**2,30,432**	**2,56,286**	**2,47,831**	**-8,455**	**-3.3**
	(9.4)	**(6.5)**	**(9.5)**	**(5.6)**	**(5.4)**	**(5.3)**		
Revenue Deficit [II1-IA]	**23,871**	**37,932**	**1,38,803**	**55,366**	**59,504**	**40,959**	**-18,545**	**-31.2**
	(4.2)	**(3.2)**	**(6.6)**	**(1.3)**	**(1.3)**	**(0.9)**		
Primary Deficit	**28,585**	**18,598**	**75,035**	**-399**	**6,127**	**-15,905**	**-22,032**	**-359.6**
	(5.0)	**(1.6)**	**(3.6)**	**(0.0)**	**(0.1)**	**(-0.3)**		
I. Total Receipts (A+B)	1,51,593	2,96,629	5,94,804	11,25,252	13,10,973	13,31,711	20,738	1.6
A. Revenue Receipts (1+2)	1,05,757	2,17,526	3,78,817	8,77,075	9,96,267	10,55,165	58,898	5.9
1. Tax Receipts (a+b)	87,564	1,74,851	3,05,374	7,24,023	8,34,094	8,73,299	39,205	4.7
a) Direct Taxes	14,267	41,603	80,215	2,68,108	3,05,949	3,42,750	36,801	12.0
b) Indirect Taxes	73,297	1,33,248	2,25,159	4,55,915	5,28,145	5,30,549	2,404	0.5
2. Non Tax Receipts	18,193	42,675	73,443	1,53,052	1,62,173	1,81,866	19,693	12.1
B. Capital Receipts	45,836	79,102	2,15,987	2,48,177	3,14,706	2,76,546	-38,160	-12.1
a) Non Debt Capital Receipts	3,531	6,968	12,591	1,667	57,344	52,834	-4,510	-7.9
b) Debt Capital Receipts	42,305	72,134	2,03,396	2,46,510	2,57,362	2,23,712	-33,650	-13.1
II. Aggregate Expenditure (1+2+3 = 4+5)	1,62,868	3,02,166	5,91,258	11,09,174	13,09,897	13,55,830	45,933	3.5
1. Revenue Expenditure	1,29,628	2,55,457	5,17,618	9,32,441	10,55,770	10,96,124	40,354	3.8
2. Capital Outlay	21,353	32,594	55,875	1,57,316	2,33,919	2,38,126	4,207	1.8
3. Loans and Advances	11,887	14,115	17,766	19,417	20,207	21,580	1,373	6.8
4. Development Expenditure	97,149	1,65,361	3,08,546	5,88,028	7,45,961	7,36,974	-8,987	-1.2
5. Non-Development Expenditure	65,719	1,36,805	2,82,712	5,21,146	5,63,935	6,18,856	54,921	9.7

RE: Revised Estimates. BE: Budget Estimates.

Notes: 1. Inter-Governmental transactions have been netted out.
2. Figures in parentheses are percentages to GDP.
3. Data in respect of States relate to 28 States.
4. Totals may not tally due to rounding off.

Contingent Liabilities/Guarantees of the Government

II.4.12 The outstanding guarantees of Central Government declined marginally to Rs.1,09,826 crore at end-March 2007 from Rs.1,10,626 crore at end-March 2006 (Table 2.42). The net accretion to the stock of contingent liabilities in the form of guarantees extended by the Central Government declined by Rs.800 crore for the year ended March 2007. FRBM Rules, 2004 stipulate that the net accretion to contingent liabilities be limited to 0.50 per cent of GDP in any fiscal year.

FISCAL OUTLOOK FOR 2008-09[12]

Central Government

II.4.13 The Union Budget 2008-09 sought to continue with the fiscal correction process. GFD is budgeted to decline by 0.6 percentage point to 2.5 per cent of GDP during 2008-09 while revenue deficit

Table 2.41: Combined Liabilities of the Centre and States

End-March	Outstanding Liabilities (Rupees crore)			Debt-GDP Ratio (per cent)		
	Centre	States	Combined	Centre	States	Combined
1	2	3	4	5	6	7
1991	3,14,558	1,28,155	3,68,824	55.2	22.5	64.7
1996	6,06,232	2,49,535	7,26,854	50.9	20.9	61.0
2001	11,68,541	5,94,148	14,84,106	55.6	28.3	70.6
2002	13,66,408	6,90,747	17,33,033	60.0	30.3	76.0
2003	15,59,201	7,86,430	19,70,807	63.5	32.0	80.3
2004	17,36,678	9,13,376	22,41,950	63.0	33.2	81.4
2005	19,94,422	10,29,174	25,62,015	63.3	32.7	81.3
2006	22,60,145	11,67,866	28,79,705	63.1	32.6	80.4
2007	25,38,596	12,50,819	31,90,698	61.2	30.2	77.0
2008 RE	28,97,037	13,37,044	36,27,260	61.5	28.4	77.0
2009 BE	30,62,912	14,51,169	38,91,740	57.7	27.4	73.4

RE : Revised Estimates. BE: Budget Estimates.

Note : 1. Data in respect of States relate to 28 States.
2. Under 'combined liabilities', inter-Governmental transactions are netted out.
3. Data include 'reserve funds' and 'deposits and advances'.

[12] All comparisons of 2008-09 in this section are with the revised estimates of 2007-08, unless stated otherwise.

Table 2.42: Outstanding Government Guarantees

(Amount in Rupees crore)

End-March	Centre		States		Total	
	Amount	Per cent of GDP	Amount	Per cent of GDP	Amount	Per cent of GDP
1	2	3	4	5	6	7
1994	62,834	7.3	48,865	5.6	1,11,700	12.9
1995	62,468	6.1	48,479	4.8	1,10,947	10.9
1996	65,573	5.5	52,631	4.4	1,18,204	9.9
1997	69,748	5.1	65,339	4.7	1,35,087	9.8
1998	73,877	4.8	73,751	4.8	1,47,628	9.7
1999	74,606	4.3	79,457	4.5	1,54,063	8.8
2000	83,954	4.3	1,32,029	6.8	2,15,983	11.1
2001	86,862	4.1	1,68,719	8.0	2,55,581	12.2
2002	95,859	4.2	1,65,386	7.3	2,61,245	11.5
2003	90,617	3.7	1,84,294	7.5	2,74,911	11.2
2004	87,780	3.2	2,19,658	8.0	3,07,438	11.2
2005	1,07,957	3.4	2,04,426	6.5	3,12,383	9.9
2006	1,10,626	3.1	1,96,914 P	5.5	3,07,540	8.6
2007	1,09,826	2.6	..	..	..	..

P: Provisional. .. : Not Available.

Note : Ratios to GDP may not add up to the total due to rounding off.

Source: 1. Data on Centre's guarantees are from budget documents of the Central Government.
2. Data on States' guarantees are based on the information received from the State Governments and pertain to 17 major States. Data for 2006 pertain to 16 major States.

Table 2.43: Decomposition of the GFD of the Centre

(Per cent)

Year	Revenue Deficit	Capital Outlay	Net Lending	Other Non-debt Receipts @
1	2	3	4	5
1990-91	41.6	27.2	31.2	0
1995-96	49.4	23.4	29.6	-2.3
2000-01	71.7	20.8	9.2	-1.8
2001-02	71.1	18.8	12.7	-2.6
2002-03	74.4	20.1	7.7*	-2.2
2003-04	79.7	27.8	6.3*	-13.8
2004-05	62.6	41.3	-0.4*	-3.5
2005-06	63.0	37.6	0.5	-1.1
2006-07	56.3	42.3	1.8	-0.4
2007-08 (RE)	44.6	52.1#	4.6	-1.3##
2008-09 (BE)	41.4	63.4	2.8	-7.6

@ : Include disinvestment proceeds and value of bonus shares.
* : Adjusted for debt swap transactions.
# : Net of acquisition cost of transfer of the Reserve Bank's stake in SBI to the Central Government at Rs.35,531 crore.
: Net of surplus transfer from the Reserve Bank to the Central Government on account of sale of the Reserve Bank's stake in SBI to the Government at Rs.34,309 crore.

is budgeted to decline by 0.4 percentage points to 1.0 per cent of GDP. Gross primary surplus relative to GDP is budgeted to increase to 1.1 per cent during 2008-09 from 0.6 per cent during 2007-08 (see Table 2.37). While the target for GFD as mandated under the FRBM Act, 2003 is set to be achieved, that of eliminating revenue deficit by 2008-09 has been rescheduled and extended by one year. This is primarily on account of a shift in Plan priorities in favour of revenue expenditure intensive programmes and schemes, and systemic rigidity in the containing of certain non-plan expenditures in the short-term. The Union Budget envisaged a revenue-led fiscal consolidation along with containment and repriotisation of expenditure. With the share of revenue deficit in GFD estimated lower at 41.4 per cent during 2008-09, more resources would be utilised for capital outlay (Table 2.43).

Pattern of Receipts

II.4.14 Revenue receipts are budgeted to rise by 14.8 per cent during 2007-08 on top of 20.9 per cent growth recorded in the previous year (Table 2.44). Growth in collections under all the major taxes, except customs duty, is budgeted to decelerate in 2008-09, partly due to the high base created by the robust growth in the previous years. Nonetheless, the gross tax/GDP ratio is expected to increase to 13.0 per cent in 2008-09, thus continuing the rising trend that began in 2002-03 led by the sustained rise in direct taxes (Table 2.45).

II.4.15 Growth in non-tax revenue at 2.6 per cent in 2008-09 is budgeted to be lower than that in 2007-08 (12.2 per cent) on account of lower growth of dividends and profits (see Table 2.44). In respect of non-debt capital receipts, the recoveries of loans and advances from the State Governments and the Central PSUs are budgeted to remain unchanged. Disinvestment proceeds during 2008-09 are budgeted at Rs.10,165 crore, of which Rs.1,165 crore has been earmarked to National Investment Fund.

Pattern of Expenditure

II.4.16 Aggregate expenditure, as percentage of GDP, is budgeted at 14.2 per cent of GDP in 2008-09 as compared with 14.4 per cent[13] of GDP in

[13] Adjusted for expenditure of Rs. 35,531 crore incurred by Central Government for acquisition of the Reserve Bank's stake in the SBI in 2007-08.

Table 2.44: Revenue Position of the Centre

(Amount in Rupees crore)

Item	2006-07	2007-08 (RE)	2008-09 (BE)	Variation			
				2007-08		2008-09	
				Amount	Per cent	Amount	Per cent
1	2	3	4	5	6	7	8
Total Receipts (1+2)	5,83,387	6,75,064*	7,50,884	91,677	15.7	75,820	11.2
	(14.1)	(14.4)	(14.2)				
1. Revenue Receipts	4,34,387	5,25,098	6,02,935	90,711	20.9	77,837	14.8
	(10.5)	(11.2)	(11.4)				
Tax Revenue (Net)	3,51,182	4,31,773	5,07,150	80,591	22.9	75,377	17.5
	(8.5)	(9.2)	(9.6)				
Non-Tax Revenue	83,205	93,325	95,785	10,120	12.2	2,460	2.6
	(2.0)	(2.0)	(1.8)				
2. Capital Receipts	1,49,000	1,49,966*	1,47,949	966	0.6	-2,017	-1.3
	(3.6)	(3.2)	(2.8)				
Non-Debt Capital Receipts	6,427	6,313*	14,662	-114	-1.8	8,349	132.3
	(0.2)	(0.1)	(0.3)				
Debt Capital Receipts	1,42,573	1,43,653	1,33,287	1,080	0.8	-10,366	-7.2
	(3.4)	(3.1)	(2.5)				
Memo :							
Gross Tax Revenue	4,73,512	5,85,410	6,87,715	1,11,898	23.6	1,02,305	17.5
	(11.4)	(12.5)	(13.0)				
i) Corporation Tax	1,44,318	1,86,125	2,26,361	41,807	29.0	40,236	21.6
	(3.5)	(4.0)	(4.3)				
ii) Income Tax@	75,081	1,03,470	1,20,604	28,389	37.8	17,134	16.6
	(1.8)	(2.2)	(2.3)				
iii) Customs Duty	86,327	1,00,766	1,18,930	14,439	16.7	18,164	18.0
	(2.1)	(2.1)	(2.2)				
iv) Union Excise Duty	1,17,613	1,27,947	1,37,874	10,334	8.8	9,927	7.8
	(2.8)	(2.7)	(2.6)				
v) Service Tax	37,598	50,603	64,460	13,005	34.6	13,857	27.4
	(0.9)	(1.1)	(1.2)				
vi) Securities Transaction Tax	4,646	7,500	9,000	2,854	61.4	1,500	20.0
	(0.1)	(0.2)	(0.2)				
vii) Banking Cash Transaction Tax	507	550	550	43	8.5	0	0.0
	(0.0)	(0.0)	(0.0)				
viii) Fringe Benefit Tax	5,316	6,800	8,160	1,484	27.9	1,360	20.0
	(0.1)	(0.1)	(0.2)				

RE: Revised Estimates. BE : Budget Estimates.

* : Adjusted for an amount of Rs. 34,309 crore on account of transfer of profit from the Reserve Bank to the Central Government on account of transfer of Reserve Bank's stake in SBI to the Government.

@ : Excluding Fringe Benefit Tax.

Note : Figures in parentheses are percentages to GDP.

2007-08, reflecting containment of non-plan expenditures, particularly, interest payments and subsidies as percentage of GDP. The growth in subsidies is budgeted to decelerate to 2.4 per cent from a growth of 22.1 per cent in 2007-08, leading to a decline in its ratio to GDP by 0.2 percentage point to 1.3 per cent in 2008-09 (Table 2.46).

II.4.17 Plan expenditure/GDP ratio is budgeted to increase on the back of higher budgetary support

Table 2.45 : Gross Tax Revenues of the Centre

(Per cent to GDP)

Year	Direct Tax	Indirect Tax	Total
1	2	3	4
1990-91	1.9	8.2	10.1
1991-92	2.3	8.0	10.3
1992-93	2.4	7.5	10.0
1993-94	2.4	6.5	8.8
1994-95	2.7	6.5	9.1
1995-96	2.8	6.5	9.4
1996-97	2.8	6.6	9.4
1997-98	3.2	6.0	9.1
1998-99	2.7	5.6	8.3
1999-00	3.0	5.8	8.8
2000-01	3.3	5.7	9.0
2001-02	3.0	5.2	8.2
2002-03	3.4	5.4	8.8
2003-04	3.8	5.4	9.2
2004-05	4.2	5.5	9.8
2005-06	4.6	5.6	10.3
2006-07	5.3	6.1	11.4
2007-08 (RE)	6.5	6.0	12.5
2008-09 (BE)	6.9	6.1	13.0

RE : Revised Estimates. BE: Budget Estimates.

for the Central Plan (Table 2.47). Capital expenditure, relative to GDP, is budgeted to decline to 1.7 per cent during 2008-09, although the share of capital outlay in the total capital expenditure is budgeted to increase to 91.1 per cent in 2008-09 from 87.1 per cent in 2007-08 on account of higher defence outlay. The share of defence capital outlay would increase from 44.2 per cent of total capital expenditure in 2007-08 to 51.8 per cent in 2008-09 with a concomitant decline in the share of non-defence capital outlay from 55.8 per cent to 48.2 per cent.

II.4.18 Amongst major development expenditures, the allocation to education as a proportion to total expenditure is budgeted to increase during 2008-09. The combined expenditure on education and health is envisaged to rise from 5.8 per cent of total expenditure during 2007-08 to 6.5 per cent in 2008-09. The shares of agriculture and rural development in the total expenditure are, however, budgeted to marginally decline (Table 2.48).

Financing of Gross Fiscal Deficit

II.4.19 An analysis of the financing pattern of GFD reveals that the share of net market borrowings (excluding allocations budgeted under MSS) would decline to 74.3 per cent of the GFD in 2008-09 from 77.1 per cent in 2007-08. External assistance would finance 8.2 per cent of GFD as compared with 6.9 per cent in 2007-08. Investments by the NSSF in the special Central Government securities are budgeted to finance 7.4 per cent of GFD in 2008-09, as against (-) 1.3 per cent last year. During 2008-09, draw down of cash balances is budgeted to finance 5.4 per cent of GFD as against the buildup of cash balances in the previous year (Table 2.49).

II.4.20 Apart from the Plan outlay (Plan 'A') of Rs.2,43,386 crore, the Union Budget 2008-09 proposed Plan 'B' for mobilising additional resources of Rs.10,000 crore through better tax administration

Table 2.46: Subsidies of the Centre

(Rupees crore)

Item	2003-04	2004-05	2005-06	2006-07	2007-08 RE	2008-09BE
1	2	3	4	5	7	8
Subsidies	44,323	45,957	47,522	57,125	69,742	71,431
	(1.6)	(1.5)	(1.3)	(1.4)	(1.5)	(1.3)
Of which:						
i. Food	25,181	25,798	23,077	24,014	31,546	32,667
	(0.9)	(0.8)	(0.6)	(0.6)	(0.7)	(0.6)
ii. Fertiliser	11,847	15,879	18,460	26,222	30,501	30,986
	(0.4)	(0.5)	(0.5)	(0.6)	(0.6)	(0.6)
iii. Petroleum	6,351	2,956	2,683	2,699	2,882	2,884
	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)

RE:Revised Estimates BE:Budget Estimates

Note : Figures in parentheses are percentages to GDP.

Table 2.47 : Expenditure Pattern of the Centre

(Amount in Rupees crore)

Item	2006-07	2007-08 (RE)	2008-09 (BE)	Variation 2007-08 Amount	Variation 2007-08 Per cent	Variation 2008-09 Amount	Variation 2008-09 Per cent
1	2	3	4	5	6	7	8
Total Expenditure	5,83,387	6,73,842*	7,50,884	90,455	15.5	77,042	11.4
	(14.1)	(14.4)	(14.2)				
1. Non-Plan Expenditure	4,13,527	4,66,318*	5,07,498	52,791	12.8	41,180	8.8
	(10.0)	(9.9)	(9.6)				
i) Interest Payments	1,50,272	1,71,971	1,90,807	21,699	14.4	18,836	11.0
	(3.6)	(3.7)	(3.6)				
ii) Defence Expenditure	85,510	92,500	1,05,600	6,990	8.2	13,100	14.2
	(2.1)	(2.0)	(2.0)				
iii) Subsidies	57,125	69,742	71,431	12,617	22.1	1,689	2.4
	(1.4)	(1.5)	(1.3)				
iv) Grants to States	35,734	36,432	43,294	698	2.0	6,862	18.8
	(0.9)	(0.8)	(0.8)				
v) Other non-Plan Expenditure	84,886	95,673*	96,366	10,787	12.7	-2,307	-(2.4)
	(2.0)	(2.0)	(1.8)				
2. Plan Expenditure	1,69,860	2,07,524	2,43,386	37,664	22.2	35,862	17.3
	(4.1)	(4.4)	(4.6)				
i) Budgetary Support to Central Plan	1,24,342	1,48,669	1,79,954	24,327	19.6	31,285	21.0
	(3.0)	(3.2)	(3.4)				
ii) Central Assistance for State and UT Plans	45,518	58,855	63,432	13,337	29.3	4,577	7.8
	(1.1)	(1.3)	(1.2)				
Memo:							
Grants	91,621	1,06,025	1,23,340	14,404	15.7	17,315	16.3
Loans	8,524	10,992	8,243	2,468	29.0	-2,749	-25.0

BE : Budget Estimate. RE: Revised Estimate.

* : Adjusted for an amount of Rs. 35,531 crore on account of transactions relating to transfer of the Reserve Bank's stake in SBI to the Government.

Note : Figures in parentheses are percentages to GDP.

which will be allocated to key areas such as agriculture, rural development, health and urban infrastructure. The key fiscal indicators such as revenue deficit, non-plan expenditure and gross tax revenue relative to GDP for 2008-09 are budgeted higher than the Eleventh Plan projections (Table 2.50).

II.4.21 Although the Central Government's fiscal deficit is budgeted to decline, it continues to remain considerably higher than several other emerging market economies (Table 2.51).

Extra-Budgetary Items

II.4.22 Recognising that revenue deficit and GFD do not include the Government's liabilities on account

Table 2.48 : Expenditure on Select Development Heads of the Centre

(Per cent to GDP)

Item	2007-08(RE)	2008-09(BE)
1	2	3
Agriculture	62,442	68,612
	(9.3)	(9.1)
Education	25,428	33,923
	(3.8)	(4.5)
Health	13,187	15,249
	(2.0)	(2.0)
Rural Development	17,385	18,562
	(2.6)	(2.5)
Irrigation	385	567
	(0.1)	(0.1)

Note: 1. Figures in parentheses are percentages to total expenditure.
2. Total expenditure for 2007-08 (RE) has been adjusted to exclude transactions relating to transfer of the Reserve Bank's stake in SBI.

Table 2.49 : Financing Pattern of Gross Fiscal Deficit of the Centre

(Amount in Rupees crore)

Item	2007-08 (RE)	2008-09 (BE)
1	2	3
Gross Fiscal Deficit	1,43,653	1,33,287
Financed by:		
Market Borrowings	1,10,727	99,000
	(77.1)	(74.3)
Securities against Small Savings	-1,802	9,873
	-(1.3)	(7.4)
External Assistance	9,970	10,989
	(6.9)	(8.2)
State Provident Funds	4,800	4,800
	(3.3)	(3.6)
NSSF	11,174	53
	(7.8)	(0.0)
Reserve Funds	3,504	-972
	(2.4)	-(0.7)
Deposit and Advances	7,807	8629
	(5.4)	(6.5)
Postal Insurance and Life Annuity Funds	3,045	4,123
	(2.1)	(3.1)
Draw Down of Cash Balances	-18,184	7,225
	-(12.7)	(5.4)
Others #	12,612	-10,433
	(8.8)	-(7.8)

\# : Including savings (taxable) bonds 2003 and deposit scheme for retiring employees.
Note : Figures in parentheses are percentages to GFD.

of oil, food and fertiliser, the Budget 2008-09 has reported these figures for 2007-08 as below the line items in the 'Budget at a Glance'. This is a major step towards bringing about greater transparency in fiscal accounting (Box II.13).

Table 2.50 : Eleventh Plan Projections *vis-a-vis* the Budget Estimates

(Per cent to GDP)

Item	2008-09	
	Eleventh Plan Projections	Budget Estimates
1	2	3
Centre		
1. Gross Budgetary Support to Plan	4.51	4.59
of which:		
(i) Plan revenue Expenditure	2.34	3.96
2. Total Non-Plan	9.16	9.57
of which:		
(i) Interest Payments	3.18	3.60
(ii) Defence	2.20	1.99
(iv) Non-Plan grants to States	0.72	0.82
(v) Subsidies	1.03	1.35
3. Total Expenditure	13.67	14.16
4. Gross tax revenue	11.83	12.97
Less: Share of States	3.22	3.37
5. Net Tax to the Centre	8.62	9.56
6. Non-tax Revenue	1.82	1.81
7. Total Revenue Receipts	10.44	11.37
8. Gross Fiscal Deficit	3.00	2.51
9. Revenue Deficit	0.00	1.04

Central Government Finances: April-June 2008

II.4.23 Revenue receipts of the Union Government as a proportion to the budget estimates, improved to 13.7 per cent in April-June 2008 from 13.2 per cent in April-June 2007 reflecting higher tax and non-tax revenues. Total expenditure as a proportion of budget estimates, at 22.5 per cent, was higher than 21.2 per cent in April-June 2007(net of acquisition cost of the Reserve Bank's stake in SBI). While plan expenditure during April-June 2008 increased by 29.8 per cent over the corresponding period of the

Table 2.51: Deficit and Debt Indicators of the Central Government – Select Countries

(As per cent of GDP)

Country	Fiscal Deficit				Public debt			
	2004	2005	2006	2007	2004	2005	2006	2007
1	2	3	4	5	6	7	8	9
China	1.3	1.2	0.8	-0.7	18.5	17.9	17.3 p	..
Republic of Korea	0.5	-0.1	1.3	1.5	25.2	29.5	32.2	33.3 p
India	4.0	4.1	3.5	2.8	63.3	63.1	61.2	61.7
Indonesia	1.1	0.5	1.0	1.2	55.2	45.6	38.6	35.7 p
Malaysia	4.1	3.6	3.3	3.2	66.7	62.5	56.5 p	55.6 p
Thailand	-0.1	0.6	-1.1	1.7	49.3	47.3	40.3	37.5

..: Not Available p: Projection
Note : Negative sign indicates surplus
Source : 1) Asia Economic Monitor, July 2008, Asian Development Bank;
2) Union Budget documents, Government of India; 3) Provisional Accounts of Union Government for 2007-08, Controller General of Accounts, Government of India.

Box II.13
Extra-budgetary Items and Government Finances

The international code on fiscal transparency underlines the need for the public to be provided with comprehensive information on past, current and projected fiscal activity, and on major risks (IMF, 2007). The code urges the Governments to cover all their budgetary and extra-budgetary activities in their budget documents, including final accounts. In India, extra-budgetary items or off-budget items have become a significant component of liabilities of the Government, particularly in the recent past. The 'Economic Outlook for 2007-08' released by the Economic Advisory Council to the Prime Minister in July 2007 also observed that there were substantial off-budget liabilities which needed to be taken account of.

The Central Government, besides providing explicit subsidies on petroleum, food and fertiliser, has also been periodically issuing special bonds to the oil marketing companies (since 1997-98), the Food Corporation of India (FCI) (in 2006-07) and fertiliser companies (in 2007-08) to support them. The issuance of these bonds *per se* is considered to be fiscal deficit neutral since they do not involve cash flow and are, therefore, not treated as part of budgetary expenditure/receipts. According to the existing accounting practice, the issuance of oil bonds and other similar bonds is reflected in the Annual Financial Statement (AFS) of the Union Budget under the public account and a matching transaction is shown under revenue expenditure for settlement of claims with oil companies/fertiliser companies. These transactions are then netted out of the revenue account of the expenditure budget and the capital account of the receipts budget through the respective reconciliation statements. However, these bonds have fiscal implications as they add to the liability of the Government. Furthermore, as interest payments on such bonds are treated as part of the revenue expenditure, they affect the revenue deficit and, thereby, the fiscal deficit on a continuing basis.

Recognising that the revenue deficit and GFD were understated to the extent the Government incurred liabilities on account of oil, food and fertiliser bonds, the Union Budget 2008-09 explicitly reported the off-budget items as below the line items in the summary budget statement, *viz*., 'Budget at a Glance', as a first step towards bringing transparency in the operations of these items. The revised estimates for 2007-08 placed the issuance of special securities at Rs.18,757 crore, of which Rs.11,257 crore were issued to oil marketing companies and Rs.7,500 crore to fertiliser companies *in lieu* of subsidies. During 2007-08, the actual issuance of special securities to oil companies as compensation for under-recoveries and for settlement of contingent liabilities amounted to Rs.20,333 crore and Rs.221 crore, respectively. Special securities issued to fertiliser companies as compensation for fertiliser subsidy amounted to Rs.7,500 crore. The Central Government also issued special securities amounting to Rs.9,996 crore to State Bank of India (SBI) as its subscription towards SBI's rights issue of equity shares.

References

1. Government of India (2007), '*Economic Outlook for 2007-08*', Economic Advisory Council to the Prime Minister, July.
2. Government of India, *Union Budget Documents*, various issues.
3. International Monetary Fund (2007), *Code of Good Practices on Fiscal Transparency*, April.

preceding year, non-plan expenditure (adjusted for acquisition cost of the Reserve Bank's stake in SBI in 2007) increased by 10.3 per cent. As a proportion to the budget estimates, revenue deficit increased to 138.7 per cent during April-June 2008 from 96.0 per cent in the corresponding period of 2007. During April-June 2008, GFD at Rs.86,126 crore constituted 64.6 per cent of the budget estimates as compared with 50.9 per cent during the corresponding period of 2007 (net of acquisition cost of the Reserve Bank's stake in SBI).

State Budgets 2008-09

II.4.24 The State Governments in their budgets for 2008-09 committed to carry forward the process of fiscal correction and consolidation. The consolidated revenue surplus of the States is expected to be Rs.28,426 crore (0.54 per cent of GDP) in 2008-09 (BE) as compared with Rs.22,526 crore (0.48 per cent of GDP) in 2007-08 (RE). As a result, GFD as a per cent of GDP is expected to decline to 2.1 per cent in 2008-09 (BE) from 2.3 per cent in 2007-08 (RE). The consolidated primary deficit is budgeted at 0.1 per cent of GDP in 2008-09 (BE), the same as in the preceding year (Table 2.52 and see Appendix Table 30).

II.4.25 The improvement in the revenue account during 2008-09 is budgeted to be mainly achieved through increase in revenue receipts, which would emanate from increase in States' own tax revenue,

Table 2.52: Major Deficit Indicators of the State Governments

(Amount in Rupees crore)

Item	1990-95	1995-00	2000-05	2005-06	2006-07	2007-08 BE	2007-08 RE	2008-09 BE
	Average							
1	2	3	4	5	6	7	8	9
Gross Fiscal Deficit				90,084	77,509	108,323	107,958	112,653
	(2.8)	(3.4)	(4.0)	(2.5)	(1.9)	(2.3)	(2.3)	(2.1)
Revenue Deficit				7,013	-24,857	-11,973	-22,526	-28,426
	(0.7)	(1.7)	(2.2)	(0.2)	-(0.6)	-(0.3)	-(0.5)	-(0.5)
Primary Deficit				6,060	-15,654	5,648	5,080	4,270
	(1.1)	(1.4)	(1.3)	(0.2)	-(0.4)	(0.1)	(0.1)	(0.1)

BE : Budget Estimates. RE: Revised Estimates.

Note : (1) Negative (-) sign indicates surplus.

(2) Figures in parentheses are percentages to GDP.

(3) Data on GDP for 2006-07 are based on CSO's Quick Estimates, while for 2007-08 are based on its Revised Estimates. Data on GDP for 2008-09 are as per the Union Budget Documents, 2008-09.

Source : Budget Documents of the State Governments.

shareable taxes and grants from the Centre (Table 2.53). One of the ways to create fiscal space is revenue augmentation, which has assumed added significance under the rule-based fiscal framework on account of implicit cap on financing of expenditure by borrowings (Box II.14).

Table 2.53: Aggregate Receipts of the State Governments

(Amount in Rupees crore)

Item	1990-95	1995-00	2000-05	2005-06	2006-07	2007-08 BE	2007-08 RE	2008-09 BE	Percentage variation Col.8/6	Col.8/7	Col.9/8
	Average										
1	2	3	4	5	6	7	8	9	10	11	12
Aggregate Receipts (1+2)				5,95,627	6,73,358	7,67,695	7,63,367	8,95,307	13.4	-0.6	17.3
	(16.0)	(14.8)	(17.2)	(16.6)	(16.2)	(16.3)	(16.2)	(16.9)			
1. Total Revenue Receipts (a+b)				4,31,020	5,30,556	6,06,733	6,28,742	7,19,835	18.5	3.6	14.5
	(12.0)	(10.7)	(11.2)	(12.0)	(12.8)	(12.9)	(13.3)	(13.6)			
(a) States' Own Revenue				2,60,246	3,15,812	3,53,229	3,55,970	4,03,658	12.7	0.8	13.4
	(7.2)	(6.7)	(7.0)	(7.3)	(7.6)	(7.5)	(7.6)	(7.6)			
States' Own Tax				2,12,307	2,52,548	2,94,038	2,93,392	3,36,810	16.2	-0.2	14.8
	(5.3)	(5.1)	(5.6)	(5.9)	(6.1)	(6.2)	(6.2)	(6.4)			
States' Own non-Tax				47,939	63,263	59,191	62,578	66,848	-1.1	5.7	6.8
	(1.8)	(1.6)	(1.4)	(1.3)	(1.5)	(1.3)	(1.3)	(1.3)			
(b) Central Transfers				1,70,774	2,14,744	2,53,504	2,72,773	3,16,177	27.0	7.6	15.9
	(4.8)	(4.0)	(4.2)	(4.8)	(5.2)	(5.4)	(5.8)	(6.0)			
Shareable Taxes				94,024	1,20,293	1,36,184	1,48,134	1,73,147	23.1	8.8	16.9
	(2.6)	(2.4)	(2.4)	(2.6)	(2.9)	(2.9)	(3.1)	(3.3)			
Central Grants				76,750	94,451	1,17,320	1,24,638	1,43,030	32.0	6.2	14.8
	(2.3)	(1.6)	(1.8)	(2.1)	(2.3)	(2.5)	(2.6)	(2.7)			
2. Capital Receipts (a+b)				1,64,607	1,42,802	1,60,962	1,34,625	1,75,472	-5.7	-16.4	30.3
	(4.0)	(4.1)	(6.0)	(4.6)	(3.4)	(3.4)	(2.9)	(3.3)			
(a) Loans from Centre@				8,097	5,529	14,918	11,291	15,349	104.2	-24.3	35.9
	(1.9)	(1.7)	(1.0)	(0.2)	(0.1)	(0.3)	(0.2)	(0.3)			
(b) Others Capital Receipts				1,56,510	1,37,273	1,46,043	1,23,334	1,60,123	-10.2	-15.5	29.8
	(2.1)	(2.4)	(5.0)	(4.4)	(3.3)	(3.1)	(2.6)	(3.0)			

BE : Budget Estimates. RE: Revised Estimates.

@ : With the change in the system of accounting with effect from 1999-2000, States' share in small savings which was included earlier under loans from Centre is included under internal debt and shown as special securities issued to National Small Savings Fund (NSSF) of the Central Government. The data for the years prior to 1999-2000 as reported in this Table, however, exclude loans against small savings, for the purpose of comparability.

Note : Figures in parentheses are percentages to GDP.

Source: Budget Documents of the State Governments.

Box II.14
Fiscal Space at the Sub-National Government Level

Fiscal space has been conceptualised in several ways and is still an evolving term. It can be defined as 'the gap between the current level of expenditure and the maximum level of expenditure a government can undertake without impairing its solvency' (IMF-World Bank, 2006). It can also be defined as 'the availability of budgetary room that allows a government to provide resources for a desired purpose without any prejudice to the sustainability of a government's financial position' (Heller, 2005). Both these definitions conceptualise fiscal space in residual terms ('gap' or 'room'). In contrast, fiscal space is also characterised as 'concrete policy actions for enhancing domestic resource mobilisation and the reforms necessary to secure the enabling governance, institutional and economic environment for these policy actions to be effective' (Roy *et al*, 2007). The focus on domestic resource mobilisation in this definition underscores the fact that ultimately the sustainability and solvency of an economy depends on (a) the extent to which domestic financing mechanisms are able to support public expenditures; and (b) the fact that the mobilisation of resources in a sustainable manner is a function of political economy context within which fiscal space is secured.

In operational terms, fiscal space is a country-specific matter. For developing countries, fiscal space may seem a more immediate issue than in advanced countries as it would provide additional fiscal room that can go for some meritorious public spending such as health, education and infrastructure, which, in turn, would increase medium-term growth and expand the revenue base of the economy in the long-run. However, while creating fiscal space for a particular activity, the Governments would need to assess whether any future expenditure related to it could be met from the normal future revenue of the Government. If the fiscal space is created for repaying the past debt of the Government, the Government can save money on account of interest outflow in future (Tanzi, 2007). In contrast, if the future budgetary resources of the Government are tied up with the projected committed expenditure of the Government, it would create a negative fiscal space for the meritorious expenditure of the Government in future.

Fiscal space assumes significance in the context of the finances of sub-national Governments, since they have greater expenditure responsibilities than the Central Government. The fiscal space at the sub-national level can be created in a number of ways such as increasing tax rates, strengthening tax administration, cutting down low priority expenditure, implementing expenditure programmes efficiently, raising additional borrowings and acquiring higher transfers from the Central Government (Heller, 2005). Though cutting down low priority expenditure is a desirable way of creating fiscal space, there is a need to ensure that in doing so a particular sector is not weakened, so as to avoid the costs of rebuilding the entire sector in future. Similarly, if fiscal space is created through additional borrowings, it should be assessed in terms of its impact on the Government's capacity to generate the revenue needed to service that debt.

Creation of fiscal space is critical in India in order to reap the benefits of demographic dividend in the coming decades. The Eleventh Five Year Plan document has stated that for achieving the growth target of 9 per cent, it is important to overcome the infrastructure deficit in the country. Creating fiscal space would enable the undertaking of large investment in both social and physical infrastructure sectors of the country. In India, raising the ratio of States' own tax to Gross State Domestic Product (GSDP) would be a possible way of creating fiscal space at the sub-national level. Initiating measures aimed at increasing tax revenue and reducing non-developmental expenditure would directly create fiscal space at the sub-national Government level in India. Apart from these, better targeting of subsidies can also create fiscal space by cutting down non-merit subsidies.

The Debt Swap Scheme (DSS) operated during 2002-05 and Debt Consolidation and Relief Facility (DCRF) recommended by the Twelfth Finance Commission have created fiscal space at the State level in India by reducing the expenditure on interest payments. It has been the endeavour of some States to create earmarked fiscal space through Special Purpose Vehicles (SPV). The States may take adequate care to assess the rate of return of the projects financed by SPVs to avoid pressure on their budgets in future. In recent years, the State Governments have also initiated some one-off measures such as sale of land and property to create fiscal space. However, if the expenditure financed by such fiscal space demands more expenditure in future, it may exert pressure on the normal budget in future. Furthermore, many State Governments have used public-private partnership (PPP) as a way to create fiscal space mainly for financing infrastructure. Through PPP, State Governments can access the private funds in a non-debt creating manner to finance the public projects.

References

1. Government of India (2007), *Eleventh Five Year Plan Document.*
2. Heller, P. S. (2005), 'Understanding Fiscal Space', *Policy Discussion Paper*, IMF.
3. IMF-World Bank (2006), *The Interim Report on Fiscal Policy for Growth and Development*, Development Committee of the Joint World Bank-IMF Board on Fiscal Policy and Growth.
4. Roy, Rathin and others (2007), 'Fiscal space for What? Analytical Issues from a Human Development Perspective', Paper presented at G-20 Workshop on Fiscal Policy, July 1-2, Istanbul.
5. Tanzi, V. (2007), 'Can Fiscal Decentralisation Create Fiscal Space?', Paper presented at the G-20 Workshop on Fiscal Policy, July 1-2, Istanbul.

Table 2.54: Expenditure Pattern of the State Governments

(Amount in Rupees crore)

Item	1990-95	1995-00	2000-05	2005-06	2006-07	2007-08	2007-08	2008-09	Percentage variation		
		Average				BE	RE	BE	Col.8/6	Col.8/7	Col.9/8
1	2	3	4	5	6	7	8	9	10	11	12
Aggregate Expenditure				5,61,682	6,57,280	7,66,620	7,87,489	8,92,783	19.8	2.7	13.4
(1+2 =3+4+5)	(15.9)	(14.9)	(17.1)	(15.7)	(15.9)	(16.3)	(16.7)	(16.8)			
1. Revenue Expenditure				4,38,034	5,05,699	5,94,760	6,06,216	6,91,409	19.9	1.9	14.1
of which:	(12.7)	(12.4)	(13.4)	(12.2)	(12.2)	(12.6)	(12.9)	(13.0)			
Interest Payments				84,024	93,164	1,02,675	1,02,878	1,08,383	10.4	0.2	5.4
	(1.7)	(2.0)	(2.7)	(2.3)	(2.2)	(2.2)	(2.2)	(2.0)			
2. Capital Expenditure				1,23,648	1,51,582	1,71,859	1,81,273	2,01,374	19.6	5.5	11.1
of which:	(3.2)	(2.5)	(3.6)	(3.5)	(3.7)	(3.6)	(3.8)	(3.8)			
Capital Outlay				77,559	98,063	1,18,796	1,28,331	1,45,159	30.9	8.0	13.1
	(1.5)	(1.4)	(1.6)	(2.2)	(2.4)	(2.5)	(2.7)	(2.7)			
3. Development Expenditure				3,30,044	3,92,165	4,67,695	4,93,563	5,57,116	25.9	5.5	12.9
	(10.7)	(9.4)	(9.4)	(9.2)	(9.5)	(9.9)	(10.5)	(10.5)			
4. Non-Development Expenditure				1,90,021	2,11,872	2,46,130	2,41,019	2,75,609	13.8	-2.1	14.4
	(4.3)	(4.8)	(5.9)	(5.3)	(5.1)	(5.2)	(5.1)	(5.2)			
5. Others*				41,617	53,243	52,794	52,907	60,058	-0.6	0.2	13.5
	(0.9)	(0.7)	(1.7)	(1.2)	(1.3)	(1.1)	(1.1)	(1.1)			

BE : Budget Estimates. RE: Revised Estimates.
* : Comprise Compensation and Assignments to local bodies, Grants-in-Aid and Contributions, Discharge of Internal Debt and Repayment of loans to the Centre.
Note : Figures in parentheses are percentages to GDP.
Source : Budget Documents of the State Governments.

II.4.26 The increase in revenue surplus would also be facilitated by deceleration in revenue expenditure, particularly in interest payments and pension. Capital outlay, as a ratio to GDP, would be maintained at 2.7 per cent in 2008-09 (BE) as in the previous year. It is important to note that while the development expenditure is budgeted to decelerate in 2008-09 (BE) over the previous year, non-development expenditure is budgeted to accelerate (Table 2.54). The deceleration of development expenditure is a cause for concern as the public expenditure on development heads is important for social and economic development. It is important for the State Governments to take appropriate expenditure rationalisation measures to lay emphasis on provision of core public and merit goods (Box II.15).

II.4.27 The revenue surplus, which was budgeted at 0.5 per cent of GDP in 2008-09 (BE) would finance a part of capital outlay. Market borrowings would be the major financing item of GFD (56.7 per cent) in 2008-09 (BE), followed by special securities issued to NSSF (19.8 per cent) and provident funds (11.5 per cent) (Table 2.55 and Appendix Table 32).

II.4.28 As regards resource transfer from the Centre to States, a perusal of Union Budget 2008-09 in conjunction with State Budgets reveals that States have overestimated grants from the Centre while shareable Central taxes have been underestimated during 2008-09. The flows from NSSF and loans from the Centre have also been overestimated in State Budgets for 2008-09 as compared with those announced in Union Budget 2008-09. Taking into account the data on devolution and transfers from the Centre as indicated in the Union Budget 2008-09, the States' revenue surpluses would be somewhat lower, while gross fiscal deficit would be correspondingly higher than those budgeted by the State Governments.

Box II.15
Pattern of Public Expenditure of the State Governments

According to the Indian Constitution, expenditure responsibilities relating to the social sector and economic infrastructure are largely assigned to the State Governments. Enhancing human development levels requires the States to step up their expenditure on key social services like education and health along with improving delivery mechanisms of public services to obtain the desired outcomes. Within the framework of Fiscal Responsibility Legislation (FRL), there are budgetary constraints on substantially raising public expenditure financed by deficit or borrowings. This necessitated the adoption of a revenue-led strategy with measures of expenditure rationalisation to gain fiscal space in undertaking social and other development expenditures by the State governments.

An assessment of the consolidated expenditure pattern of the State Governments reveals that their average total expenditure (revenue and capital) as a ratio to GDP declined significantly from 15.9 per cent during 1991-95 to 14.9 per cent during 1996-2000, reflecting decline in both revenue and capital components (Table A). The ratio improved to 17.1 per cent during 2001-05, but declined to 15.9 per cent in 2006-07. In contrast to the compression of aggregate expenditure and revenue receipts in the second half of the 1990s which led to the deterioration of State finances, the fiscal consolidation under the FRL framework in the current decade brought about an increase in revenue receipts and curtailment of revenue expenditure. The resultant improvement in the revenue balances of the States facilitated some rise in capital expenditure relative to GDP.

Given the limitation in increasing public expenditure, the State Governments have been setting up Expenditure Reform Commissions and undertaking several measures in the direction of expenditure rationalisation. In view of the predominance of non-development components in the State Governments' expenditure, however, the expenditure reform has remained a challenge at the sub-national level. With the rising level of fiscal deficits, interest payments constituted a significant proportion of the expenditure of the State Governments, rising from 1.7 per cent of GDP during 1991-95 to 2.7 per cent of GDP during 2001-05. A positive feature in recent years was the measures taken towards reducing fiscal deficit under the fiscal consolidation process and restructuring of the State Government liabilities, which facilitated reduction in the ratio of interest payments to GDP. After touching a peak of 2.9 per cent of GDP in 2003-04, interest payments declined to 2.2 per cent of GDP in 2006-07, primarily due to the Debt Swap Scheme (2002-05) and Debt Consolidation and Relief Facility recommended by the Twelfth Finance Commission. Second, the rise of pension obligations, another important non-discretionary component, from 0.6 per cent of GDP during 1991-95 to 1.2 per cent during 2001-05 necessitated the introduction of the New Pension Scheme (NPS) based on defined contribution basis by 19 State Governments. This tended to stabilise the pension obligations. Third, the expenditure on administrative services has been relatively stable in view of policy to arrest the growth of Government personnel since the early 1990s.

Table A: Trends in Expenditure by State Governments

(Per cent to GDP)

Item	1990-91 to 1994-95 (Average)	1995-96 to 1999-00 (Average)	2000-01 to 2004-05 (Average)	2005-06	2006-07	2007-08 (RE)	2008-09 (BE)
Total Expenditure (1+2)	15.9	14.9	17.1	15.7	15.9	16.7	16.8
1. Revenue Expenditure	12.7	12.4	13.4	12.2	12.2	12.9	13.0
of which:							
(a) Interest Payments	1.7	2.0	2.7	2.3	2.2	2.2	2.0
(b) Pensions	0.6	0.8	1.2	1.1	1.1	1.2	1.2
(c) Administrative Services	1.2	1.1	1.1	1.0	0.9	1.0	1.2
2. Capital Expenditure	3.2	2.5	3.6	3.5	3.7	3.8	3.8
of which:							
(a) Capital Outlay	1.5	1.4	1.6	2.2	2.4	2.7	2.7
(b) Loans and Advances	0.9	0.6	0.5	0.4	0.3	0.4	0.3
Memo item:							
(i) Development Expenditure	10.7	9.4	9.4	9.2	9.5	10.5	10.5
(ii) Social Sector Expenditure	5.8	5.5	5.5	5.3	5.4	6.1	6.3

RE : Revised Estimates. BE : Budget Estimates.
Source: State Finances - A Study of Budgets, various years.

Thus, the expenditure for development purposes showed signs of improvement in the recent years. However, it was still lower than the levels achieved in the early 1990s. The average development expenditure (revenue and capital) as a ratio to GDP declined from 10.7 per cent during 1990-91 to 1994-95 to 9.4 per cent during 2001-05 but is budgeted to increase to 10.5 per cent in 2008-09 (BE). The average social sector expenditure (social services, rural development and food storage and warehousing), as a ratio to GDP, declined from 5.8 per cent to 5.5 per cent between 1991-95 and 2001-05, but is budgeted to increase to 6.3 per cent in 2008-09 (BE).

The ongoing pattern of expenditure by the States brings to the fore a number of issues relating to public expenditure management reforms. First, the States have to adhere to fiscal discipline (hard budget constraints) under the rule-based framework of FRL. Second, there is a need to improve allocation towards development expenditure, particularly, in view of the fiscal space being created on account of decline in debt servicing in recent years. Third, the States may reprioritise expenditure by focusing on provision of core public and merit goods. Finally, the State Governments may relate expenditures to outcomes in terms of quality, reach and the impact of government expenditures.

References

1. Schick, Allen (2007), 'Managing Public Expenditure', Paper presented at the G-20 Workshop on Fiscal Policy, July 1-2, Istanbul.
2. Sen, T. K. and K. Karmarkar (2007), 'Reprioritisation of Public Expenditure for Human Development', Working Paper No. 2, *Financing Human Development,* National Institute of Public Finance and Policy, June.

Table 2.55: Decomposition and Financing Pattern of Gross Fiscal Deficit of States

(Per cent)

Item	1990-95 Average	1995-00 Average	2000-05 Average	2005-06	2006-07	2007-08 BE	2007-08 RE	2008-09 BE
1	2	3	4	5	6	7	8	9
Decomposition (1+2+3-4)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1. Revenue Deficit	25.2	47.1	54.6	7.8	-32.1	-11.1	-20.9	-25.2
2. Capital Outlay	55.4	43.1	40.5	86.1	126.5	109.7	118.9	128.9
3. Net Lending	19.4	10.0	4.9	6.1	8.0	10.7	9.8	9.7
4. Non-debt capital receipts*	-	0.2	-	-	2.5	9.3	7.8	13.3
Financing (1 to 11)								
1. Market Borrowings	16.1	16.4	26.4	17.0	16.8	24.3	58.9	56.7
2. Loans from Centre	48.8	39.7	4.3	-	-12.2	6.0	2.9	5.9
3. Loans against Securities Issued to NSSF	-	28.9 #	40.2	81.9	72.9	49.6	9.1	19.8
4. Loans from LIC,NABARD, NCDC, SBI & Other Banks	1.8	2.9	4.0	4.5	1.0	7.3	6.2	6.0
5. Provident Fund, *etc.*	17.6	16.2	10.1	11.6	13.4	11.4	11.3	11.5
6. Reserve Funds	6.8	5.6	5.0	5.8	9.8	3.9	-8.9	1.1
7. Deposits & Advances	9.9	9.9	4.2	8.1	16.5	1.4	4.7	4.3
8. Suspense & Miscellaneous	4.3	2.8	-0.8	8.8	6.1	-1.3	-4.5	-1.6
9. Remittances	-1.4	-3.7	0.7	0.1	-0.4	-	-0.3	0.1
10. Others	0.7	1.4	4.7	-	-3.3	-1.5	-1.6	-1.4
11. Overall Surplus (-)/Deficit (+)	-4.5	3.0	1.2	-37.7	-20.7	-1.0	22.3	-2.2

BE : Budget Estimates. RE: Revised Estimates. - : Not applicable/Negligible.
* : Includes proceeds from disinvestment and sale of land.
\# : Pertains to only 1999-2000 as it was introduced from that year.
Note : "Others" include Compensation and other bonds, Loans from other institutions, Appropriation to Contingency Fund, Inter-state Settlement and Contingency Fund.
Source : Budget Documents of the State Governments.

Combined Finances for 2008-09

II.4.29 An overview of the combined budgetary position of the Central and State Governments for 2008-09 indicates that the key deficit indicators are budgeted to decline significantly, both in absolute terms and in terms of GDP (Table 2.56). A noteworthy feature of the combined budgetary position is the continued reduction witnessed in revenue deficit in the recent years including 2008-09 (BE) on account of the buildup of sizeable surplus in the revenue account of consolidated State finances and a reduction of revenue deficit of the Central Government under the rule-based FRBM framework.

Table 2.56: Measures of Deficit of the Central and State Governments

Year	Amount (Rupees crore)			Per cent to GDP		
	Gross Fiscal Deficit	Revenue Deficit	Primary Deficit	Gross Fiscal Deficit	Revenue Deficit	Primary Deficit
1	2	3	4	5	6	7
1990-91	53,580	23,871	28,585	9.4	4.2	5.0
1995-96	77,671	37,932	18,598	6.5	3.2	1.6
2000-01	1,99,852	1,38,803	75,035	9.5	6.6	3.6
2002-03	2,34,987	1,62,990	75,927	9.6	6.6	3.1
2003-04	2,34,501	1,59,408	56,928	8.5	5.8	2.1
2004-05	2,34,721	1,14,761	42,408	7.5	3.6	1.3
2005-06	2,39,560	99,312	35,583	6.7	2.8	1.0
2006-07	2,30,432	55,366	-399	5.6	1.3	0.0
2007-08 RE	2,47,831	40,959	-15,905	5.3	0.9	-0.3
2008-09 BE	2,44,460	26,758	-43,017	4.6	0.5	-0.8

BE: Budget Estimates. RE: Revised Estimates.
Note : Data in respect of the States relate to the Budgets of 28 States.

II.4.30 Revenue receipts are budgeted to increase mainly on account of increase in tax revenue (Table 2.57). The combined tax-GDP ratio is budgeted to increase to 19.2 per cent in 2008-09 from 18.5 per cent in 2007-08. On the expenditure side, the share of development expenditure in total expenditure is budgeted to improve to 56.2 per cent during 2008-09 BE from 54.4 per cent in 2007-08 RE.

II.4.31 Market borrowings are budgeted to finance a lower proportion of the combined GFD during 2008-09 than in the preceding year. While the share of state provident funds is budgeted to increase marginally, the contribution of small savings to GFD financing is budgeted to increase significantly during 2008-09 mainly due to the base effect (Table 2.58).

Table 2.57: Combined Receipts and Disbursements of the Centre and States

(Amount in Rupees crore)

Items	2007-08 RE	2008-09 BE	Variation Amount	Variation Per cent
1	2	3	4	5
Total Receipts (A+B)	13,31,711	14,88,330	1,56,619	11.8
A. Revenue Receipts (1+2)	10,55,165 (22.4)	12,08,804 (22.8)	1,53,639	14.6
1. Tax Receipts (a+b)	8,73,299 (18.5)	10,17,107 (19.2)	1,43,808	16.5
a) Direct Taxes	3,42,750 (7.3)	4,08,659 (7.7)	65,909	19.2
b) Indirect Taxes	5,30,549 (11.3)	6,08,448 (11.5)	77,899	14.7
2. Non Tax Receipts	1,81,866 (3.9)	1,91,697 (3.6)	9,831	5.4
B. Capital Receipts	2,76,546 (5.9)	2,79,526 (5.3)	2,980	1.1
Total Disbursements (C+D)	13,55,830 (28.8)	14,85,535 (28.0)	1,29,705	9.6
C. Development Expenditure	7,36,974 # (15.6)	8,34,345 (15.7)	97,371	13.2
D. Non-Development Expenditure	6,18,856 (13.1)	6,51,190 (12.3)	32,334	5.2

RE : Revised Estimates. BE: Budget Estimates.

: Including an amount of Rs.35,531 crore on account of transactions relating to transfer of the Reserve Bank's stake in SBI to the Government of India.

Note: 1. Figures in parentheses are percentages to GDP.
2. Data in respect of the States relate to the Budgets of 28 States.

Table 2.59: Combined Expenditure of the Centre and States on the Social Sector

(Amount in Rupees crore)

Items	2006-07	2007-08 BE	2007-08 RE	2008-09 BE
1	2	3	4	5
Expenditure on Social Sector *	3,25,351	3,71,877	3,87,527	4,50,151
Of which:				
Social Services	2,41,340	2,96,212	3,05,290	3,59,181
Of which:				
i) Education	1,14,744	1,33,284	1,35,679	1,60,642
ii) Medical & Public Health	52,126	65,158	66,423	75,055
Per cent of GDP				
Expenditure on Social Sector	7.8	7.9	8.2	8.5
Of which:				
Social Services	5.8	6.3	6.5	6.8
Of which:				
i) Education	2.8	2.8	2.9	3.0
ii) Medical & Public Health	1.3	1.4	1.4	1.4
Per cent of total expenditure				
Expenditure on Social Sector	29.3	28.4	28.6	30.3
Of which:				
Social Services	21.8	22.6	22.5	24.2
Of which:				
i) Education	10.3	10.2	10.0	10.8
ii) Medical & Public Health	4.7	5.0	4.9	5.1

*: Expenditure on social sector includes expenditure on social services, rural development and food subsidies.

Note: Data in respect of the States relate to the Budgets of 28 States.

Social Sector Expenditure

II.4.32 The combined social sector expenditure as a proportion to GDP is budgeted to increase by 0.3 percentage point of GDP to 8.5 per cent during 2008-09 (Table 2.59). The share of expenditure on education would constitute 44.6 per cent of social services, marginally higher than that of the preceding year.

Table 2.58: Financing of Gross Fiscal Deficit of the Centre and States

(Rupees crore)

Year	Market Borrowings	State Provident Funds	Small Savings	External Borrowings	Others	Gross Fiscal Deficit
1	2	3	4	5	6	7
2005-06	1,21,546 (50.7)	15,388 (6.4)	89,836 (37.5)	7,472 (3.1)	5,318 (2.2)	2,39,560 (100.0)
2006-07	1,27,858 (55.5)	15,188 (6.6)	63,746 (27.7)	8,472 (3.7)	15,168 (6.6)	2,30,432 (100.0)
2007-08 BE	1,37,134 (53.5)	15,659 (6.1)	57,500 (22.4)	9,111 (3.6)	36,882 (14.4)	2,56,286 (100.0)
2007-08 RE	1,74,280 (70.3)	15,193 (6.1)	8,827 (3.6)	9,970 (4.0)	39,561 (16.0)	2,47,831 (100.0)
2008-09 BE	1,62,842 (66.6)	16,301 (6.7)	28,498 (11.7)	10,989 (4.5)	25,830 (10.6)	2,44,460 (100.0)

BE: Budget Estimates. RE: Revised Estimates.

Note: 1. Figures in parentheses are percentages to GFD.
2. Data in respect of the States relate to the Budgets of 28 States.

II.4.33 To sum up, the combined finances of the Central and State Governments are budgeted to show a significant improvement during 2008-09 largely due to marked improvement in State finances. The key deficit indicators of both the Central and the State Governments during 2008-09 are budgeted to be lower than a year ago on account of the expected surpluses in the revenue accounts of several State Governments. The fiscal consolidation process is envisaged to be carried forward through an increase in tax-GDP ratio, aided by the sustained economic growth and stable tax environment. However, implementation of the Sixth Pay Commission recommendations, expenditures under the farm debt waiver scheme, and the need for enhanced oil, fertiliser and food subsidies will give rise to renewed fiscal pressures.

V. FINANCIAL MARKETS

II.5.1 Global financial markets remained turbulent during most part of 2007-08. The turmoil, which erupted in the US sub-prime mortgage market, gradually deepened and spilled over to other market segments leading to surge in liquidity demand. Apart from taking action at individual level, central banks in advanced economies also initiated measures in a more collaborative manner to ease liquidity stress in financial markets. Concerns about slowdown in the real economy propelled a broad-based re-pricing of growth risk by the end of 2007. Elevated inflationary pressures in many economies reflected historical peaks in crude oil prices and higher commodity prices. Equity markets in advanced economies declined during most of the year, while those in emerging market economies (EMEs) declined sharply from January 2008. Long-term government bond yields in advanced economies softened, reflecting flight to safety by investors and easing of monetary policy in the US. In the currency markets, the US dollar depreciated against major currencies.

II.5.2 Financial markets in India remained relatively unaffected by the turbulence overseas during 2007-08, except for the equity market which witnessed occasional bouts of volatility, especially beginning the second week of January 2008 in tandem with trends in major international equity markets. For the year as a whole, however, the equity market registered positive gains. Brief spells of volatility were also observed in the money market on account of variations in capital flows and cash balances of the Central Government with the Reserve Bank. Movements in interest rates in the domestic money market reflected mainly the impact of changes in liquidity conditions with the banking system. After the withdrawal of the ceiling of Rs. 3,000 crore on reverse repo acceptances under the liquidity adjustment facility (LAF) from August 6, 2007, interest rates in the money market mostly moved within the reverse repo and repo rates corridor during the remaining part of the year. Interest rates in the collateralised segments of the money market remained below the call rate during the year. In the foreign exchange market, the Indian rupee generally exhibited two-way movements. Yields in the Government securities market eased during most part of the year (Table 2.60). Deposit rates of scheduled commercial banks softened, particularly at the longer end of the maturities.

INTERNATIONAL FINANCIAL MARKETS

II.5.3 International financial markets witnessed heightened uncertainties and turbulence during 2007-08 triggered by the crisis in the US sub-prime mortgage market in August 2007. The crisis occurred in the backdrop of an exceptional boom in credit growth and leverage in the financial system, fuelled by a long period of benign economic and financial conditions, including historically low real interest rates, low financial market volatility and abundant liquidity. Investor appetite for high returns in a low interest rate environment and a general feeling of complacency encouraged market participants to undertake increasingly higher risks. This stimulated further financial innovations for unbundling and distributing risks through financial markets and boosted demand for a range of high yielding and complex financial products such as asset-backed securities (ABSs), collateralised debt obligations (CDOs) and credit default swaps (CDSs). Banks and other financial institutions gave substantial impetus to this process by establishing off-balance sheet funding. Both the banks and rating agencies misjudged the liquidity and concentration risks involved in these products. According to the IMF's assessment in April 2008[14], the recent financial market turbulence has developed into the largest financial shock since the Great Depression, inflicting heavy damage on markets and institutions at the core of the financial system.

II.5.4 The sequence of the recent financial market developments could be broadly classified into five phases. The first phase, from mid-2007 to end-September 2007, represents the genesis of the turbulence and initial actions by central banks. The second phase, from end-September 2007 to mid-October 2007, corresponds to a brief spell of recovery in response to repeated central bank liquidity injections. The third phase, from mid-October 2007 to mid-March 2008, witnessed renewed concerns of turbulence as the sub-prime lending crisis gradually deepened and spilled over to markets for other assets. Concerns about slowdown in the real economy towards end-2007 also propelled a broad-based further re-pricing of risk due to emerging growth concerns. The fourth phase from mid-March 2008 to end-May 2008 witnessed a modest recovery in the international financial markets. In the fifth phase from end-May 2008 onwards news about fresh write-downs and job losses indicated renewed dislocations.

Table 2.60: Domestic Financial Markets at a Glance

Year/Month	Call Money		Govt. Securities		Foreign Exchange				Liquidity Management		Equity			
	Average Daily Turnover (Rupees crore)	Average Call Rates* (Per cent)	Average Daily Turnover in Govt. Securities (Rupees crore)+	Average 10-year Yield@ (Per cent)	Average Daily Inter-bank Turnover (US $ million)	Average Exchange Rate (Rupees per US $)	RBI's net Foreign Currency Sales (-)/ Purchases(+) (US $ million)	Average 3-month Forward Premia (Per cent)	Average MSS Outstanding (Rupees crore)#	Average Daily LAF Outstanding (Rupees crore)	Average Daily BSE Turnover (Rupees crore)	Average Daily NSE Turnover (Rupees crore)	Average BSE Sensex**	Average S & P CNX Nifty**
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2005-06	**17,979**	**5.60**	**3,643**	**7.12**	**12,738**	**44.27**	**8,143 ##**	**1.60**	**58,792**	**10,986**	**3,248**	**6,253**	**8280**	**2513**
2006-07	**21,725**	**7.22**	**4,863**	**7.78**	**18,719**	**45.28**	**26,824 ##**	**2.14**	**37,698**	**21,973**	**3,832**	**7,812**	**12277**	**3572**
2007-08	**21,393**	**6.07**	**8,104**	**7.91**	**33,746P**	**40.24**	**78,203 ##**	**2.16**	**1,28,684**	**4,677**	**6,335**	**14,148**	**16569**	**4897**
Jan 2007	22,360	8.18	4,822	7.71	21,171	44.33	2,830	4.22	39,553	-10,738	4,380	8,757	13984	4037
Feb 2007	23,254	7.16	4,386	7.90	20,298	44.16	11,862	3.71	40,827	648	4,676	9,483	14143	4084
Mar 2007	23,217	14.07	2,991	8.00	25,992	44.03	2,307	4.51	52,944	-11,858	3,716	7,998	12858	3731
Apr 2007	29,689	8.33	4,636	8.10	29,311	42.15	2,055	6.91	71,468	-8,937	3,935	8,428	13478	3947
May 2007	20,476	6.96	4,442	8.15	25,569	40.78	4,426	4.58	83,779	-6,397	4,706	9,885	14156	4184
Jun 2007	16,826	2.42	6,250	8.20	30,538	40.77	3,192	2.59	83,049	1,689	4,536	9,221	14334	4222
Jul 2007	16,581	0.73	13,273	7.94	32,586	40.41	11,428	1.12	82,996	2,230	5,684	12,147	15253	4474
Aug 2007	23,603	6.31	6,882	7.95	31,994	40.82	1,815	1.59	1,00,454	21,729	4,820	10,511	14779	4301
Sep 2007	21,991	6.41	5,859	7.92	36,768	40.34	11,867	1.45	1,17,674	16,558	6,157	13,302	16046	4660
Oct 2007	18,549	6.03	5,890	7.92	39,452P	39.51	12,544	1.12	1,58,907	36,665	9,049	20,709	18500	5457
Nov 2007	20,146	6.98	4,560	7.94	30,677P	39.44	7,827	1.40	1,75,952	-2,742	7,756	18,837	19260	5749
Dec 2007	16,249	7.50	7,704	7.91	31,547P	39.44	2,731	1.64	1,64,606	-10,804	8,606	19,283	19827	5964
Jan 2008	27,531	6.69	19,182	7.61	38,008P	39.37	13,625	2.07	1,59,866	15,692	8,071	19,441	19326	5756
Feb 2008	22,716	7.06	12,693	7.57	40,441P	39.73	3,884	0.24	1,75,166	-1,294	5,808	13,342	17728	5202
Mar 2008	22,364	7.37	5,881	7.69	38,617P	40.36	2,809	1.25	1,70,285	-8,271	6,166	14,056	15838	4770
Apr 2008	19,516	6.11	6,657	8.10	36,710P	40.02	4,325	2.68	1,70,726	26,359	5,773	13,561	16291	4902
May 2008	19,481	6.62	6,780	8.04	31,868P	42.13	148	2.45	1,75,565	11,841	6,084	13,896	16946	5029
Jun 2008	21,707	7.75	6,835	8.41	38,108P	42.82	-5,229	3.78	1,74,433	-8,622	5,410	12,592	14997	4464
Jul 2008 (P)	24,736	8.76	5,474	9.19	–	42.84	–	6.04	1,72,169	-27,961	5,388	12,862	13717	4125

* : Average of daily weighted call money borrowing rates. + : Average of daily outright turnover in Central Government dated securities.
@ : Average of daily closing rates. # : Average of weekly outstanding MSS. ** : Average of daily closing indices.
: Cumulative for the financial year. LAF : Liquidity Adjustment Facility. MSS : Market Stabilisation Scheme.
BSE : Bombay Stock Exchange Limited. NSE : National Stock Exchange of India Limited . P : Provisional - : Not available.
Note : In column 11, (-) indicates injection of liquidity, while (+) indicates absorption of liquidity.

[14] World Economic Outlook, and Global Financial Stability Report, International Monetary Fund, April 2008.

II.5.5 Delinquency rates on sub-prime mortgages (residential loans extended to individuals with poor credit history) started rising markedly after mid-2005. These losses were aggravated by a sharp fall in financial market liquidity as investors became reluctant to invest in such products. These events resulted in a tightening in underwriting standards, with fewer households qualifying for sub-prime loans. Losses on mortgage exposures worsened following adverse developments in the US housing market. Many issuers of asset-backed commercial paper (ABCP) programmes found it extremely difficult to roll over the maturing asset backed paper into new longer-term paper. The uncertainty over financial system exposures spread to banks and hedge funds outside the US as they disclosed their exposures to the structured products with sub-prime mortgages as underlying securities. The rating agencies also announced that they would be downgrading asset backed securities with underlying pools of sub-prime mortgages.

II.5.6 As the activity in ABCP dwindled, concerns about banks being forced to take ABCP exposures on to their balance sheets generated apprehensions about an impending credit crunch. Inability of commercial paper issuing vehicles to finance at longer maturities induced them to seek liquidity needs from their sponsor banks, which, in turn, prompted banks to hoard liquidity. The uncertainty about the quality of counter-party assets also aggravated the situation. The disturbances, thus, spilled over into the short-term money markets, causing steep increases in overnight interest rates in major economies in August 2007 as banks sought to conserve their own liquidity in the face of pressures to absorb assets from off-balance-sheet vehicles for which they were no longer able to obtain funding and uncertainty about the size and distribution of banks' losses on holding of sub-prime securities and other structure credits. The UK witnessed some of the sharpest increases in the inter-bank rates as liquidity requirements at the mortgage lender Northern Rock became more pronounced eventually triggering a bank run. The government bond yields in industrialised countries declined sharply as markets sold off and investors retreated from risky assets.

II.5.7 Central banks in the US and other affected economies were, therefore, required to inject liquidity in August 2007 to stabilise inter-bank markets. Open market operations of increased size and maturity were undertaken by the Bank of England, the European Central Bank (ECB) and the US Federal Reserve System. The types of securities against which banks could borrow were broadened by the US Fed and the ECB to include mortgage backed securities. The US Fed also decided to accept ABCPs as collateral. On August 16, 2007, the US Federal Open Market Committee (FOMC) lowered its discount rate by 50 basis points, bringing in some calmness in markets. The Bank of England provided emergency liquidity assistance to Northern Rock bank. The US FOMC, at its meeting held on September 18, 2007, decided to cut the fed funds rate target by 50 basis points (bps) from 5.25 per cent to 4.75 per cent and correspondingly the federal discount rate from 5.75 per cent to 5.25 per cent. While the primary concern of the FOMC till August 2007 was the existence of inflationary pressures, the risks to economic growth were indicated an added concern in its September 18, 2007 statement.

II.5.8 In the second phase, the credit markets recovered briefly in early October 2007 as a consequence of successive central bank liquidity injections into the inter-bank money markets and lower policy rates in the US. In the third phase, renewed concerns about the uncertainty in the US housing market and direct and indirect exposures to associated economic and financial risks from mid-October 2007 led to widening of credit spreads. Mirroring the developments in the US, credit spreads widened in the Euro area. Market conditions weakened for structured instruments, reflecting the deteriorating asset quality and uncertainties about valuation of structured credit products. This also reflected the worsening of sentiment in the money market beginning mid-October 2007 as liquidity conditions became tight leading to rise in inter-bank rates. The swap spreads between three-month inter-bank interest rates and overnight index swaps rose sharply, reflecting greater preference for liquidity and rising counterparty risk premia. Spreads also increased sharply across other related market segments, including securities backed by credit cards, auto loans, student loans, and commercial mortgages, as a result of concerns about rising default rates, excessive leverage, and questionable securitisation techniques. Market participants evinced keen interest in government paper. Bond yields also fell in anticipation of weakening of economic activity and expectations of further monetary policy easing in the US.

II.5.9 The US Federal Reserve Board reduced its fed funds rate target further by 25 basis points each on October 31, 2007 and December 11, 2007 to improve liquidity. The Bank of England and the Bank of Canada also reduced their policy rates in December 2007. In the situation of heightened tensions and serious impairment of functioning of the money markets, five central banks, *viz*., the Bank of Canada, the Bank of England, the ECB, the Federal Reserve and the Swiss National Bank (SNB) announced measures on December 12, 2007 in a collaborative manner to address elevated pressures. Actions taken by the Federal Reserve included the establishment of Term Auction Facility (TAF) and the establishment of foreign exchange swap lines with the ECB and the SNB. The TAF allowed a potentially much larger pool of banks to bid for funds direct from the Fed. The goal of the TAF was to reduce the incentive for banks to hold cash and increase their willingness to provide credits to households and firms. The ECB announced that the Eurosystem would conduct two US dollar liquidity-providing operations, in connection with the US dollar TAF, against ECB-eligible collateral for a maturity of 28 and 35 days. The Bank of England expanded the amount of reserves offered at three months maturity in its long-term repo open market operations scheduled on December 18, 2007 and January 15, 2008. It also widened the range of collateral accepted for funds advanced at this maturity. The Bank of Canada announced that it would enter into term purchase and resale agreements extending over the calendar year-end. The UK Government extended guarantees to depositors of Northern Rock to avoid contagion in the banking system. The Northern Rock was also provided a large loan by the Bank of England.

II.5.10 Since January 2008, evidence of an imminent slowdown in the real economy accumulated leading to a broad-based re-pricing of risk arising from growth concerns. In the wake of further worsening of the baseline outlook for real activity in 2008 and increasing downside risks to growth, the US Fed reduced the fed funds rate target sharply by 75 basis points to 3.50 per cent on January 22, 2008 and further by 50 basis points to 3.00 per cent on January 30, 2008, taking the total reduction to 225 basis points beginning September 18, 2007.

II.5.11 Weak growth in the US manufacturing sector, adverse labour market conditions, and uncertainty about the ability of the financial system to provide and allocate credit deteriorated the sentiment in the credit market further. Expectations of downgrading of monoline financial guarantees further affected market sentiment. Thus, global credit markets witnessed further volatility and spreads rose sharply across the board as further write-offs by major financial institutions and adverse news from the US housing sector aggravated the concerns of further weakening of the US economy.

II.5.12 Other segments of the financial market also witnessed heightened volatility, reflecting nervousness about the feedback effect between market developments and economic outlook. Currency markets and equity markets remained volatile in February 2008, reflecting spill-over of risks from the credit market to these segments and indications of further slowdown of the US economy. Government bond yields declined sharply, and investment in commodity markets escalated as investors sought alternative asset classes. The news of additional monoline downgrades, related recapitalisations and restructuring plans and increased loss estimates for exposures similar to those of the monolines, and renewed concerns about unwinds and structured instruments added further volatility to the financial markets. The equity markets declined in the US, Europe, Japan and other advanced economies. The equity markets in the EMEs, which had shown some resilience, witnessed heightened volatility from January 2008. Government bond yields declined further consequent to the decline in the equity markets and increased flows towards the government securities market. Softening of yields was also in anticipation of further monetary policy easing in the US. The US Federal Reserve announced on March 14, 2008 to provide emergency funding to Bear Stearns, an investment bank. As per the arrangement, the New York Fed was to fund the investment bank through its discount window by passing funds to JPMorgan bank, which set up a secured loan facility with Bear Stearns. In order to foster market liquidity and to promote moderate growth over time and to mitigate the risks to economic activity, the US Fed reduced the fed funds rate target sharply by 75 basis points to 2.25 per cent on March 18, 2008, and further by 25 basis points to 2.0 per cent on April 29-30, 2008 taking the total reduction to 325 basis points beginning September 18, 2007.

II.5.13 The fourth phase between mid-March 2008 and end-May 2008 witnessed a modest improvement in financial market conditions. Markets witnessed a cautious return of investor risk tolerance in the credit markets by end-May 2008 from mid-March 2008. As a result, credit markets recovered with narrowing down of spreads and investor interest in equity markets revived temporarily. In sharp contrast to these favourable developments, inter-bank money markets, however, failed to recover as liquidity demand remained elevated.

II.5.14 Inter-bank money markets continued to show signs of stress during March-May 2008 as spreads between LIBOR rates and overnight index swap rates increased in all the three major markets, *viz.,* the US, the UK and the Euro area. Central banks continued to work together to improve liquidity conditions in financial markets. In view of the persistent liquidity pressures in some term funding markets, the ECB, the US Federal Reserve, and the SNB announced an expansion of their liquidity measures in May 2008. On May 2, 2008, the US Federal Reserve announced an increase in the amounts auctioned to eligible depository institutions under its bi-weekly TAF from US$ 50 billion to US$ 75 billion, beginning with the auction on May 5, 2008. In conjunction with the increase in the size of the TAF, the US FOMC authorised further increases in its existing temporary reciprocal currency arrangements with the ECB and the SNB. These arrangements provided US dollars up to US$ 50 billion and US$ 12 billion to the ECB and the SNB, respectively, representing increases of US$ 20 billion and US$ 6 billion over December 12, 2007. The Governing Council of the ECB decided, in conjunction with the US Federal Reserve and in the context of the TAF, to increase the amount of US dollar liquidity provided to the counterparties of the Eurosystem to US$ 25 billion in each bi-weekly auction. The SNB decided to increase the frequency and amount of US dollar repo auctions. Accordingly, the SNB decided to hold its US dollar auctions on a 14-day basis. The total amount of liquidity made available was increased from US$ 6 billion to a maximum of US$ 12 billion. The wider pool of collateral promoted improved financing conditions in a broader range of financial markets.

II.5.15 Credit markets were buoyed by a cautious return of risk tolerance, with spreads recovering from the very wide levels witnessed in the first quarter of 2008. Market liquidity improved, allowing for better price differentiation across instruments. The stabilisation of financial markets and the emergence of a somewhat less pessimistic economic outlook also contributed to a turnaround in the equity markets till end-May 2008. Government bond yields rose mirroring the developments in the credit and equity markets. Growing perceptions among investors that the impact from the financial turmoil on real economic activity might turn out to be less severe than had been anticipated also improved investor confidence. On July 8, 2008, the Bank of Canada indicated that it would withdraw liquidity from the system in view of improvement in funding conditions witnessed since end-April 2008.

II.5.16 Financial markets, however, came under stress again in June 2008 and early-July 2008 as concerns mounted about the losses and longer-term profitability of two US mortgage companies, *viz*., Fannie Mae and Freddie Mac. Equity markets declined since May 2008 reflecting edging up of inflation across the developed and EMEs as well as surge in crude oil prices to new peaks. In view of uncertainty about inflation outlook remaining high, the US Fed decided to keep the fed funds rate target unchanged in its meeting held on June 25, 2008 and August 5, 2008. In order to further enhance the effectiveness of its existing liquidity facilities, the US Federal Reserve announced the following steps on July 30, 2008: (i) extension of the Primary Dealer Credit Facility (PDCF) and the TSLF through January 30, 2009; (ii) introduction of auctions of options on US$ 50 billion of draws on the TSLF; (iii) introduction of 84-day TAF loans as a complement to 28-day TAF loans; and (iv) increase in the Federal Reserve's swap line with the ECB to US$ 55 billion from US$ 50 billion in May 2008. In association with this change, the ECB and the SNB also adapted the maturity of their operations. Equity markets recovered somewhat towards end-July 2008 reflecting decline in the crude oil prices.

II.5.17 An important lesson emerging from the recent financial market turbulence is that the financial system needs to be strengthened with an array of regulatory changes such as strengthening of capital and liquidity norms; stronger risk management practices; closer supervision and management of firm-wide risks; and greater transparency and resilience of the financial infrastructure. Private investors and other market participants have also crucial roles to play in strengthening the financial system. The recent episode of financial distress, however, raises several issues about financial regulation and the appropriate role of the lender of last resort. While playing the role of lender of last resort, the central bank needs to ensure that appropriate incentives are in place to discourage excessive risk-taking and the under-pricing of risk so that greater crisis in the future could be avoided. As in the case of Bank of England, it maintained the principle of penalty rate while providing loan to the Northern Rock.

II.5.18 In strong contrast to earlier periods of global financial disruption, the direct spillovers to emerging and developing economies have been largely contained so far. Emerging Asia, in particular, was not severely affected by the recent financial market turbulence. However, volatility in Asian equity markets increased markedly and credit spreads widened. Furthermore, growth in the Asian economies is likely to be trimmed by the downturn in the US economy. Notwithstanding these adverse developments, economic growth in Asia has held up well due to a host of positive factors. First, the macroeconomic fundamentals are much healthier than they were 10 years ago, *i.e.*, during 1997 south-east Asian crisis as reflected in the improved sovereign credit ratings of the countries. Many Asian countries have cut back domestic spending, reduced fiscal deficits, and reformed their economies. The development of local currency financial instruments has helped reduce the currency mismatches that underlay the Asian financial crisis. Central banks have also improved their management of capital flows, mitigating the risk of exchange rate overvaluation, credit booms, and asset bubbles. Second, corporate balance sheets in Asia have improved as debt-to-equity ratios have declined sharply and foreign currency borrowing is no longer a main source of funding for the corporates in most countries. Third, most Asian countries have strengthened their external positions. The current account in most countries is in surplus and the foreign exchange reserves have increased sharply. Exports are also well diversified. Reflecting the strong external positions, the selling pressures on Asian currencies remained muted despite significant portfolio outflows from Asian markets and the unwinding of carry trades that occurred during the sub-prime crisis. Fourth, in response to increases in property prices, many Asian countries have taken measures to cool property markets in recent years whenever prices threatened to become a bubble. As a result, property price crashes in the wake of slowing economic growth and financial market turmoil have been less of a risk.

II.5.19 Recent sub-prime lending crisis raises several issues and concerns from the perspective of smooth functioning of financial markets. (Box II.16).

Box II.16
The Sub-prime Lending Crisis: Issues for Financial Markets

The sub-prime lending crisis has brought the issue of financial market stability to the fore of public policy. It has posed a major dilemma for central banks as to the relative importance of financial stability as an objective of monetary policy *vis-à-vis* the more traditional objective of ensuring price stability. In the wake of the sub-prime crisis, inadequacies in supervisory and regulatory systems were clearly evident. Consequently, financial markets had to contend with many unconventional measures initiated by several central banks in order to tide over the crisis.

There are several issues which need to be carefully examined from the perspective of financial markets. First, the sharp repricing of risk that began in the middle of 2007, which had the under-pricing continued, could have substantially escalated the eventual adjustment costs that global financial markets would have to bear (Mohan, 2007a). Second, the simultaneous evaporation of market liquidity and funding liquidity was exacerbated by the rising uncertainties in the valuations of complex products and in the location of risks in the system. Third, banks did not prove immune to the turmoil in credit markets, particularly in the wake of the shift from the originate-and-hold banking model to the originate-and-distribute financial business model that accelerated in recent years (Mohan, 2007b). Fourth, the sheer intensity and speed with which the turmoil hit the banks was evident from the severe dislocations in the inter-bank market. Market participants and policymakers alike had seriously underestimated the impact of potential tensions in financial markets on the involuntary re-intermediation pressures that would affect banks. Fifth, the major role played by special investment vehicles (SIVs), which had experienced rapid growth in recent years, was hardly on the radar screen of authorities and observers. As a result, the potential liquidity demands that could fall back on the banks or the degree of leverage embedded in the global financial system was largely underestimated. Sixth, as the process of deleveraging is slow, particularly in the credit market, asset price valuation becomes extremely difficult in a stressed market. Seventh, the domino effect created in terms of the cascading impact on the entire spectrum of the market was also attributable to the failure of the credit rating agencies in assessing and rating instruments properly in the asset backed commercial paper (ABCP) market (IMF, 2008). Finally, the apparent inadequacy of financial institutions' capital cushions was starkly exposed. The major efforts that are now being made by banks to strengthen their capital positions suggest that capital cushions are considered too small in the face of currently perceived risks (Knight, 2008). This is a grim reminder of how easy it is to overestimate the size of buffers in booming and exuberant times. The widespread use of securitisation facilitated this process further by dispersing risks across the system and hence encourage risk-taking, not commensurate with the size of the balance sheets of various financial entities (Geithner, 2008).

Additionally, there are some concerns relating to hedge funds and carry trade which also had a bearing on financial markets. Hedge funds are highly leveraged institutions, known to generate higher returns as compared to stock market investments. Being highly leveraged, they can lose their capital very rapidly if their assets experience a sharp drop. Hedge funds may also create excess volatility risks by making trades leading to overreaction of prices. The collapse of large hedge funds may have serious implications for financial markets and institutions having exposure to them.

Carry trades generate extraordinarily high returns but also carry a risk of large losses. Carry trades are particularly sensitive to changes in exchange rates or interest differential. In recent years, the interest rate differential in Japan and New Zealand has provided an opportunity of earning profits by borrowing in yen and buying assets in currencies of Australia and New Zealand where interest rates were higher. The risks to financial stability largely emanate from the abrupt unwinding of carry trades which may trigger sharp assets price and exchange rate realignments.

References

1. Geithner, T. (2008), “The Current Financial Challenges: Policy and Regulatory Implications”, Remarks at the Council on Foreign Relations Corporate Conference 2008, New York City.

2. International Monetary Fund (2008), *Global Financial Stability Report*, April 2008.

3. Knight, M. D. (2008), “Now You See It, Now You Don’t; the Nature of Risk and the Current Financial Turmoil”, Speech at the Ninth Annual Risk Management Convention of the Global Association of Risk Professionals, 26-28 February 2008.

4. Mohan, R. (2007a), “Recent Financial Market Developments and Implications for Monetary Policy”, *Reserve Bank of India Bulletin*, October.

5. ______ (2007b), “India’s Financial Sector Reforms: Fostering Growth While Containing Risk”, *Reserve Bank of India Bulletin,* December.

6. Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience, April 2008.

Short-term Interest Rates

II.5.20 Short-term interest rates in 2007-08 witnessed a mixed trend. These declined in the US, and in the UK from December 2007, reflecting monetary easing. On the other hand, short-term interest rates increased in other advanced economies such as the Euro area and Sweden as central banks in these countries raised their policy rates. In the EMEs, short-term interest rates also witnessed a mixed trend during 2007-08, firming up in Argentina, China, South Korea and the Philippines, while softening in Hong Kong, Brazil and Thailand (Table 2.61).

II.5.21 During 2008-09 so far (up to August 13, 2008), short-term interest rates in advanced economies moved broadly in tandem with the policy rates. In the US, short-term interest rates declined. The US Fed kept its fed funds rate target unchanged at 2.0 per cent in June and August 2008 after reducing it by 25 basis points on April 29-30, 2008. In the UK, short-term interest rates declined, reflecting cut in policy rate in April 2008. On the other hand, short-term interest rates increased in the Euro area reflecting increase in the key policy rates on July 3, 2008. In the EMEs, short-term interest rates generally witnessed an uptrend, firming up in Argentina, Brazil, Hong Kong, Malaysia, South Korea and Thailand. The only exceptions were China and the Philippines.

Table 2.61 : Short-term Interest Rates

(Per cent)

Region/Country	At End of			
	March 2006	March 2007	March 2008	August 2008*
1	2	3	4	5
Advanced Economies				
Euro area	2.80	3.91	4.72	4.97
Japan	0.04	0.57	0.75	0.75
Sweden	1.99	3.21	4.11	4.26
UK	4.58	5.55	6.01	5.76
US	4.77	5.23	2.26	2.14
Emerging Market Economies				
Argentina	9.63	9.63	10.44	13.88
Brazil	16.54	12.68	11.18	12.91
China	2.40	2.86	4.50	4.32
Hong Kong	4.47	4.17	1.83	2.24
India	**6.11**	**7.98**	**7.23**	**9.15**
Malaysia	3.51	3.64	3.62	3.70
Philippines	7.38	5.31	6.44	4.94
South Korea	4.26	4.94	5.32	5.78
Thailand	5.10	4.45	3.25	3.78

*: As on August 13, 2008.

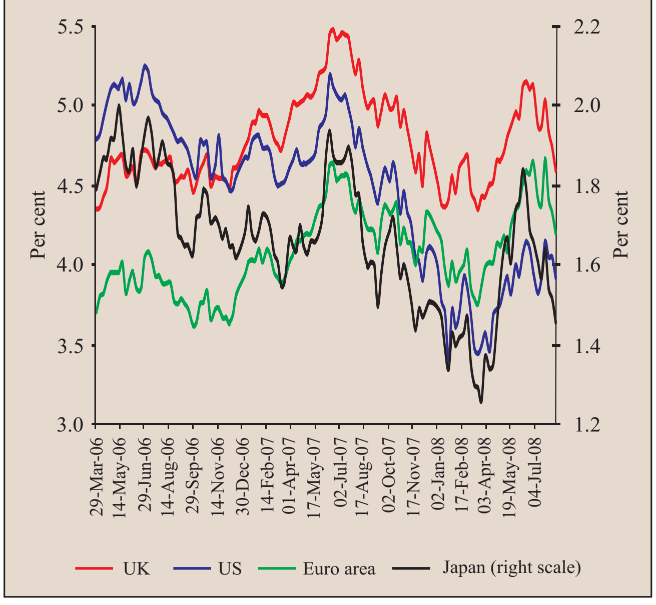
Note : Data for India refer to 91-day Treasury Bills rate and for other countries 3-month money market rates.

Source : The Economist.

Government Bond Yields

II.5.22 During the first quarter of 2007-08, government bond yields increased in major advanced economies, reflecting higher short-term rates and upward revision in growth expectations. Long-term government bond yields, however, softened in the subsequent part of the year, reflecting lower investor appetite for riskier assets in the wake of deteriorating housing market, turbulence in the credit market and monetary policy easing in the US (Chart II.16). The 10-year government bond yield in the US increased from 4.65 per cent on March 30, 2007 to a high of 5.26 per cent on June 12, 2007 but declined to 3.45 per cent on March 31, 2008. On the whole, during 2007-08, 10-year yield declined by 120 basis points in the US. Yield on the 10-year government paper in other advanced economies also declined (49 basis points in the UK, 41 basis points in Japan and 16 basis points in the Euro area). During 2008-09 so far (up to August 13, 2008), long-term government bond yields in major advanced economies, which had bottomed out at end-March 2008, hardened, reflecting reduced safe haven demand for government securities and a reassessment among investors of the need for monetary easing.

Chart II.16: 10-year Government Bond Yields



Equity Markets

II.5.23 Equity markets in the advanced economies declined during 2007-08, reflecting concerns over recession in the US economy on account of contraction in the US service industry, weak earnings growth reported by some of the leading US companies, home foreclosures climbing to record high levels and lacklustre retail sales in the US (Table 2.62). Equity markets bottomed out around January 22, 2008 following the unanticipated reduction in US short-term interest rates and news of possible capital injections into the monoline insurers. Equity markets rebounded somewhat in late January 2008, but much of these gains petered out in February-March 2008, reflecting weakening of the growth prospects. The MSCI developed markets index declined by 17.0 per cent between end-October 2007 and January 23, 2008 and was still down about 14.0 per cent between end-October 2007 and end-March 2008. On the other hand, equity markets in the EMEs recorded further gains during most part of 2007-08 amidst sharp intermittent corrections, reflecting healthy corporate earnings, strong portfolio flows and buoyant merger and acquisition activity. After remaining resilient, however, equity markets in the EMEs witnessed pronounced weaknesses from January 2008 as risk tolerance and earning expectations were under pressure. The MSCI emerging markets indices declined by 21.1 per cent between end-October 2007 and January 23, 2008 and was still down by 17.4 per cent between end-October 2007 and end-March 2008. Global equity markets declined further during 2008-09 reflecting signs of economic slowdown, sharp rise in inflation rate and high international crude oil prices.

Table 2.62: International Stock Markets

Country (Index)	Percentage variation (year-on-year)		P/E Ratio		Coefficient of variation
	End-March 2007	End - March 2008	End-March 2007	End-March 2008	2007-08
1	2	3	4	5	6
Emerging Markets					
Indonesia (Jakarta Composite)	38.4	33.7	19.1	17.0	11.5
Brazil (Bovespa)	20.7	33.1	14.1	14.1	9.3
Thailand (SET Composite)	-8.1	21.3	10.6	16.6	6.9
India (BSE Sensex)	**15.9**	**19.7**	**20.5**	**21.6**	**13.7**
South Korea (KOSPI)	6.8	17.3	13.0	14.2	8.5
China	145.2	9.1	34.2	28.1	15.5
Taiwan (Taiwan Index)	19.2	8.7	17.1	18.4	6.8
Russia (RTS)	34.9	6.1	13.0	12.0	7.1
Malaysia (KLSE Composite)	34.6	0.1	17.0	13.7	4.7
Singapore (Straits Times)	28.2	-4.9	14.0	10.8	7.1
Developed Markets					
US (Dow Jones Industrial Average)	11.2	-0.7	16.4	15.2	4.2
US (Nasdaq Composite)	3.5	-5.9	34.6	33.7	6.0
Euro Area (FTSE Eurotop 100)	7.5	-15.7	14.8	11.2	6.9
UK (FTSE 100)	5.8	-9.6	16.7	11.5	4.9
Japan (Nikkei 225)	1.3	-27.6	23.4	14.3	11.1
Hong Kong (Hang Seng)	25.3	15.4	15.1	13.3	12.6
Memo:					
MSCI World	13.4	-5.1	-	-	4.7
MSCI emerging	17.9	18.9	-	-	9.2
MSCI Asia	18.7	18.6	-	-	10.5

- : Not available.
Source : Bloomberg.

Foreign Exchange Market

II.5.24 The US dollar depreciated against major currencies in the international market during 2007-08, reflecting the impact of the sub-prime crisis, fed funds rate cuts and lower than expected economic activity. The US dollar touched a historic low against the Euro, pound sterling and the Japanese yen in the last two quarters of 2007-08. During 2007-08, the US dollar depreciated by 15.8 per cent against the Euro, 1.5 per cent against the Pound sterling and 14.9 per cent against the Japanese yen (Table 2.63). Amongst Asian currencies, the US dollar depreciated by 9.3 per cent against the Chinese yuan, 10.2 per cent against the Thai baht; but it

Table 2.63: Appreciation (+)/Depreciation (-) of the US dollar *vis-à-vis* other Currencies

(Per cent)

Currency	End-March 2006 @	End-March 2007 @	End-March 2008 @	Aug. 11, 2008 *
1	2	3	4	5
Euro	7.1	-9.1	-15.8	5.3
Pound Sterling	8.5	-11.4	-1.5	3.5
Japanese Yen	9.4	0.2	-14.9	9.8
Chinese Yuan	-3.1	-3.4	-9.3	-2.2
Russian Rubble	-0.6	-6.1	-9.7	4.5
Turkish Lira	-2.0	3.2	-5.8	-9.9
Indian Rupee	**2.2**	**-2.5**	**-9.0**	**5.1**
Indonesian Rupiah	-4.3	0.5	1.1	0.0
Malaysian Ringgit	-3.0	-6.2	-7.8	4.0
South Korea Won	-4.7	-3.7	5.5	3.2
Thai Baht	-0.7	-9.9	-10.2	7.0
Argentine Peso	5.4	0.7	2.1	-3.8
Brazilian Real	-18.1	-6.4	-17.0	-5.4
Mexican Peso	-2.6	1.3	-3.5	-4.9
South African Rand	-0.5	17.2	11.3	-4.9

@ : Year-on-year variation. * : Variation over end-March 2008.

appreciated by 5.5 per cent against the South Korean won. The US dollar continued to depreciate during April-July 2008, reflecting lower consumer confidence in the wake of elevated global commodity prices, weaker equity markets, lower manufacturing growth, higher unemployment with downward non-farm payroll employment, lower sales of new houses in the US and selling pressure of the US dollar in the international market. The US dollar, however, appreciated from the beginning of August 2008 on the back of a rise in US home sales and diminishing expectations for Euro zone interest rate increases.

DOMESTIC FINANCIAL MARKETS

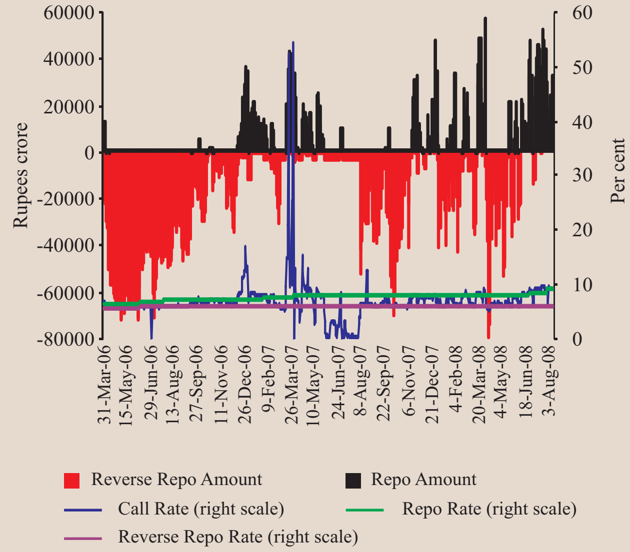
Money Market

Call/Notice Money Market

II.5.25 The money market remained largely orderly during 2007-08, barring occasional spells of volatility on account of volatility in capital flows and large changes in cash balances of the Central Government with the Reserve Bank. The money market was also affected by the imposition of the ceiling of Rs.3,000 crore on reverse repo acceptances under the liquidity adjustment facility (LAF) from March 5, 2007 to August 5, 2007. Call/ notice rates softened to below the reverse repo rate during June-July 2007, but subsequently moved back to the reverse repo and repo rate corridor after the removal of the ceiling of Rs.3,000 crore on reverse repo acceptances under the LAF from August 6, 2007 (Chart II.17 and Appendix Table 35). The call rate averaged 4.47 per cent between April 1, 2007 and August 5, 2007, and 6.89 per cent between August 6, 2007 and March 31, 2008. Over the year, as a whole, the call rate averaged 6.07 per cent, 115 basis points lower than that in 2006-07.

II.5.26 In the call/notice money market, the weighted average call/notice rates declined in April 2007 from the elevated levels observed in the second-half of March 2007 following easing of liquidity conditions, on account of reduction in the cash balances of the Central Government. Notwithstanding the continued reduction in the cash balances of the Central Government, liquidity conditions tightened from the second-half of April 2007, partly on account of a two-

Chart II.17: Liquidity Adjustment Facility and the Call Rate



stage hike in the cash reserve ratio (CRR) by 25 basis points each, announced on March 30, 2007. The CRR was placed at 6.25 per cent effective from the fortnight beginning from April 14, 2007 and at 6.50 per cent from April 28, 2007. Consequently, call/ notice money market rates edged higher and exceeded the repo rate during the second-half of April 2007 and some part of May 2007. From May 28, 2007 onwards, the liquidity conditions eased significantly, reflecting the reduction in cash balances of the Central Government and the Reserve Bank's foreign exchange operations. Amidst excess liquidity and the cap of Rs.3,000 crore on the reverse repo window of LAF imposed with effect from March 5, 2007, the call rates remained well below the reverse repo rate in June and July 2007. In fact, the call rate was placed below one per cent on a number of occasions in June and July 2007; it reached as low as 0.13 per cent on August 2, 2007.

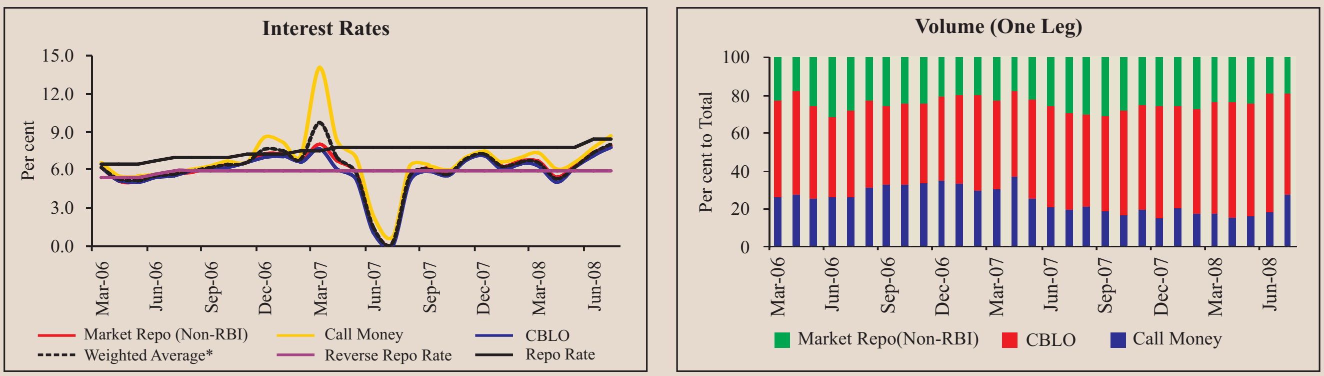
II.5.27 With the withdrawal of the ceiling of Rs.3,000 crore on the daily reverse repo window of LAF with effect from August 6, 2007, the call rate increased but remained mostly within the informal corridor of the reverse-repo and repo rates of 6.00-7.75 per cent during August, September and October 2007. In the wake of relative tightness in the liquidity conditions from the second week of November 2007, however, call/ notice money market rates edged up and hovered around the upper bound of the informal corridor. This was mainly because of festive season demand for currency, increase in Central Government cash balances with the Reserve Bank and further hike in the CRR by 50 basis points to 7.5 per cent with effect from the fortnight beginning November 10, 2007. In December 2007, the call/ notice rate continued to move around the repo rate as liquidity conditions remained tight on account of advance tax outflows.

II.5.28 Call rates declined in the first week of January 2008 on the back of improvement in liquidity conditions, partly on account of reduction in the surplus balances of the Central Government. The rates hardened during the second-half of January 2008 but remained within the informal corridor for most of the days during this month. Call rates followed the same pattern in February 2008 as that in January 2008. Call /notice money market rates edged up in the second half of March 2008 on account of quarterly advance tax outflows, but pre-emptive steps taken by the Reserve Bank, including special arrangements under the LAF to smoothen the liquidity management helped in maintaining orderly conditions in the money market.

II.5.29 Interest rates in the collateralised segments of the money market – the market repo (outside the LAF) and the collateralised borrowing and lending obligation (CBLO) – moved in tandem with call rates. The collateralised market is now the predominant segment of the money market, and it accounted for nearly 80 per cent of the total volume during 2007-08 (Chart II.18 and Table 2.64). During 2007-08, interest rates averaged 5.20 per cent, 5.50 per cent and 6.07 per cent, respectively, in CBLO, market repo and call/notice money market (6.24 per cent, 6.34 per cent and 7.22 per cent, respectively, a year ago). The weighted average rate in all the three money market segments combined together was 5.48 per cent during 2007-08 as compared with 6.57 per cent a year ago. In both the CBLO and market repo segments, mutual funds were the major lenders, while the commercial banks and primary dealers were the major borrowers. The average rates in the CBLO and market repo segments were 6.55 per cent and 6.82 per cent, respectively, during April-July 2008.

II.5.30 The call rate softened from the beginning of April 2008 following significant reduction in the surplus cash balances of the Central Government. The call/notice money rate hovered around the reverse repo rate during April 2008 and averaged 6.11 per cent. The call rate edged up somewhat and averaged 6.62 per cent during May 2008 reflecting a decline in the surplus liquidity in the banking system due to the cumulative impact of the three-stage hike in the cash reserve ratio (CRR) of 25 basis points each effective from the fortnights beginning from April 26, 2008, May 10, 2008 and May 24, 2008 to 8.25 per cent. After some easing in early June 2008, the call rate mostly remained above the repo rate from June 10, 2008 as the liquidity conditions turned tight. In the first week of July 2008, the call rate declined sharply and moved within the LAF corridor as liquidity

Chart II.18: Money Market - Interest Rate and Volume



*: Weighted average of interest rate in the call money, CBLO and market repo segments.

Table 2.64: Activity in Money Market Segments

(Rupees crore)

Year/Month	Average Daily Volume (One Leg): Call Money Market	Repo Market (Outside the LAF)	Collateralised Borrowing and Lending Obligation (CBLO)	Total (2+3+4)	Term Money Market	Commercial Paper: Outstanding	WADR (per cent)	Certificates of Deposit: Outstanding	WADR (per cent)
1	2	3	4	5	6	7	8	9	10
2005-06	**8,990**	**5,296**	**10,020**	**24,306**	**417**	**17,285**	**6.46**	**27,298**	**-**
2006-07	**10,863**	**8,419**	**16,195**	**35,477**	**506**	**21,336**	**8.08**	**64,821**	**8.24**
2007-08	**10,697**	**13,684**	**27,813**	**52,194**	**352**	**33,813**	**9.20**	**1,16,904**	**8.94**
Jan 2007	11,180	6,591	15,758	33,529	515	24,398	9.09	70,149	9.22
Feb 2007	11,627	7,794	19,063	38,484	467	21,167	10.49	72,795	9.87
Mar 2007	11,608	8,687	17,662	37,957	739	17,863	11.33	93,272	10.75
Apr 2007	14,845	7,173	18,086	40,104	440	18,759	10.52	95,980	10.55
May 2007	10,238	8,965	20,810	40,013	277	22,024	9.87	99,715	9.87
Jun 2007	8,413	10,295	20,742	39,450	308	26,256	8.93	98,337	9.37
Jul 2007	8,290	12,322	20,768	41,380	288	30,631	7.05	1,05,317	7.86
Aug 2007	11,802	16,688	26,890	55,380	319	31,784	8.30	1,09,224	8.67
Sep 2007	10,995	17,876	29,044	57,915	265	33,614	8.95	1,18,481	8.57
Oct 2007	9,275	15,300	29,579	54,154	221	42,183	7.65	1,24,232	7.91
Nov 2007	10,073	12,729	28,614	51,416	184	41,308	9.45	1,27,143	8.48
Dec 2007	8,124	13,354	30,087	51,565	509	40,243	9.27	1,23,466	8.81
Jan 2008	13,765	17,029	35,711	66,505	312	50,062	11.83	1,29,124	8.82
Feb 2008	11,358	17,682	36,007	65,047	525	40,642	9.73	1,39,160	9.94
Mar 2008	11,182	14,800	37,413	63,395	571	32,592	10.38	1,47,792	10.00
Apr 2008	9,758	14,966	38,828	63,552	374	37,584	8.85	1,50,865	8.49
May 2008	9,740	14,729	36,326	60,795	420	42,032	9.02	1,56,780	8.95
Jun 2008	10,854	11,262	35,774	57,890	253	46,847	10.03	1,63,143	9.16
Jul 2008 (P)	12,368	8,591	23,669	44,628	226	51,569	10.95	1,64,892	10.23

-: Not available. WADR: Weighted Average Discount Rate. P : Provisional.

eased mainly on account of a decline in the cash balances of the Central Government. Subsequently, the call rate increased and mostly remained above the repo rate reflecting the impact of the two-stage CRR hike of 25 basis points each (on July 5 and July 19, respectively) to 8.75 per cent and hike in the repo rate by 50 basis points to 9.0 per cent on July 29, 2008. The average call rate was 8.76 per cent during July 2008. During August 2008 so far (August 20, 2008), call rates remained mostly above the repo rate due to prevailing tight liquidity conditions. The call rate was placed at 9.56 per cent on August 20, 2008.

Certificates of Deposit

II.5.31 Scheduled commercial banks (SCBs) continued to rely on certificates of deposit (CDs) to supplement their deposit resources to fund the credit demand. The flexibility of timing and return that can be offered for attracting bulk deposits has made CDs the preferred route for mobilising resources by some banks. The outstanding amount of CDs by SCBs increased from Rs.93,272 crore at end-March 2007 to Rs.1,47,792 crore at end-March 2008 (see Table 2.64 and Appendix Table 36). The amount outstanding constituted 6.0 per cent of the aggregate deposits of CDs issuing banks at end-March 2008 (4.8 per cent at end-March 2007) with significant variations among the banks. The CDs to aggregate deposit ratio of smaller banks with a lower deposit base was higher in comparison with larger banks. The largest amount of CDs issued was for the period "181 days and above" during 2007-08. The weighted average discount rate (WADR) of CDs was 10.0 per cent at end-March 2008 as compared with 10.75 per cent at end-March 2007. The outstanding amount of CDs issued by SCBs increased to Rs. 1,64,892 crore on July 18, 2008, which accounted for 6.2 per cent of the total aggregate deposits of the 'CD-issuing' banks. The WADR of CDs stood at 10.23 per cent as on July 18, 2008.

Commercial Paper

II.5.32 The outstanding amount of commercial paper (CP) issued by corporates increased from Rs.17,863 crore at end-March 2007 to Rs.50,062 crore at end-January 2008 (see Table 2.64 and Appendix Table 37). Issuances of CP declined thereafter and the outstanding amount declined to Rs.32,592 crore at end-March 2008, reflecting seasonal year-end redemptions. The fortnightly average issuance of CP during 2007-08 was Rs.4,153 crore as compared with Rs.2,322 crore during 2006-07. The CP issuance was dominated by the prime-rated entities. The outstanding amount of CP increased to Rs.51,569 crore on July 31, 2008. The WADR on CP declined from 11.33 per cent on March 31, 2007 to 7.65 per cent at end-October 2007 but hardened to 10.38 per cent as on March 31, 2008 and further to 10.95 per cent as on July 31, 2008. The most preferred tenor of CP issuance was for period "180 days and above".

II.5.33 Leasing and finance companies continued to be the major issuers of CP followed by manufacturing companies and financial institutions (Table 2.65).

Table 2.65: Commercial Paper - Major Issuers

(Rupees crore)

Category of Issuer	End of			
	March 2006	March 2007	March 2008	July 2008
1	2	3	4	5
Leasing and Finance	9,400 (73.9)	12,594 (70.5)	24,925 (76.5)	38,754 (75.1)
Manufacturing	1,982 (15.6)	2,754 (15.4)	5,687 (17.4)	9,560 (18.6)
Financial Institutions	1,336 (10.5)	2,515 (14.1)	1,980 (6.1)	3,255 (6.3)
Total	**12,718 (100.0)**	**17,863 (100.0)**	**32,592 (100.0)**	**51,569 (100.0)**

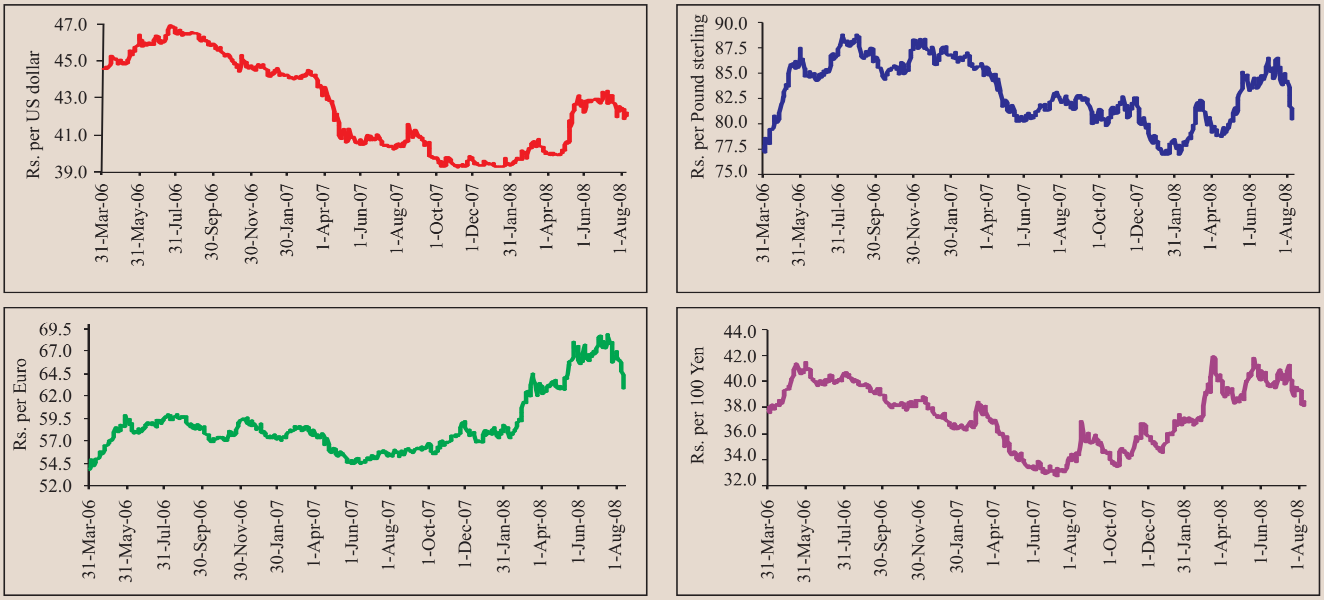
Note : Figures in parentheses are percentage shares in the total outstanding.

FOREIGN EXCHANGE MARKET

II.5.34 The Indian rupee generally exhibited two-way movements in the range of Rs.39.26-43.15 per US dollar during 2007-08 (Chart II.19). During the beginning of the year, tight liquidity conditions in the domestic money market and US dollar sales by banks led the rupee to appreciate from its level of Rs.43.60 per US dollar at end-March 2007 to Rs.40.46 per US dollar as on May 29, 2007. Thereafter, the rupee remained relatively stable till the last week of July 2007. However, foreign institutional investment (FII) outflows, bearish conditions in the Indian equity market and concerns over the sub-prime mortgage crisis in the US resulted in depreciation of the Indian rupee during the first half of August 2007 to Rs.41.58 per US dollar on August 17, 2007 from Rs.40.43 per US dollar on July 31, 2007. The exchange rate of the rupee appreciated thereafter on account of large capital inflows, interest rate cut by the US Fed, weakening of the US dollar *vis-à-vis* other major currencies and strong performance of the domestic stock markets. The rupee moved in a range of Rs.39.26-39.84 per US dollar during October 2007-January 2008. However, the rupee started depreciating against the US dollar from the beginning of February 2008 on account of FII outflows, rising crude oil prices and heavy dollar demand by oil companies. The exchange rate of the rupee was Rs.39.99 per US dollar at end-March 2008.

II.5.35 The Reserve Bank made net purchases of US$ 78.2 billion during 2007-08 as compared with US$ 26.8 billion during 2006-07 (Chart II.20 and Table 2.66). Between end-March 2007 and end-March 2008, the exchange rate of the rupee appreciated by 9.0 per cent against the US dollar over its level at end-March 2007. Over the same period, the exchange rate of the rupee appreciated by 7.6 per cent against the Pound sterling, while it depreciated by 7.8 per cent against the Euro, 7.6 per cent against the Japanese yen and 1.1 per cent against the Chinese Yuan.

Chart II.19 : Movement of Rupee *vis-a-vis* Major Currencies



II.5.36 During 2008-09 so far (up to August 20, 2008), the Indian rupee has generally depreciated, reflecting large capital outflows by FIIs (US$ 5.2 billion during the first quarter of 2008-09), increased demand for dollars by the oil companies and bearish stock market conditions. The exchange rate of the rupee was Rs.43.75 per US dollar on August 20, 2008. At this level, the Indian rupee depreciated by 8.6 per cent over its level on March 31, 2008. Over the same period, the rupee depreciated by 2.5 per cent against the Pound sterling, 2.2 per cent against

Chart II.20 : Foreign Exchange Market Intervention and Exchange Rate

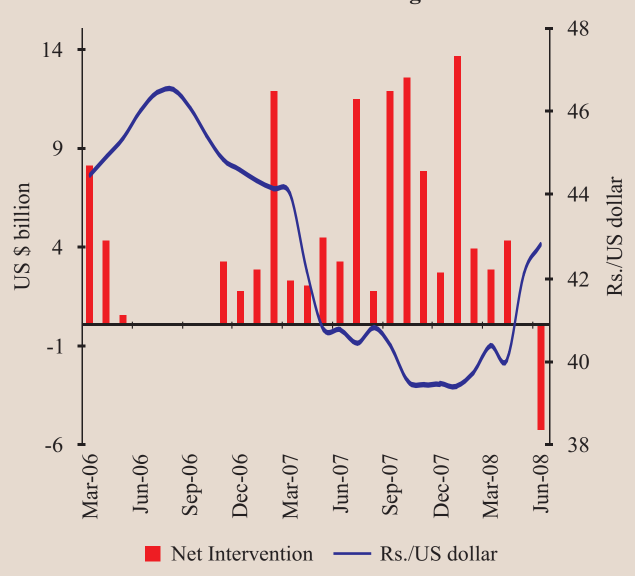


Table 2.66: Purchases and Sales of US dollar by the Reserve Bank

(US $ million)

Year/ Month	Purchase (+)	Sale (-)	Net (+/-) Purchases (+) Sales (-)	Outstanding Net Forward Sales (-)/ Purchase (+) (end of month)
1	2	3	4	5
2005-06	**15,239**	**7,096**	**(+) 8,143**	**0**
2006-07	**26,824**	**0**	**(+) 26,824**	**0**
2007-08	**79,696**	**1,493**	**(+) 78,203**	**14,735**
Jan 2007	2,830	0	(+) 2,830	0
Feb 2007	11,862	0	(+) 11,862	0
Mar 2007	2,307	0	(+) 2,307	0
Apr 2007	2,055	0	(+) 2,055	0
May 2007	4,426	0	(+) 4,426	0
Jun 2007	3,192	0	(+) 3,192	0
Jul 2007	11,428	0	(+) 11,428	0
Aug 2007	1,815	0	(+) 1,815	0
Sep 2007	11,867	0	(+) 11,867	0
Oct 2007	12,544	0	(+) 12,544	(+) 4,990
Nov 2007	7,827	0	(+) 7,827	(+) 7,553
Dec 2007	2,731	0	(+) 2,731	(+) 8,238
Jan 2008	13,625	0	(+) 13,625	(+) 16,629
Feb 2008	3,884	0	(+) 3,884	(+) 16,178
Mar 2008	4,302	1,493	(+) 2,809	(+) 14,735
Apr 2008	4,325	0	(+) 4,325	(+) 17,095
May 2008	1,625	1,477	(+) 148	(+) 15,470
Jun 2008	1,770	6,999	(-) 5,229	(+) 13,700

(+) : Implies purchases including purchases leg under swaps and outright forwards.
(-) : Implies sales including sale leg under swaps and outright forwards.
Note : This Table is based on value dates and data are inclusive of transactions under the India Millennium Deposits.

the Euro and 10.8 per cent against the Chinese yuan, while appreciated by 0.7 per cent against the Japanese yen.

II.5.37 India is classified under the 'managed float' exchange rate regime of the IMF. The Reserve Bank intervenes in the foreign exchange market to contain excessive volatility as and when necessary. India's exchange rate policies have been described as ideal for Asia (Box II.17).

II.5.38 In terms of effective exchange rates, 36-currency trade weighted nominal effective exchange rate (NEER) and real effective exchange rate (REER) of the Indian rupee experienced appreciation of 1.4 per cent and 2.0 per cent, respectively, between March 2007 and March 2008. Over the same period, the 6-currency trade weighted NEER and REER of the rupee appreciated by 0.2 per cent and 3.2 per cent, respectively (Appendix Table 38). On August 8, 2008, the 6-currency trade weighted NEER of the rupee had depreciated by 3.2 per cent, while the 6-currency trade weighted REER appreciated by 0.9 per cent over their end-March 2008 levels.

II.5.39 The conditions in the spot foreign exchange market and generally comfortable liquidity conditions in the domestic money market kept forward premia on the US dollar low during 2007-08 (Chart II.21). In February 2008, while the rupee traded one-month forward at discount, three-month and six-month forward premia remained at their lowest level during the financial year as exporters continued to offload forward positions. The one-month, three-month and six-month forward premia declined from 7.30 per cent, 5.14 per cent and 4.40 per cent, respectively, at end-March 2007 to 3.45 per cent, 2.75 per cent and 2.50 per cent, respectively, as on March 31, 2008. As on August 8, 2008, the one-month, three-month and six-month forward premia stood at 6.82 per cent, 5.59 per cent and 4.36 per cent, respectively.

II.5.40 The total turnover in the foreign exchange market grew by 87.0 per cent during 2007-08, reflecting large cross border trade and capital flows (Chart II.22 and Appendix Table 39). The average daily turnover in the foreign exchange market increased to US $ 48.1 billion during 2007-08 from US $ 25.8 billion during 2006-07. While the average daily inter-bank turnover increased to US $ 33.8 billion from US $ 18.7 billion, the merchant turnover increased to US $ 14.3 billion from US $ 7.0 billion. The ratio of inter-bank to merchant turnover was 2.4 during 2007-08 as compared with 2.7 a year ago.

II.5.41 According to Bank for International Settlements (BIS) Triennial Central Bank Survey of

Chart II.21: Rupee/US Dollar Forward Premia

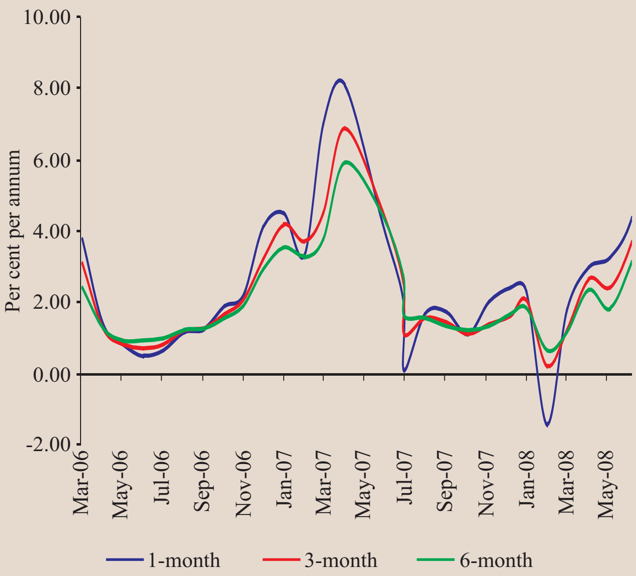
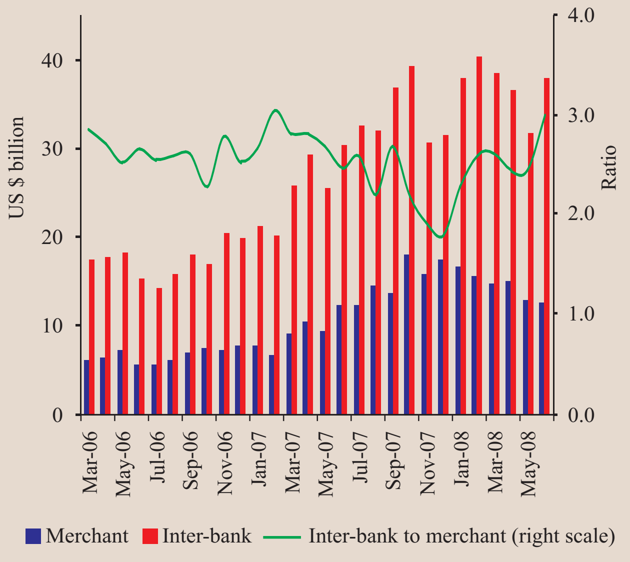


Chart II.22 : Average Daily Turnover in the Foreign Exchange Market



Box II.17
Exchange Rate Regimes

The choice of an appropriate exchange rate regime has varied over time and across countries depending upon the prevailing circumstances and the country context. The fixed (hard pegs) and freely floating exchange rate are the two opposite poles of the exchange rate regimes. Under the fixed exchange rate regime, country's currency value is matched to the value of another currency or to a basket of other currencies. In the case of a currency board arrangement, the domestic currency is backed by one-to-one by foreign currency under reference. Under the freely floating or flexible exchange rate regime, the value of domestic currency is allowed to fluctuate according to the forces of demand and supply in the foreign exchange market. In between these two exchange rate regimes, exists an array of intermediate arrangements such as `managed float' and 'exchange rate bands'. While the 'managed float' is a type of intermediate regime that remains closer to the 'independent float', 'exchange rate bands' are type of intermediate regime that remains closer to the 'pegged regime'. Under the managed floating exchange rate regime, the authorities adjust interest rate policy and/or intervene in the foreign exchange market to deliberately affect the exchange rate without a particular commitment. Exchange rate bands can be either around fixed pegs (called pegged exchange rate within horizontal bands) or around crawling pegs (called crawling band). Under the band regime, the value of the currency is maintained within certain margins of fluctuations of at least +/-1 per cent around a fixed central rate, or the margin between the maximum and the minimum value of the exchange rate exceeds two per cent. Under crawling band, the central rate/margin is adjusted periodically at a fixed rate or in response to changes in selective quantitative indicators. Each regime has its own advantages and disadvantages.

With higher international economic and financial integration and the experiences with greater cross border capital flows, the choice of the exchange rate regime for the economies across the world has undergone significant changes. The 1990s witnessed several crises in EMEs. Many of them were the consequence of an attempt to defend a fixed exchange rate such as Mexico in 1994, some East Asian countries in 1997 and Russia in 1998. These crises led to a renewed debate on the appropriate exchange rate regime. One school of thought argued that it was a mistake to have set explicit exchange rate pegs and that the solution lay in increased exchange rate flexibility. Another school of thought held that it was the looseness of the commitment that got the fixed rate regime into trouble and that the better policy was a firm institutional commitment such as a currency board. Thus, after the Asian crisis, the widely accepted theoretical position was that a country had the choice of either giving up monetary independence and setting up a currency board or giving up the stable currency objective and letting the exchange rate float freely so that monetary policy could then be directed to the objectives of inflation control. However, the fixed exchange rate system was clearly out of favour after the Brazilian and the Argentinean crises, which occurred after the Asian crisis, as even strong currency board type arrangements of a fixed peg, *vis-à-vis*, dollar were found to be unviable. The dominant view emerged that for most countries floating or flexible exchange rates were the only sustainable way of ensuring a less-prone exchange rate regime. However, it is now widely believed that floating, fixed and intermediate regimes are appropriate and that the choice of appropriate regime cannot be made independently of knowledge of circumstances facing the country in question.

The recent cross-country experiences seem to be in favour of intermediate regimes with country-specific features and no targets for the level of the exchange rate. This has been particularly true for the lower and middle-income countries that face institutional and operational constraints to floating and very often fall back to pegs after a relatively short spell in floating. In terms of the IMF's 2007 classification of exchange rate regimes, as on April 2007, 83 countries adopted floating regimes (including 48 managed floats and 35 independent floats), 82 countries soft pegs and 23 countries hard pegs. Among the 82 countries following soft pegs, 49 countries are pegged to a single currency, while 6 countries follow exchange rate bands, including horizontal band (Hungary, Cyprus, Denmark, Slovak Republic and Tonga) and crawling band (Costa Rica).

Since March 1993, the exchange rate in India has been determined largely by demand and supply conditions in the market. The Indian approach in recent years has been guided by the broad principles of careful monitoring and management of exchange rates with flexibility, without a fixed target or a pre-announced target or a band, coupled with the ability to intervene if and when necessary, while allowing the underlying demand and supply conditions to determine the exchange rate movements over a period in an orderly way. Subject to this predominant objective, the exchange rate policy is guided by the need to reduce excess volatility, prevent the emergence of establishing speculative activities, help maintain adequate level of reserves, and develop an orderly foreign exchange market. This system has served the country well.

References

1. Frankel, Jeffrey (2003), "Experience of and Lessons From Exchange Rate Regimes in Emerging Economies", *Working Paper 10032,* National Bureau of Economic Research, Cambridge, MA 02138, October.
2. International Monetary Fund (2007), *Annual Report on Exchange Arrangement and Exchange Restrictions.*
3. Jalan, Bimal (2003), Address at 14th National Assembly of Forex Association of India, August.

Foreign Exchange and Derivatives Market Activity in April 2007, global daily average foreign exchange turnover rose to US$ 3.2 trillion in April 2007 from US$ 2.0 trillion in April 2004 and US $ 1.4 trillion in April 2001. According to the Survey, while foreign exchange trading rose in general among the emerging markets, the growth in India was the highest among all the countries included in the Survey. India's daily average foreign exchange market turnover increased nearly five-fold from US$ 7 billion (0.3 per cent share in daily average global foreign exchange turnover) in April 2004 to US$ 34 billion (0.9 per cent share in daily average global foreign exchange turnover) in April 2007. The daily average foreign exchange turnover of India was US $ 3 billion in April 2001.

GOVERNMENT SECURITIES MARKET

II.5.42 Yields in the government securities market hardened somewhat during the first quarter of 2007-08, partly reflecting global trends, CRR hikes, increase in the Market Stabilisation Scheme (MSS) ceiling and issuances under the MSS (Chart II.23). The 10-year yield reached an intra-year peak of 8.32 per cent on June 11, 2007. Subsequently, the yields softened in July 2007, reflecting easy liquidity conditions, lower inflation and global trends in yields. The fall in yields was arrested as the market responded to the withdrawal of the cap on liquidity absorptions under the LAF with effect from August 6, 2007. Yields remained generally range-bound during August-December 2007. The domestic government securities market witnessed a rally in January 2008 with the 10-year yield recording a low of 7.42 per cent on January 23, 2008, reflecting build-up of expectations of interest rate cuts by the Reserve Bank following rate reductions by the US Fed. Subsequently, yields started hardening from the second half of March 2008, mostly reflecting higher inflation. The 10-year yield moved in a range of 7.42-8.32 per cent during 2007-08. As on March 31, 2008, the 10-year yield was 7.93 per cent, four basis points lower than that at end-March 2007.

II.5.43 During 2008-09 so far (up to August 20, 2008), the 10-year yield moved in the range of 7.91-9.51 per cent. As inflation expectations hardened in the wake of higher than expected increase in the domestic WPI, yields hardened. The 10-year yield declined in the third week of July 2008 after reaching a peak of 9.51 per cent on July 15, 2008, reflecting easing of international crude oil prices. The 10-year yield was 9.15 per cent as on August 20, 2008, 122 basis points higher than that at end-March 2008.

II.5.44 The spread between one and 10-year yields widened marginally to 45 basis points at end-March 2008 from 42 basis points at end-March 2007. At the longer end, the spread between 10 and 30-year yields increased to 47 basis points at end-March 2008 from 37 basis points at end-March 2007. The yield spread of 5-year AAA-rated bonds over 5-year Government securities widened to 161 basis points at end-March 2008 from 142 basis points at end-March 2007 (Table 2.67).

Chart II.23: Yields on Central Government Securities

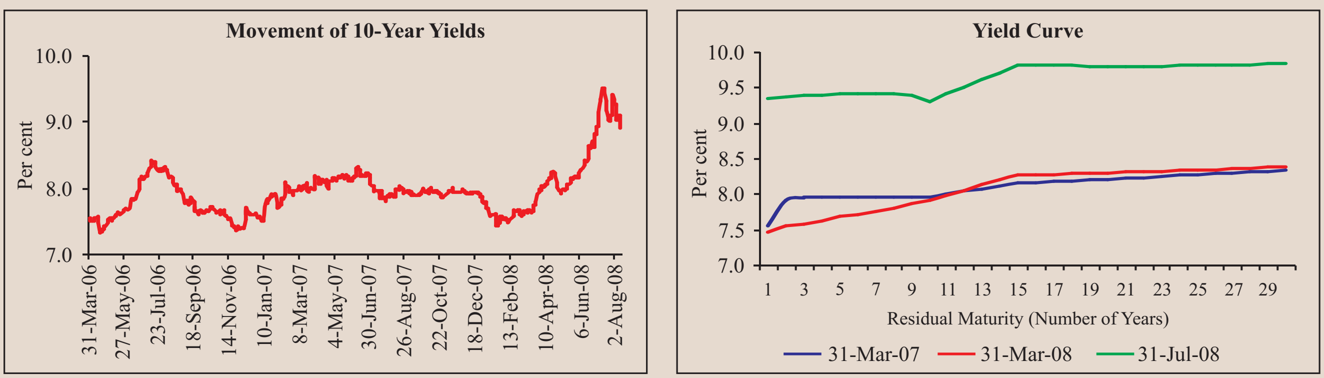


Table 2.67: Yield Spreads

(Basis points)

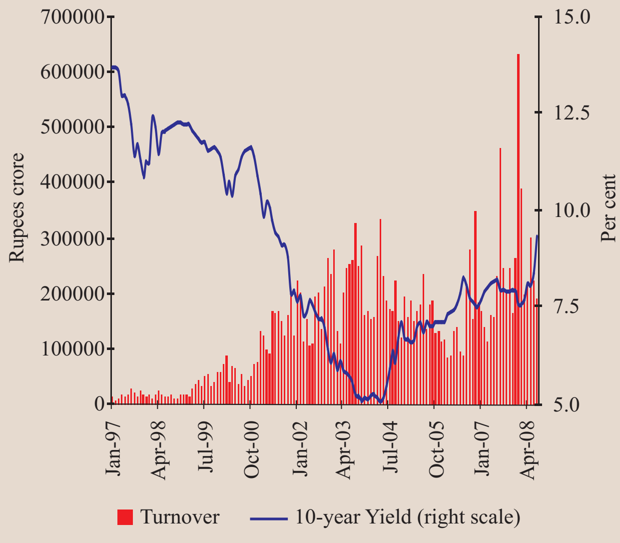
Year/ Month	Spread 10 Year-91-Day T-bill	10 Year-1 Year	20 Year-10 Year	30 Year-10 Year	5 Year AAA Bond-5 Year G-sec
1	2	3	4	5	6
2005-06	**146**	**106**	**36**	**45**	**48**
2006-07	**115**	**77**	**32**	**43**	**106**
2007-08	**65**	**37**	**30**	**38**	**151**
Jan 2007	43	36	32	35	126
Feb 2007	65	37	16	21	152
Mar 2007	41	42	26	37	142
Apr 2007	80	27	19	33	162
May 2007	107	41	25	36	174
Jun 2007	87	65	23	31	186
Jul 2007	176	77	30	47	137
Aug 2007	98	51	31	39	170
Sep 2007	84	52	40	49	157
Oct 2007	57	21	37	43	125
Nov 2007	44	20	31	39	123
Dec 2007	46	19	25	31	127
Jan 2008	-39	11	24	28	141
Feb 2008	-33	11	32	36	158
Mar 2008	78	45	38	47	161
Apr 2008	77	27	38	42	130
May 2008	74	29	24	29	145
Jun 2008	-12	-49	58	50	125
Jul 2008	-15	-4	50	53	124

II.5.45 Over the years, the turnover in the Government securities market and yield have generally witnessed an inverse relationship. During the period of rising yields, the turnover tended to be subdued, while during the period of softening in the yields, the turnover increased sharply (Chart II.24 and Appendix Table 40).

CREDIT MARKET

II.5.46 Interest rates offered by public sector banks (PSBs) on deposits of maturity of one year to three years were placed in the range of 8.25-9.25 per cent in March 2008 as compared with the range of 7.25-9.50 per cent in March 2007, while those on deposits of maturity of above three years were placed in the range of 8.00-9.00 per cent in March 2008 as compared with the range of 7.50-9.50 per cent in March 2007. Similarly, interest rates offered by

Chart II.24: Turnover and Yields in the Government Securities Market



private sector banks on deposits of maturity of one year to three years were placed in the range of 7.25-9.25 per cent in March 2008 as compared with 6.75-9.75 per cent in March 2007, while those on deposits of maturity above three years were placed in the range of 7.25-9.75 per cent in March 2008 as compared with 7.75-9.60 per cent in March 2007. Interest rates offered by foreign banks on deposits of maturity of one year to three years were placed in the range of 3.50-9.75 per cent in March 2008 as compared with 3.50-9.50 per cent in March 2007 (Table 2.68 and Appendix Table 41).

II.5.47 Deposit rates of scheduled commercial banks (SCBs) have hardened during 2008-09 so far (up to end-July 2008). Interest rates of public sector banks (PSBs) on deposits of maturity of one year to three years increased to 8.25-9.75 per cent in July 2008 from 8.25-9.25 per cent in March 2008. The deposit rates of private sector banks on deposits of maturity both one to three years and above three years firmed up to the range of 8.00-10.00 per cent in July 2008 from the range of 7.25-9.25 per cent and 7.25-9.75 per cent, respectively, in March 2008.

II.5.48 The benchmark prime lending rates (BPLRs) of PSBs and private sector banks were placed in the range of 12.25-13.50 per cent and 13.00-16.50 per

Table 2.68: Deposit and Lending Rates

(Per cent)

Item	March 2005	March 2006	March 2007	March 2008	June 2008	July 2008
1	2	3	4	5	6	7
1. Domestic Deposit Rate						
Public Sector Banks						
Up to 1 year	2.75-6.00	2.25-6.50	2.75-8.75	2.75-8.50	2.75-9.00	2.75-9.25
More than 1 year and up to 3 years	4.75-6.50	5.75-6.75	7.25-9.50	8.25-9.25	8.25-9.50	8.25-9.75
More than 3 years	5.25-7.00	6.00-7.25	7.50-9.50	8.00-9.00	8.00-9.35	8.50-9.50
Private Sector Banks						
Up to 1 year	3.00-6.25	3.50-7.25	3.00-9.00	2.50-9.25	3.00-8.75	3.00-9.50
More than 1 year and up to 3 years	5.25-7.25	5.50-7.75	6.75-9.75	7.25-9.25	8.00-9.50	8.00-10.00
More than 3 years	5.75-7.00	6.00-7.75	7.75-9.60	7.25-9.75	8.00-10.00	8.00-10.00
Foreign Banks						
Up to 1 year	3.00-6.25	3.00-6.15	3.00-9.50	2.25-9.25	3.00-9.25	3.75-9.50
More than 1 year and up to 3 years	3.50-6.50	4.00-6.50	3.50-9.50	3.50-9.75	3.50-9.75	3.50-9.75
More than 3 years	3.50-7.00	5.50-6.50	4.05-9.50	3.60-9.50	3.60-9.50	3.60-9.50
2. Benchmark Prime Lending Rate						
Public Sector Banks	10.25-11.25	10.25-11.25	12.25-12.75	12.25-13.50	12.50-14.00	12.75-14.00
Private Sector Banks	11.00-13.50	11.00-14.00	12.00-16.50	13.00-16.50	13.00-17.00	13.50-17.25
Foreign Banks	10.00-14.50	10.00-14.50	10.00-15.50	10.00-15.50	10.00-15.50	10.00-15.50
3. Actual Lending Rate*						
Public Sector Banks	2.75-16.00	4.00-16.50	4.00-17.00	4.00-17.75	-	-
Private Sector Banks	3.15-22.00	3.15-20.50	3.15-25.50	4.00-24.00	-	-
Foreign Banks	3.55-23.50	4.75-26.00	5.00-26.50	5.00-28.00	-	-
4. Weighted Average Lending Rate	**12.57**	**11.97**	**11.92**	**-**	**-**	**-**

- : Not available.
* : Interest rate on non-export demand and term loans above Rs.2 lakh, excluding lending rates at the extreme five per cent on both sides.

cent, respectively, in March 2008 as compared with 12.25-12.75 per cent and 12.00-16.50 per cent, respectively, in March 2007. In July 2008, the BPLRs of PSBs and private sector banks were placed in the range of 12.75-14.00 per cent and 13.50-17.25 per cent, respectively. The range of BPLRs of foreign banks, however, remained unchanged at 10.00-15.50 per cent during the same period.

II.5.49 The weighted average BPLR of PSBs increased from 12.4 per cent in March 2007 to 12.8 per cent in March 2008 and further to 12.9 per cent in June 2008. Over the same period, the weighted average BPLR of private sector banks increased from 14.3 per cent to 15.1 per cent and further to 15.2 per cent. The weighted average BPLR of foreign banks also increased from 12.6 per cent in March 2007 to 13.9 per cent in March 2008 and further to 14.1 per cent in June 2008. The weighted average actual lending rate of SCBs declined from 12.6 per cent at end-March 2005 to 12.0 per cent at end-March 2006 and further to 11.9 per cent at end-March 2007.

EQUITY AND DEBT MARKETS

Primary Market

II.5.50 Resources raised through public issues from the primary market by the corporate sector (excluding offers for sale) increased by 158.5 per cent to Rs.83,707 crore during 2007-08, even as the number of issues remained unchanged at 119 in 2007-08 (Table 2.69). The average size of public issues, thus, increased to Rs.703 crore during 2007-08 from Rs.272 crore during 2006-07. The share of non-Government companies (private sector) in total resource mobilisation declined to 76.0 per cent during 2007-08 from 94.5 per cent during 2006-07(Chart II.25 and Appendix Table 42). Banks and financial institutions in both public and private sectors

Table 2.69: Mobilisation of Resources from the Primary Market

(Amount in Rupees crore)

Item	2006-07		2007-08 P	
	No. of Issues	Amount	No. of Issues	Amount
1	2	3	4	5
A. Prospectus and Rights Issues**				
1. Private Sector (a+b)	**117**	**30,603**	**115**	**63,638**
		(44.7)		**(107.9)**
a) Financial	8	1,425	11	14,676
b) Non-financial	109	29,178	104	48,962
2. Public Sector (a+b+c)	**2**	**1,779**	**4**	**20,069**
		(-69.2)		**(1028.1)**
a) Public Sector Undertakings	1	997	-	-
b) Government Companies	-	-	2	2,516
c) Banks/Financial Institutions	1	782	2	17,553
3. Total (1+2)	**119**	**32,382**	**119**	**83,707**
		(20.2)		**(158.5)**
of which:				
(i) Equity	116	31,532	116	82,398
(ii) Debt	3	850	3	1,309
B. Private Placement				
1. Private Sector (a+b)	**1,524**	**81,841**	**1,614**	**1,29,522**
		(98.7)		**(58.3)**
a) Financial	632	48,414	904	88,151
b) Non-financial	892	33,427	710	41,371
2. Public Sector (a+b)	**157**	**64,025**	**198**	**83,046**
		(15.8)		**(29.7)**
a) Financial	127	52,117	132	56,185
b) Non-financial	30	11,908	66	26,861
3. Total (1+2)	**1,681**	**1,45,866**	**1,812**	**2,12,568**
		(51.2)		**(45.7)**
of which:				
(i) Equity	1	57	2	1,410
(ii) Debt	1,680	1,45,809	1,810	2,11,158
C. Euro Issues (ADRs and GDRs)	**40**	**17,005**	**26**	**26,556**
		(49.8)		**(56.2)**

P: Provisional. **: Excluding offers for sale. -: Nil/Negligible.

Note: Figures in the parentheses are percentage variations over the previous year.

Source: Securities and Exchange Board of India and various merchant bankers.

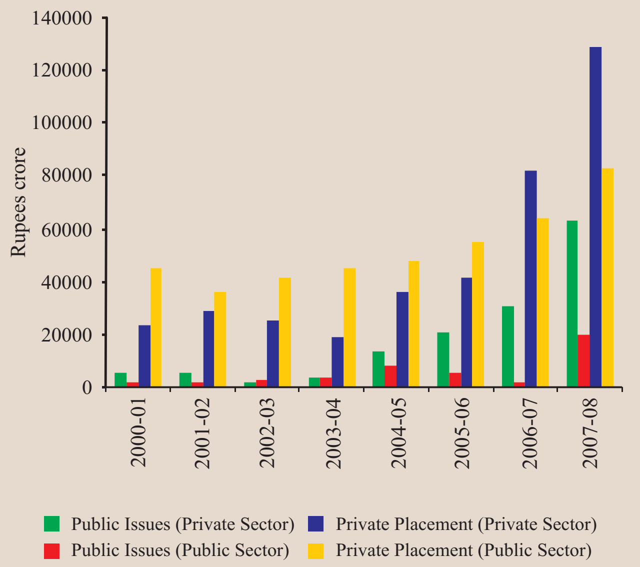
mobilised 38.5 per cent of resources through public issues in 2007-08 as compared with 6.8 per cent last year. Two public sector banks raised funds aggregating Rs.17,553 crore through public issues.

II.5.51 The share of the initial public offerings (IPOs) both in terms of number of issues and resources mobilised in the total public issues increased significantly during 2007-08. Out of 119 public issues in the financial year 2007-08, 82 issues were IPOs, constituting 47.7 per cent of the total resource mobilisation. Equity issues constituted 98.4 per cent of the total resource mobilisation through public issues during 2007-08 as compared with 97.4 per cent during the previous year. Of the 119 public issues floated during 2007-08, only three were debt issues. The private corporate debt market, thus, continued to be insignificant. Several efforts were made in 2007-08 to develop this important segment of the market (Box II.18).

II.5.52 The domestic private placement market continued to be a significant source of funding for the Indian corporate sector. Mobilisation of resources through private placements increased by 45.7 per cent to Rs.2,12,568 crore during 2007-08 as compared with an increase of 51.2 per cent during 2006-07. Private sector entities (both financial and non-financial) mobilised bulk of the resources (60.9 per cent) in 2007-08 (Chart II.25). Resources mobilised by public sector entities at Rs.83,046 crore witnessed an increase of 29.7 per cent during 2007-08 as compared with a rise of 15.8 per cent during 2006-07. The resource mobilisation by financial intermediaries (both public and private sectors) increased by 43.6 per cent to Rs.1,44,336 crore accounting for 67.9 per cent of the total resource mobilisation. Banks (both public and private sectors) mobilised Rs.26,199 crore through private placements, which was 15.5 per cent lower than that in the previous year.

II.5.53 Resources raised by Indian corporates through Euro issues – American Depository Receipts (ADRs) and Global Depository Receipts (GDRs) – increased sharply by 56.2 per cent to Rs.26,556

Chart II.25: Resource Mobilisation in the Primary Market



Box II.18
The Corporate Bond Market in India – Current Status

Among the multiple financing channels operative in a developing economy, the corporate bond market has assumed a special place in recent years due to its ability to not only provide long term funds, but also to absorb shocks in a rapidly integrating global financial system. A well developed bond market reduces banks' exposure to credit and asset-liability mismatches which, in turn, moderate the systemic risks. Furthermore, a broad and deep bond market can emerge as an alternative channel for raising resources, when funding from the banking sector and the equity market becomes difficult. Also, the informational efficiency of corporate bond prices is at par with underlying stocks (Hotchkiss and Ronen, 2002).

At the macro level**,** the pace of development and size of corporate bond markets depend largely on economic growth, level of financial development in the economy and the institutional support offered to its growth. The large size of the US corporate bond market for example, may be attributed to both its evolution over a long period of time and sophisticated financial architecture. Similarly, Korean bond market developed due to the increased availability of structured financial products such as mortgage and asset-backed securities (RBI, 2007). A key driving force behind the growth of the Malaysian bond market was the change in the institutional setting (Sharma, 2000). For instance, the bond market was spurred by the presence of institutional investors such as pension funds, unit trusts and insurance companies**,** consolidation of regulatory responsibilities under one head called the National Bond Market Committee and encouragement to Islamic bond market. In Singapore, the idea was to expand the base of investors by attracting non-resident issuers in both local and foreign currencies. This was encouraged by removal of restrictions on Singapore-based financial institutions trading with non-financial institutions and on trading of interest rate swaps.

The corporate bond market has been in existence in India for a long time. However, despite a long history, the size of the public issue segment of the corporate bond market in India has remained insignificant. In recent years, large resources have been raised by way of debt from the private placement market. As against an annual average of Rs.7,513 crore raised by way of public debt issues during 1990-91 to 1994-95, the resource mobilisation declined to an average of Rs.5,469 crore during 1995-96 to 1999-00 and further to an average of Rs. 2,899 crore during 2000-01 to 2006-07. In sharp contrast, mobilisation of funds by way of private placement of debt increased from an average of Rs.33,638 crore during 1995-96 to 1999-00 to an average of Rs.84,262 crore during 2000-01 to 2006-07. In 2007-08, as against Rs.1,309 crore raised by way of public debt issues, resources raised from the private placement market were quite large at Rs.2,12,568 crore.

The lack of market infrastructure and comprehensive regulatory framework coupled with low issuance leading to low liquidity in the secondary market, narrow investor base, inadequate credit assessment skills, high costs of issuance, lack of transparency in trades and underdevelopment of securitisation of products are some of the major factors that have hindered the growth of the private corporate debt market. Stringent norms for public issues, regulatory overlap and lack of risk management products are some of the micro barriers hindering the market growth (ICMA, 2008). Among the macro constraints, prominent ones are demand and supply barriers. Demand for corporate debt is constrained due to investment restrictions on banks and domestic institutional investors like insurance companies who are subject to strict asset allocation rules. Supply of funds from pension sector is held back because coverage of formal pension system is restricted to organised workforce only (Garzarelli, *et al.* 2007).

In the recent period, several measures have been taken to develop the debt market. The corporate bond reporting and trading platform have been operationalised at BSE, NSE and FIMMDA. SEBI has rationalised the provisions of continuous disclosures made by issuers who have listed their debt securities. It also implemented measures to streamline the activity in corporate bond market by reducing the shut period in corporate bonds in line with Government securities, reduced tradable lots in corporate bonds in respect of all entities including Qualified Institutional Investors to Rs.1 lakh and standardised the day count convention. In order to enhance safety of investors, SEBI made it mandatory that the companies issuing debentures and the respective debenture trustees/stock exchanges shall disseminate all information regarding the debentures to the investors by displaying information through respective websites and press releases. Several other reforms such as simplification of the debt issuance process and rationalisation of stamp duty are also under consideration.

A key to expand corporate bond market is to manage the credit risk through credit enhancement mechanisms like credit rating and bond insurance institutions. Institutional investors who have superior risk assessment capacity along with investment capacity can also act as credit enhancers. However, such institutions require sufficient time to develop (Mohan, 2006).

References

1. Garzarelli, F, *et al.* (2007), "Bonding the BRICS: A Big chance for India's Debt Capital Market", Global Economics Paper 161, November.
2. Hotchkiss, E. and T. Ronen (2002), "The Information Efficiency of the Corporate Bond Market – An Intra-day Analysis", *Review of Financial Studies*, Volume 15.
3. ICMA Centre (2008), "The Development of India's Corporate Debt Market", City of London, February.
4. Mohan, R. (2006), "Recent Trends in the Indian Debt Market and Current Initiatives", *Reserve Bank of India Bulletin*, April.
5. Reserve Bank of India (2007), *Report on Currency and Finance - 2005-06.*
6. Sharma, K. (2000), "The Underlying Constraints on Corporate Bond Market Development in South-East Asia", *DESA Discussion Paper No. 14,* Economic and Social Affairs, United Nations.

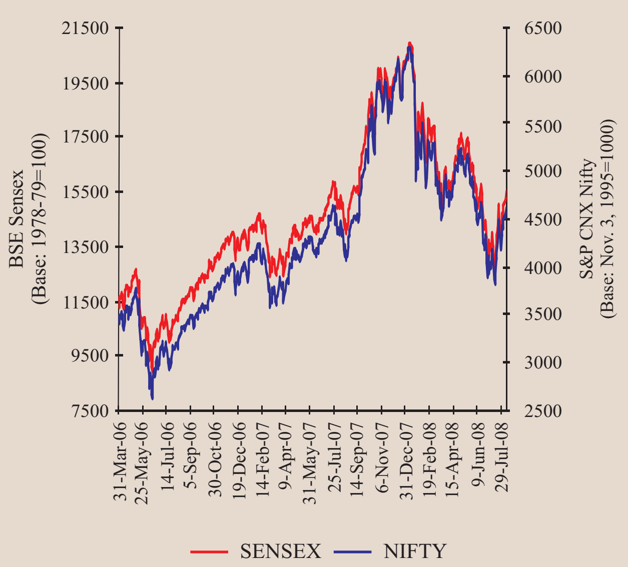
crore during 2007-08. Out of these, Rs. 17,851 crore were mobilised in the form of ADRs and Rs.8,705 crore in the form of GDRs. Most of the Euro issues were made by private non-financial companies.

Secondary Market

II.5.54 The domestic stock markets, which remained generally firm up to early January 2008, witnessed a sharp correction beginning January 11, 2008 (Chart II.26). Continuing the firm trend of the previous year, the stock markets in India surged ahead to reach new high between April-December 2007. Liquidity support from FIIs and domestic mutual funds, strong macroeconomic fundamentals, healthy corporate earnings, upward trend in EMEs equity markets and other sector and stock specific news helped to boost the market sentiment. Although the domestic stock markets witnessed corrections in mid-August, mid-October and mid-December 2007, they recovered soon. The BSE Sensex reached an all-time high of 20873 on January 8, 2008.

II.5.55 Beginning January 11, 2008, the domestic stock markets witnessed severe bouts of volatility due to heightened concerns over the severity of sub-prime lending crises in the US and its spillover to other market segments and in other countries. Fears of recession in the US economy on account of contraction in the US service industry, weak earnings growth reported by some of the leading US companies, home foreclosures climbing to record high levels and lacklustre retail sales in the US also impacted the sentiment. Liquidity squeeze from the secondary market in the wake of the IPO issuances, heavy sales by FIIs in the Indian equity market, hike in short-term capital gains tax from 10 per cent to 15 per cent announced in the Union Budget 2008-09, increase in domestic inflation rate, rise in global crude oil prices to record highs, decline in ADR prices in the US markets were some of the other factors that adversely affected the market sentiment. Between end-March 2007 and March 31, 2008, the BSE Sensex moved in a wide range of 12455-20873. The BSE Sensex and the S&P CNX Nifty closed at 15644 and 4735, respectively, on March 31, 2008 registering gains of 19.7 per cent and 23.9 per cent, respectively, over end-March 2007 (Appendix Table 43).

Chart II.26: Indian Stock Markets



II.5.56 The market capitalisation of BSE increased sharply by 44.9 per cent to Rs. 51,38,015 crore by end-March 2008, reflecting rise in stock prices and listing of new securities (Table 2.70 and Appendix Table 44). The market capitalisation, as percentage of GDP, increased from 85.5 per cent at end-March 2007 to 156.7 per cent on January 08, 2008 before declining to 109.5 per cent by end-March 2008. The price-earning (P/E) ratio of BSE Sensex rose from 20.3 at end-March 2007 to 28.5 by January 08, 2008 before sliding to 20.1 by end-March 2008. Volatility in the stock markets increased significantly during 2007-08 and remained higher than many emerging market economies. The turnover in the major stock exchanges increased sharply during 2007-08. The combined turnover of the BSE and the NSE in the cash segment increased by 76.8 per cent during 2007-08 and that in the derivatives segment by 79.8 per cent (Appendix Table 45).

II.5.57 In an effort to provide market participants adequate liquidity and facilitating price discovery, the Securities and Exchange Board of India (SEBI) allowed short selling, and securities lending and borrowing scheme to all classes of investors with effect from April 21, 2008 (Box II.19).

Box II.19
Short Selling and Securities Lending and Borrowing

Short selling – sale of a security that the seller does not own – is one of the long-standing market practices, which has often been the subject of considerable debate in most of the securities markets across the world. The votaries of short selling consider it as a desirable and an essential feature of a securities market, not only to provide liquidity, but also to help in price discovery. In fact, short-sale restrictions could induce promoters and managements to rig up the share prices of their own companies. On the other hand, short selling is criticised on various grounds. First, it increases share price volatility and exaggerates share price declines. Second, short selling may arise from any settlement disruption, disorderly trading and any consequent failure to deliver. There are also potential risks within the chain of the short selling process such as the settlement process and efficient risk management in the operation of the securities lending market.

The short sale mechanism is being followed by most of the developed countries and emerging market economies. Financial Services Authority (FSA) in the UK recognises short selling as a legitimate professional investment activity which plays an important role in supporting efficient markets. Nevertheless, FSA imposes certain disclosure requirements on the part of investors involved in short selling. Similarly, short selling is an age-old investment tool in the US and is governed by the Securities Exchange Commission (SEC). To further liberalise restrictions on short selling, the SEC in June 2007 decided to eliminate short sale price limitations that date back to the SEC's origins in the 1930s. Recently, Hong Kong, Korea and Singapore have also permitted short selling on certain designated securities subject to disclosure of such transactions and tick rules which prohibit short selling transactions in a falling market. Malaysia also lifted ban on regulated short selling in March 2006 after a gap of nearly a decade so as to boost turnover and foreign interest in the Malaysia's usually thinly-traded market.

To complement short selling and to enable the investors to earn returns on their idle securities, in most markets, securities lending and borrowing (SLB) are also allowed. The SLB transactions are, by and large, over-the-counter (OTC) contractual obligations executed between lenders and borrowers and securities market regulators do not directly regulate the lending and borrowing transactions. The schemes for SLB are by custodians and depositories who have their own screens for meeting the demand and supply of securities from their clients. In some of the markets like Hong Kong, Korea and Singapore, the depositories and custodians provide an electronic platform for execution of securities lending and borrowing transactions.

In India, short sales were first introduced by SEBI in November 1996. Thereafter, in view of the market volatility in 1998, the SEBI temporarily banned short sales with effect from June 17, 1998. SEBI withdrew the restrictions on short sales with effect from July 2, 2001 but banned again in 2003 on the basis of observations made in the Joint Parliamentary Committee (JPC) report in December 2002. The issue of short sale was reviewed by the Secondary Market Advisory Committee (SMAC) in 2003 in the context of the changes in the market microstructure reflecting introduction of rolling settlement system, shortening of settlement cycle to T+2 and the availability of derivatives. In pursuance of the recommendation of SMAC, the SEBI allowed short selling with effect from December 20, 2007. The broad framework of the scheme comprises the following elements: (i) naked short selling is not permitted in the Indian securities market and accordingly all investors are required to mandatorily honour their obligations of delivering the securities at the time of settlement; (ii) no institutional investor is allowed to do day trading; (iii) the stock exchanges are required to frame the necessary uniform deterrent provisions and take appropriate action against the brokers for failure to deliver securities at the time of settlement; (iv) the securities traded in futures and options segment are eligible for short selling; and (v) the brokers are mandated to collect the details on scrip-wise short sell positions, collate the data and upload it to the stock exchanges before the commencement of trading on the following trading day.

In order to provide a mechanism for borrowing of securities to enable settlement of securities sold short, the SEBI also decided to put in place a full-fledged securities lending and borrowing scheme for all participants in the market under the overall framework of "Securities Lending Scheme (SLS), 1997" with effect from April 21, 2008 subject to conditions that: (i) the scheme is operated through clearing corporation/clearing house of stock exchanges having nationwide terminals; (ii) the SLB is permitted on an automated, screen-based, order-matching platform which will be provided by the approved intermediaries; (iii) initially, securities traded in the futures and options segment are eligible for lending and borrowing under the scheme; (iv) approved intermediaries, clearing members and clients can enter into an agreement specifying the rights, responsibilities and obligations of the parties to the agreement; and (v) the settlement cycle for SLB transactions is on T+1 basis.

References

1. Securities and Exchange Board of India (2005), *Discussion Paper on Short Selling and Securities Lending and Borrowing,* December.
2. ______ (2007), "Short Selling and Securities Lending and Borrowing", MRD/DoP/SE/Dep/Cir- 14 /2007, December 20, 2007.
3. ______ (2008), "Operationalisation of Short Selling and Securities Lending and Borrowing", MRD/DoP/SE/Cir-05 /2008, March 19, 2008.

Table 2.70: Indian Equity Markets - Key Indicators

Indicator	BSE			NSE		
	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08
1	2	3	4	5	6	7
1. BSE SENSEX/S&P CNX Nifty						
(i) Average	8280	12277	16569	2513	3572	4897
(ii) End of the year	11280	13072	15644	3403	3822	4735
2. Coefficient of Variation (per cent)	16.7	11.1	13.7	15.6	10.4	14.4
3. Price-Earning Ratio@	20.9	20.3	20.1	20.3	18.4	20.6
4. Price-Book Value Ratio@	5.1	5.1	5.2	5.2	4.9	5.1
5. Yield @ (per cent per annum)	1.2	1.3	1.0	1.3	1.3	1.1
6. Listed Companies	4,781	4,821	4,887	1,069	1,228	1,381
7. Cash Segment Turnover (Rupees crore)	8,16,074	9,56,185	15,78,856	15,69,556	19,45,285	35,51,038
8. Derivative Segment Turnover (Rupees crore)	9	59,007	2,42,308	48,24,174	73,56,242	1,30,90,478
9. Market Capitalisation (Rupees crore) #	30,22,191	35,45,041	51,38,015	28,13,201	33,67,350	48,58,122
10. Market Capitalisation to GDP Ratio	84.4	85.5	109.5	78.6	81.2	103.5

@ : Based on 30 scrips included in the BSE Sensex and are as at end March.
# : As at end-March.
Source : Bombay Stock Exchange Limited (BSE) and National Stock Exchange of India Limited (NSE).

II.5.58 The gains in the domestic stock market during 2007-08 were spread across various sectors. Most of the sectoral indices recorded higher gains between end-March 2007 and January 8, 2008 than those in the BSE Sensex, but exhibited higher losses thereafter than those in the BSE Sensex. On the whole, the trend in sectoral indices presented a mixed picture. While most of the sectoral indices outperformed the BSE Sensex, some sectoral indices underperformed the BSE Sensex during 2007-08. The BSE Small-cap registered higher gains of 21.2 per cent as compared with 19.7 per cent gains in the BSE Sensex, while BSE Mid-cap recorded marginally lower gains of 19.4 per cent during 2007-08. The BSE 500, a broader index, also witnessed higher increase of 24.3 per cent during 2007-08 (Table 2.71).

Table 2.71: BSE Sectoral Stock Indices

(Base: 1978-79=100)

Sector	Year-on-Year Growth (per cent)		Variation (per cent)	
	End-March 2007	End-March 2008	January 08, 2008 over end-March 2007	End-March 2008 over January 8, 2008
1	2	3	4	5
Auto	-8.5	-7.1	14.9	-19.1
Bankex	24.3	18.0	84.8	-36.1
Capital Goods	11.1	54.4	122.8	-30.7
Consumer Durables	11.1	8.8	84.0	-40.9
Fast Moving Consumer Goods	-21.3	31.7	44.0	-8.6
Health Care	-5.4	5.4	17.7	-10.4
Information Technology	21.6	-27.6	-13.4	-16.4
Metal	-4.3	65.2	130.2	-28.2
Oil and Gas	30.5	56.0	118.9	-28.7
Public Sector Undertakings	-3.2	25.4	82.4	-31.2
BSE 500	**9.7**	**24.3**	**77.6**	**-30.0**
BSE Sensex	**15.9**	**19.7**	**59.7**	**-25.1**
BSE Mid-cap	0.7	19.4	82.3	-34.5
BSE Small-cap	-1.8	21.2	108.9	-42.0

Source : Bombay Stock Exchange Limited (BSE).

II.5.59 Foreign institutional investors continued to invest large funds in the Indian securities market. According to the data released by SEBI, between April 1, 2007 and January 8, 2008, FIIs invested Rs.66,898 crore in the Indian equity market. However, FIIs made net sales of Rs.14,324 crore between January 09, 2008 and March 31, 2008. On the whole, investment by FIIs in Indian equities and debt more than doubled during 2007-08. Investments by mutual funds in equities were higher by 79.9 per cent during 2007-08. Their investments in debt increased by 40.4 per cent in 2007-08 (Table 2.72).

II.5.60 During 2008-09, the domestic stock markets witnessed an increasing trend till May 21, 2008, registering gains of 10.2 per cent over end-March 2008. The upward trend was attributed to better than expected Q4:2007-08 results declared by IT majors, net purchases by FIIs in the Indian equity market, and some easing of international crude oil prices. The markets, however, turned cautious thereafter mainly on account of hike in domestic retail fuel prices, rise in domestic inflation rate, net sales by FIIs in the Indian equity market, concerns over rising trade deficit and depreciation of the rupee, downward trend in major international equity markets, increase in international crude oil prices, decline in global metal prices, and other sector and stock specific news. As a result, both the BSE Sensex and the S&P CNX Nifty closed lower at 14678 and 4416, respectively, on August 20, 2008, registering losses of 6.2 per cent and 6.7 per cent, respectively, over their end-March 2008 level. Between end-March 2008 and August 20, 2008, the BSE Sensex moved in a range of 12576-17600.

Table 2.72: Trends in Institutional Investments

(Rupees crore)

Year	FIIs		Mutual Funds	
	Net Investment in Equity	Net Investment in Debt	Net Investment in Equity	Net Investment in Debt
1	2	3	4	5
2003-04	43,631	5,534	1,308	22,701
2004-05	40,991	1,927	448	16,987
2005-06	48,487	-7,334	14,302	36,801
2006-07	26,031	6,081	9,062	52,543
2007-08	52,574	12,499	16,306	73,790

Source : Securities and Exchange Board of India.

Wholesale Debt Market Segment of NSE

II.5.61 Activity in the Wholesale Debt Market (WDM) segment of NSE improved in 2007-08 with the turnover increasing by 28.8 per cent to Rs.2,82,317 crore. The number of securities available for trading at 3,566 as on March 31, 2008 was higher than a year ago (3,253). Total market capitalisation of the securities available for trading on the WDM segment was Rs.21,23,346 crore as on March 31, 2008 (Rs.17,84,801 as on end-March 2007).

Mutual Funds

II.5.62 Net resources mobilised by mutual funds increased by 63.6 per cent to Rs.1,53,802 crore during 2007-08. Net assets managed by mutual funds also increased by 54.8 per cent to Rs.5,05,152 crore during 2007-08 (Table 2.73).

II.5.63 Both the number of schemes and net resource mobilisation by mutual funds increased significantly during 2007-08 as compared with the previous year (Table 2.74). Bulk of the resources mobilised by mutual funds during 2007-08 were under income/debt market oriented schemes. Net mobilisation of funds under growth/equity oriented schemes also increased during the year. Balanced schemes have also been gaining popularity as the net inflows to this segment increased by 237.1 per cent during 2007-08.

All-India Financial Institutions

II.5.64 All-India Financial Institution (AIFIs) can raise resources, both short term and long term, provided the total outstanding at any time does not exceed 10 times their net owned funds (NOF) as per their latest audited balance sheet. Within this overall ceiling, four FIs, *viz*., EXIM Bank, SIDBI, NHB and NABARD were provided with umbrella limits to raise resources equivalent to 100 per cent of their NOF through instruments such as term money, term deposit, inter-corporate deposits, CDs and CPs.

Table 2.73: Resource Mobilisation by Mutual Funds

(Rupees crore)

Category	2006-07		2007-08P	
	Net Mobilisation@	Net Assets#	Net Mobilisation@	Net Assets#
1	2	3	4	5
Private Sector	79,038	2,62,079	1,33,304	4,15,621
Public Sector*	14,947	64,213	20,498	89,531
Total	**93,985**	**3,26,292**	**1,53,802**	**5,05,152**

P : Provisional. @ : Net of redemptions. # : As at end-March of respective financial year.
* : Including UTI Mutual Fund. The erstwhile UTI was divided into UTI Mutual Fund (registered with the SEBI) and the specified undertaking of UTI. Data in the table contain information only on UTI Mutual Fund.
Note : Data exclude funds mobilised under Fund of Funds Schemes.
Source : Securities and Exchange Board of India.

The aggregate umbrella limit for mobilisation of resources by these FIs increased from Rs. 19,001 crore as on March 31, 2007 to Rs. 19,500 crore as on March 31, 2008. Two FIs, *viz*., IFCI and TFCI were converted into NBFCs during the year. Further, IIBI is in the process of voluntary winding up. The outstanding amount of resources mobilised by FIs increased to Rs.4,458 crore (22.9 per cent of total limits) at end-March 2008 from Rs.3,293 crore (17.3 per cent of total limit) at end-March 2007. Commercial paper continued to be the most preferred instrument by FIs during the year.

II.5.65 Total resources mobilised by the All-India Financial Institutions (AIFIs) in the form of bonds and debentures increased by 20.4 per cent to Rs.17,175 crore during 2007-08 (Table 2.75). Financial assistance sanctioned by AIFIs increased by

Table 2.74: Funds Mobilised by Mutual Funds – Type of Schemes

(Amount in Rupees crore)

Scheme	2006-07			2007-08 P		
	No. of Schemes	Net Mobilisation	Net Assets*	No. of Schemes	Net Mobilisation	Net Assets*
1	2	3	4	5	6	7
A. Income/Debt Oriented Schemes	**450**	**64,068**	**1,93,585**	**593**	**1,03,867**	**3,12,997**
(i) Liquid/ Money Market	55	4,986	72,006	58	14,976	89,402
(ii) Gilt	28	-964	2,257	30	434	2,833
(iii) Debt (other than assured return)	367	60,046	1,19,322	505	88,457	2,20,762
(iv) Debt (assured return)	0	0	0	0	0	0
B. Growth/Equity Oriented Schemes	**267**	**28,206**	**1,23,597**	**313**	**46,933**	**1,72,742**
(i) Equity Linked Saving Schemes	40	4,453	10,211	43	6,151	16,020
(ii) Others	227	23,753	1,13,386	270	40,782	1,56,722
C. Balanced Schemes	**38**	**1,711**	**9,110**	**37**	**5,768**	**16,283**
D. Exchange Traded Fund+	**–**	**–**	**–**	**13**	**-2,766**	**3,130**
(i) Gold ETF	–	–	–	5	277	483
(ii) Other ETFs	–	–	–	8	-3,043	2,647
E. Fund of Funds Scheme	**33**	**1,164**	**2,215**	**37**	**1,162**	**3,742**
F. TOTAL #	**755**	**93,985**	**3,26,292**	**956**	**1,53,802**	**5,05,152**

*: As at end-March. #: Total excludes Fund of Funds Schemes. P: Provisional. - : Not available.
+: Exchange Traded Funds first introduced *vide* SEBI circular No. IMD/CIR No.4158422/06 dated January 24, 2006.
Source : Securities and Exchange Board of India.

Table 2.75: Resources Raised by way of Bonds/Debentures by Select All-India FIs

(Amount in Rupees crore)

Institution	Resources Raised		Outstanding Borrowings		Weighted Average Cost of Funds (Per cent)		Weighted Maturity (years)	
	2006-07	2007-08	End-March 2007	End-March 2008	2006-07	2007-08	2006-07	2007-08
1	2	3	4	5	6	7	8	9
Exim Bank	2,512	3,555	9,676	11,871	7.3	7.8	4.9	3.6
SIDBI	572	..	6,463	5,415	9.6	..	10.0	..
NABARD	10,899	13,620	31,260	32,630	8.7	9.5	5.0	4.0
NHB	283	..	10,411	7,262	8.1	..	2.0	..
Total	**14,265**	**17,175**	**57,810**	**57,179**	**..**	**..**	**..**	**..**

.. : Nil/Not applicable.

Note: 1. Data relates to rupee resources only.

2. Data on resources raised include long-term resources mobilised through bonds/debentures; short-term resources mobilised through commercial papers, certificates of deposit, inter-corporate deposits, term deposits and term money.

3. Data are provisional.

Source : Respective Financial Institutions (FIs).

87.8 per cent during 2007-08 and financial assistance disbursed increased by 19.0 per cent (Appendix Table 46).

II.5.66 To sum up, global financial markets witnessed turbulent conditions during 2007-08 as the crisis in the US sub-prime mortgage market deepened and spilled over to other markets. Indian financial markets remained largely orderly during 2007-08, barring the equity market which witnessed bouts of volatility, especially beginning the second week of January 2008 in sync with trends in major international equity markets. Brief spells of volatility were also observed in the money market on account of changes in capital flows and cash balances of the Central Government with the Reserve Bank. After the withdrawal of the ceiling of Rs. 3,000 crore on reverse repo acceptances under the LAF on August 6, 2007, interest rates in the overnight money markets moved in the reverse repo and repo corridor and generally remained within the corridor during the remaining part of the year. In the foreign exchange market, the Indian rupee generally exhibited two-way movements. Yields in the Government securities market softened during most part of the year. Deposit rates of scheduled commercial banks softened, particularly at the longer end of the maturities.

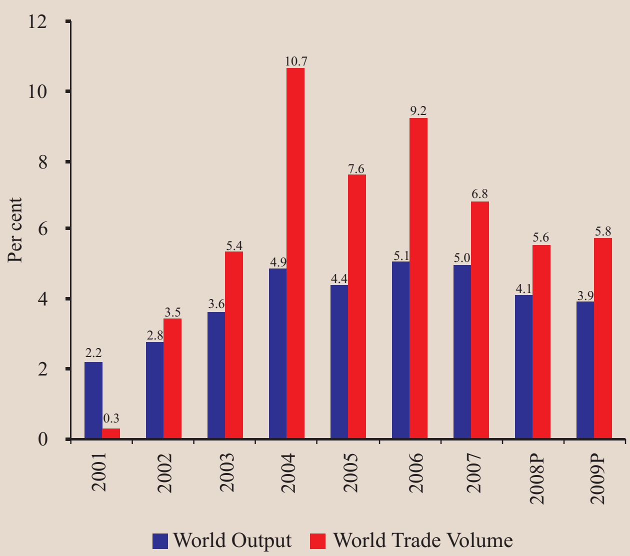
VI. EXTERNAL SECTOR

II.6.1 India's balance of payments position continued to remain comfortable during 2007-08, notwithstanding the scaling of new peaks of international crude oil prices and large volatility in global financial markets. Although merchandise export growth remained robust, the trade deficit widened during the year in the wake of sustained demand for non-oil imports and escalation in international crude oil prices. Net surplus under invisibles, however, remained buoyant, led by high growth in private transfers and software exports, thereby offsetting a significant part of the trade deficit. Consequently, as a result of substantial surplus in invisibles account, the widening of the current account deficit was contained during the year. Net capital inflows surged during the year, led by portfolio investments, external commercial borrowings (ECBs) and foreign direct investments. Outward foreign direct investment remained at a higher level, reflecting the growing global reach of the Indian corporate sector. With net capital inflows far exceeding the current account deficit, the overall balance of payments recorded a significant surplus which was reflected in an accretion of US $ 110.5 billion to the foreign exchange reserves during 2007-08.

INTERNATIONAL DEVELOPMENTS

II.6.2 The global economy grew by 5.0 per cent in 2007 as against 5.1 per cent in 2006 (Appendix Table 47 and Chart II.27). After stronger than expected growth in the third quarter of 2007, growth in most of the advanced economies decelerated sharply in the last quarter of 2007, mainly on account of turmoil in the international financial markets triggered by the US sub-prime mortgage market. In the US, real GDP growth decelerated sharply to 2.2 per cent in 2007 from 2.9 per cent in 2006, while in Japan and the Euro area, growth rates were placed marginally lower at 2.1 per cent and 2.6 per cent, respectively, in 2007 from 2.4 per cent and 2.8 per cent, respectively, in 2006. The UK economy, however, posted a marginally higher growth of 3.1 per cent in 2007 as compared with 2.9 per cent in the previous year. In contrast, emerging and developing economies continued to grow above the trend, despite some slackening of exports and industrial production towards the end of year. Growth in emerging Asia during 2007 was led by China and India. The robust growth of 11.9 per cent in China during 2007 was driven by investment growth and net exports, although export growth moderated somewhat towards the end of year. The growth of Indian economy moderated during 2007-08 as detailed in Section II.2.

Chart II.27: Growth in World Output and Trade



Note: Data for 2008 and 2009 are projections.

II.6.3 In the wake of slowdown in the major advanced economies, global merchandise trade decelerated in 2007, with growth in volume of world trade placed lower at 6.8 per cent in 2007 as compared with 9.2 per cent in 2006. According to the IMF, private capital flows to emerging and developing countries in 2007 were more than two and half times of those in 2006 driven by a surge in 'other capital flows' comprising bank and other borrowings and foreign direct investment (Table 2.76). Net private portfolio flows recorded inflows during 2007 in contrast to outflows witnessed in 2006. Emerging Asia followed by Central and Eastern Europe and Commonwealth of Independent States were the major recipients of private capital flows in 2007. Emerging Asia among other regions continued to dominate in terms of net FDI flows in 2007.

II.6.4 According to the IMF, global economic activity is likely to witness a further slowdown in 2008 mainly due to developed economies. The volume of trade and the private capital flows are also expected to be impacted in 2008 in line with the projected deceleration in world growth (Appendix Table 47). The US economy is likely to grow by 1.3 per cent in 2008, although the prospects would hinge upon the future course of the housing correction, the extent of financial sector dislocation, and the ensuing impact on household and business finances. The

Table 2.76: Net Capital Flows to Emerging Markets and Developing Economies

(US $ billion)

Item	2005	2006	2007	2008P	2009P
1	2	3	4	5	6
Net Private Capital Flows*	**251.8 (551.4)**	**231.9 (760.3)**	**605.0 (1028.9)e**	**330.7**	**441.5**
Direct investment	259.8	250.1	309.9	306.9	322.4
Portfolio investment	-19.4	-103.8	48.5	-72.2	31.0
Others	13.3	87.5	248.8	98.0	90.0
Official Capital Flows	**-109.9**	**-160.0**	**-149.0**	**-162.3**	**-149.8**

P : IMF Projections. e : Estimate.

* : On account of data limitations, flows listed under 'net private capital flows' may include some official flows.

Note : Figures in parentheses pertain to net capital flows to developing countries according to Global Development Finance, 2008. Divergence in estimates of net private capital flows by World Economic Outlook (IMF) and Global Development Finance (World Bank) is on account of (i) difference in definition of emerging markets; and (ii) difference in treatment of items within net private capital flows.

Source : World Economic Outlook, IMF, April 2008; Global Development Finance, World Bank, 2008.

Euro area is expected to grow by 1.7 per cent in 2008 even as there are increasing concerns that spillovers from the US, tightening credit conditions and rising risk spreads may have adverse implications for domestic demand. Growth in Japan is projected to decelerate to 1.5 per cent in 2008 on account of expected moderation in export growth and consumption. Growth projection for developing Asia is placed at 8.4 per cent for 2008 as against 10.0 per cent in 2007. Growth in China is expected to moderate to 9.7 per cent in 2008.

II.6.5 The overall balance of risks to the short-term global growth outlook remains tilted to the downside. Interaction between negative financial shocks and the domestic demand remains a serious downside risk to the US and, to some extent, for Western Europe and elsewhere. However, there is some upside potential for projected domestic demand in emerging economies. The emerging market and developing economies are expected to remain as the stabilising factor in supporting the global economy (Box II.20). The spillover to emerging

Box II.20

Global Slowdown and Impact on Emerging Economies

The global economy is widely expected to experience a slowdown in 2008 mainly due to slowdown in the advanced economies and to some extent in emerging market economies (EMEs). Despite some moderation, the EMEs, which have not been significantly affected by the financial market turbulence so far, would continue to grow at a rapid pace and support global growth. Domestic demand would be the major driver of growth in the EMEs, although external risks through both trade and financial channels would pose downward risks. Although EMEs have so far remained insulated from the global slowdown, their growth prospects would also be affected by external factors. Rise in risk aversion has already dampened private bond issuances in several EMEs and there remains the possibility of capital inflows drying up in the present scenario. Furthermore, in the EMEs, the recent rise in headline inflation caused by higher energy and food prices is of concern. The EMEs would require a balanced response in controlling inflation, while being alert to decelerating impulses from the slowdown in the developed countries and the possibility of prolonged global financial market turmoil.

It is, therefore, imperative to assess the likely impact of the US slowdown on EMEs. According to the IMF, 1 per cent reduction in US GDP growth leads to 0.5 percentage point decline in growth in advanced European economies with a six-month lag, and about 0.75 percentage point decline in the growth of EMEs, taking into account the joint effect of a slowdown in the US and Europe. World trade is also expected to decelerate in 2008 by 1.2 percentage points as per the IMF and by 1.0 percentage point as per the World Trade Organisation, reflecting the expectations of slower global growth.

The impact of US slowdown on the EMEs could be mainly through trade linkages and financial linkages. Trade spillovers from the slowdown in the advanced economies to emerging economies have been limited so far. However, such impact is more visible in economies that either trade heavily with the US or are more externally dependent for financing their growth. If the US slowdown persists for long and Euro area also witnesses weaker demand conditions, a weak external demand along with higher energy prices and lower equity prices, could then pose risks to the growth prospects of Asian emerging economies. In this context, China would play an important role in sustaining the growth prospects in the region. In case China gets impacted from the global slowdown, particularly in the US, it could have spillover impact on other emerging economies as about half of China's exports are with emerging economies. Emerging economies are increasingly trading among themselves which augurs well in the present situation of global slowdown.

As far as the impact through financial linkages is concerned, capital inflows to EMEs have moderated in recent months of 2008. A number of countries that had relied heavily on short-term cross-border borrowings have been affected. However, the overall direct impact on emerging and developing economies, thus far, has been significantly lower than in the previous periods of global financial market distress.

According to the IMF, the extent of resilience of the emerging and developing economies and their ability to remain decoupled from the substantial slowdown, and possible recession in the advanced economies in 2008 would depend upon two factors, *viz*., (i) building on the productivity gains from their continuing integration into the global economy; and (ii) stabilisation gains from improved macroeconomic policy frameworks. However, the EMEs have to be in readiness to respond to a more negative external environment, which could weaken trade performance and stifle capital inflows.

A recent study found that the impact of industrial economies on the growth performance of emerging markets has been declining (Akin and Kose, 2007). If the US slowdown continues to be limited to certain sectors and financial market conditions are restored in a timely manner, spillovers to other economies could remain limited. However, another study argues that if the downturn spreads to consumption and investment in the US and turns into a full-blown recession, then much larger cross-border spillovers could be expected. In this context, credible policy responses could moderate the US spillover effects to the rest of the world (Kose, 2008).

References

1. Akin, Cigdem and Kose, M. Ayhan (2007), "Changing Nature of North-South Linkages: Stylized Facts and Explanations", IMF Working Paper No. 07/280.
2. International Monetary Fund (2008), *World Economic Outlook*, April.
3. Kose, M. Ayan (2008), "Can Emerging Economies Decouple",*www.imf.org/external/np/res/docs/2008/pdf/kose.pdf*

markets and developing countries has been relatively contained so far mainly because of their limited direct exposure to sub-prime related securities. Consumption activity supported domestic demand in emerging Asian economies, while export growth has begun to show some signs of moderation. The strong domestic demand in the region combined with rising food and energy prices led to the build-up of inflationary pressures in a number of countries in emerging Asia. Apart from the possibility of further credit crunch, downside risks to global growth include contagion from the likely US recession, increased inflationary pressures driven by rising food and energy prices, and persisting global imbalances.

II.6.6 According to the World Trade Organisation (WTO), world merchandise exports growth, in real terms, slowed down to 5.5 per cent in 2007 from 8.5 per cent in 2006 due to subdued global economic growth and weaker demand in the developed region (US, Europe, Japan) as well as net oil importing developing countries in Asia. For the year 2008, WTO has projected further slowdown in growth of global merchandise trade to about 4.5 per cent from 5.5 per cent in 2007 due mainly to expected deceleration in global output. The downside risks associated with the slowdown include recessionary tendencies in the US, weaker demand in Europe and Japan, rise in inflation and depressed global stock markets.

II.6.7 Globalisation - greater integration through trade, investment, technology, cross-border production systems, and flows of information and communication - has brought economies closer. One significant consequence of this globalisation process is that many developing countries have been able to step up their economic growth. As emerging market and developing economies (EMDEs) are becoming more integrated and inter-dependent with advanced economies, they have assumed a new role in the global supply chain that increasingly influences the world economy dynamics (Box II.21).

BALANCE OF PAYMENTS

Merchandise Trade

II.6.8 India's merchandise trade continued to maintain its growth momentum in 2007-08, despite the slowdown in global economic growth and adverse financial market developments. According to WTO data, India's share in world trade (exports and imports taken together) increased from 1.2 per cent in 2006 to 1.3 per cent in 2007. During 2007, India's exports were 1.0 per cent and imports 1.5 per cent of world exports and imports, respectively. India was the 26th largest exporter and the 18th largest importer in the world in 2007. India's merchandise trade deficit, on a balance of payments basis, widened from US $ 63.2 billion in 2006-07 to US $ 90.1 billion in 2007-08.

II.6.9 According to the data released by the Directorate General of Commercial Intelligence and Statistics (DGCI&S), India's merchandise exports recorded a growth of 25.8 per cent during 2007-08 as compared with 22.6 per cent in 2006-07 (Appendix Table 48). Commodity-wise exports data available for 2007-08 indicate that agriculture and allied products, engineering goods, gems and jewellery and petroleum products were the drivers of export growth contributing about 69 per cent to the export growth. Among manufactured exports, gems and jewellery, and textiles and textile products accelerated, while engineering goods exhibited moderation. Exports of petroleum products during 2007-08 recorded a growth of 33.1 per cent, lower than that of 60.5 per cent in 2006-07 (Appendix Table 49).

II.6.10 The composition of India's merchandise exports has undergone some noticeable shifts, particularly since 2000-01. Merchandise exports recorded an average growth of 20.3 per cent during the period 2001-08, a remarkable improvement over 8.6 per cent growth during the previous decade (1990-2000). The export basket of India has become diversified in terms of commodities beginning with the year 2000. The share of traditional exports such as agriculture and allied products, handicrafts, textiles and textile products, gems and jewellery and leather and manufactures has declined in total exports, while that of engineering goods and petroleum products has increased.

Box II.21
The Changing Global Economic Geography

The wave of globalisation, reflected in a greater flow of trade and finance, is shaping the present world economic order. With the progressive integration of EMDEs into the mainstream of economic activities, the share of EMDEs in world merchandise trade increased from 23.9 per cent in 1993 to 35.4 per cent in 2007. Trade openness, as measured by exports and imports as proportion of their GDP, increased from 40.4 per cent to 66.1 per cent during the same period. The fact that this group of economies has also become the hub of dynamic growth in the recent period, reflecting their solid macroeconomic fundamentals, has also contributed to their higher trade openness. As a result, their share in world GDP in PPP terms improved from 36.2 per cent in 1993 to 43.7 per cent in 2007. Reflecting their higher growth differential *vis-à-vis* other economies, gross private capital flows have also increased at an annual compound growth rate of 30 per cent during 1999-2007 period to reach US $ 1,634 billion in 2007. Net official flows over the 10-year period ended 2007 were insignificant, implying that their robust performance has drawn a variety of investors.

All these progressively rising global economic relationships have given rise to interesting issues. The foremost is that it is now increasingly evident that there has been larger convergence in business cycle in terms of growth of real GDP, inflation, interest rates, among others across various economies of the world, although EMEs have been relatively unaffected by the current financial market turmoil and incipient global economic slowdown. The changing economic relationships among advanced and emerging economies have also had an important impact on inflation over the past decade. Globalisation and the associated rise in trade integration have reduced the barriers to market access by foreign producers. This tends to encourage price competition in domestic markets and increase imports. It has also led to the relocation of production of many internationally traded goods. China's manufacturing industry and to some extent, India's services sector, have admittedly contributed to the downward inflationary pressures over the past few years before the current increase in inflationary pressures (Reddy, 2008). Further, the volatility of inflation has also trended downwards, with its cyclical movements broadly matching those in the level of inflation itself (White, 2008).

With the growing middle-class, the global market demand is shifting dramatically as trade patterns change. Trade is less dependent than hitherto on advanced economies because the purchasing power of the consumer has gone up significantly in the major emerging economies. This provides a considerable boost to the overall growth momentum of the world economy. Like-wise, migration and the outsourcing of activities have transformed and linked labour markets globally which have significant macroeconomic implications both for the advanced and developing economies. Furthermore, the new world economic order has led the policy makers to take a holistic view on the interface issues pertaining to trade, finance, economic growth, poverty, environmental sustainability, social progress and governance which were once treated separately. For instance, social and environmental dimensions are increasingly discussed during WTO talks.

At the same time, globalisation has brought in its wake a number of challenges also. All economies are now exposed to faster transmission of adverse external shocks, sometimes even economies with strong fundamentals may be affected. For instance, the recent sub-prime crises originated in the US, but it has affected many EMEs, which are otherwise healthy. Such vulnerability suggests that there is no substitute to strengthening regulation and prudential oversight, sound risk management practices, fair valuation of portfolio and proper disclosure for market participants, particularly for banks.

At times, globalisation is also perceived as constraining the flexibility of an individual economy to pursue independent monetary policy. The cross-country experiences show that in an environment of growing internationalisation, prudent fiscal policy would provide larger headroom for market-based monetary policy and facilitate greater flexibility in exchange rate also to cushion the economy from any adverse shock, thereby preserving the independence of monetary policy of the country concerned.

While globalisation has improved the standard of living across almost all countries, the distribution of gains – both across countries and within a country – has become a matter of serious public policy concern in the recent period. In many advanced economies, GDP growth has proceeded at a rapid pace for the last several years, but median real incomes have not increased by nearly as much. Similarly, in virtually all of the advanced economies, the share of income accruing to labour in total national income has declined over the last 25 years. In many emerging economies, including in Asia, inequality has also increased. These developments raise doubts about the benefits of globalisation and lead to protectionist rhetoric on account of rising job losses and income insecurity, particularly for unskilled labour, although corporate restructuring has also meant job insecurity for professionals.

From the Indian perspective, while globalisation has contributed to higher income and employment, and access to better technology, management and market, it has also thrown up many challenges in terms of the need to upgrade the poor physical and social infrastructure. Otherwise, it would be a challenge for India to reap the full benefit of its demographic dividend in the phase of rapidly changing global economic order.

References

1. Reddy, Y.V. (2008), "Financial Globalisation, Growth and Stability: An Indian Perspective" Remarks at the International Symposium of the Banque de France on Globalisation, Inflation and Monetary Policy, held in Paris on March 7, 2008.
2. White, William R. (2008), "Globalisation and the determinants of domestic inflation", BIS Working Paper No. 256, March.

II.6.11 Destination-wise, the US with a share of 13.0 per cent in the overall exports during 2007-08 continued to be the single largest market for India, though its share declined from 14.9 per cent a year ago (Table 2.77). The other major export destinations were the UAE (9.7 per cent), China (6.8 per cent), Singapore (4.3 per cent), the UK (4.1 per cent), Hong Kong (4.0 per cent), Germany (3.2 per cent) and the Netherlands (3.0 per cent). Region-wise, exports to the EU, North America, Eastern Europe and Asian developing countries accelerated, while those to Asia and Oceania, OPEC, African developing countries and Latin American developing countries moderated.

II.6.12 Over the years, India's exports have witnessed geographical diversification as well (Box II.22). Prior to the year 2000, India's major export markets were the developed regions such as the European Union and the US. However, by 2007-08, developing countries became the major markets with exports to Asia, OPEC and African countries picking up significantly. The shares of the EU and the US declined mainly due to the structural shift in commodities composition in India's exports to these areas.

II.6.13 Growth in India's imports accelerated to 29.0 per cent during 2007-08 from 24.5 per cent in 2006-07. Growth in imports of petroleum, oil and lubricants (POL) accelerated to 39.4 per cent during 2007-08 from 30.0 per cent during 2006-07, mainly reflecting the spurt in the Indian basket of international crude oil prices (higher by 27.4 per cent in 2007-08 as compared with 12.0 per during 2006-07).

Table 2.77: Direction of India's Exports

Group/ Country	US $ billion		Variation (per cent)	
	2006-07	2007-08	2006-07	2007-08
1	2	3	4	5
1. OECD Countries	**52.0**	**61.7**	**13.5**	**18.6**
of which:				
a) EU	25.8	32.2	15.1	24.9
b) North America	20.0	22.0	8.7	10.0
US	18.9	20.7	8.7	9.7
2. OPEC	**20.7**	**26.2**	**35.8**	**26.4**
of which:				
UAE	12.0	15.4	40.0	27.7
3. Developing Countries	**50.8**	**67.2**	**27.8**	**32.4**
of which:				
Asia	37.6	50.1	21.4	33.2
People's Republic of China	8.3	10.8	22.7	30.0
Singapore	6.1	6.9	11.9	12.9
4. Total Exports	**126.4**	**159.0**	**22.6**	**25.8**

Source : DGCI&S.

II.6.14 Growth in non-oil imports was placed at 24.4 per cent during 2007-08 (22.2 per cent a year ago) and contributed about 58 per cent to the overall import growth. Within non-oil imports, capital goods imports marginally decelerated to 24.1 per cent (25.0 per cent a year ago), while the import of gold and silver, decelerated to 21.8 per cent (29.4 per cent a year ago) (Appendix Table 50). Non-oil imports, excluding gold and silver increased by 24.7 per cent during 2007-08 as compared with 21.4 per cent a year ago. Growth in mainly industrial inputs (non-oil imports net of gold and silver, bulk consumption goods, manufactured fertilisers and professional instruments) increased at an accelerated rate of 24.2 per cent (19.6 per cent in 2006-07). The other major non-oil products which showed accelerated growth in imports during the period were edible oil, fertilisers, pearls, precious and semi-precious stones, chemicals, textiles, and coal, coke and briquettes.

II.6.15 Source-wise, China was the main source of imports, constituting 11.3 per cent of total imports (oil *plus* non-oil imports) during 2007-08 (Table 2.78). The other major sources of imports were Saudi Arabia (8.1 per cent), the UAE (5.6 per cent), the US (5.5 per cent), Iran (4.6 per cent), Switzerland (4.1 per cent), Germany (4.0 per cent) and Australia (3.3 per cent).

Developments during 2008-09

II.6.16 During April-June 2008, India's merchandise exports grew by 22.4 per cent (20.4 per cent a year ago). Merchandise imports increased by 29.8 per cent (38.0 per cent). Oil imports during April-June 2008 increased by 50.4 per cent, while non-oil imports increased by 20.9 per cent. The merchandise trade deficit for April-June 2008 increased to US $ 30.4 billion from US $ 21.5 billion during April-June 2007.

Box II.22
India's Export Diversification

International trade has assumed a critical role in economic growth in an era of liberalisation and rapid globalisation. Export diversification has emerged as a long-term trade policy instrument towards stabilising export earnings, since concentration of exports in a few goods is associated with the risk of deteriorating terms of trade, income volatility and ultimately growth potential. Furthermore, sustained economic growth of developing countries requires a shift from dependence on primary exports towards diversified manufacturing exports so as to derive the benefits of externalities and forward and backward linkages. Externalities associated with export diversification relate to diversified export structure facilitated by introduction of new technologies of production through knowledge spillovers and acquisition of new organisational and entrepreneurial skills. The forward and backward linkages provide for the production of a diversified export structure.

The trade literature delineates two dimensions to export diversification, *viz.*, intensive composition of trade (also termed as intensive margin) and extensive composition of trade (extensive margin). The intensive composition of trade refers to the growth of exports in goods that are already being exported, whereas the extensive composition is defined as the growth of exports in new products. Empirical studies reveal that export diversification is on the rise and more dynamic within the developing countries and it differs depending on the income level, size and proximity of the destination markets. The poorest countries, in general, are experiencing a totally different type of constraint due to the very nature of their economic structures which lack knowledge and infrastructure. In the absence of diversification of production, their exports concentrate on a few products. The intensive margin is the most important category for all regions. Within the extensive margin, geographical diversification matters more for developing countries than for developed ones. At the same time, for the sustenance of a strong diversified export markets, besides the size of the market at destination, one needs to take into account the cost factors as well. Promotion of effective regionalism, trade facilitation measures and strengthening of infrastructure are considered to be important factors for reducing trade costs. Empirical studies have come with policy prescriptions for export diversification. In a situation of intensive composition of trade with scarce resources, the focus should be on moving up the quality chain in the existing exports. At the extensive composition of trade, geographical diversification is more important than product diversification.

In India, the strong and sustained growth in merchandise exports witnessed in recent years (an average growth of 24.0 per cent during 2002-08) was accompanied by structural shifts in the commodity composition and market diversification. The trend observed in respect of India's export diversification was one of extensive composition of trade with technology intensive commodities emerging as drivers of growth with wider geographical coverage. The technology-intensive engineering goods and petroleum products emerged as the drivers of India's exports in place of traditionally predominant items such as gems and jewellery, and textiles and textile products. Machinery, transport equipments, manufacture of metals and iron and steel, with a diversified developing countries market, drove the growth of engineering goods. Furthermore, the terms of trade effect emanating from relatively high export prices realised *vis-à-vis* import prices, in the wake of surge in global prices, particularly of ores and minerals, metals and petroleum products, also helped achieve the high export growth in recent years.

Over the years, India's exports have witnessed geographical diversification as well. India's major export markets have shifted from developed regions such as the European Union and the US to diversified markets such as Asia, OPEC and African countries.

References

1. Oliver Cadot, Celine Carrere and Vanessa Strauss-Kahn, "Export Diversification: What's Behind the Hump?", Centre for Economic Policy Research, Discussion Paper No.6590, November 2007.

2. Alberto Amurgo-Pacheco and Martha Denisse Pierola, "Pattern of Export Diversification in Developing Countries: Intensive and Extensive Margins", Policy Research Working Paper, No 4473, World Bank, January 2008.

3. *World Bank (2005), Global Economic Prospects 2005: Trade, Regionalism and Development.*

Table 2.78: Direction of India's Imports

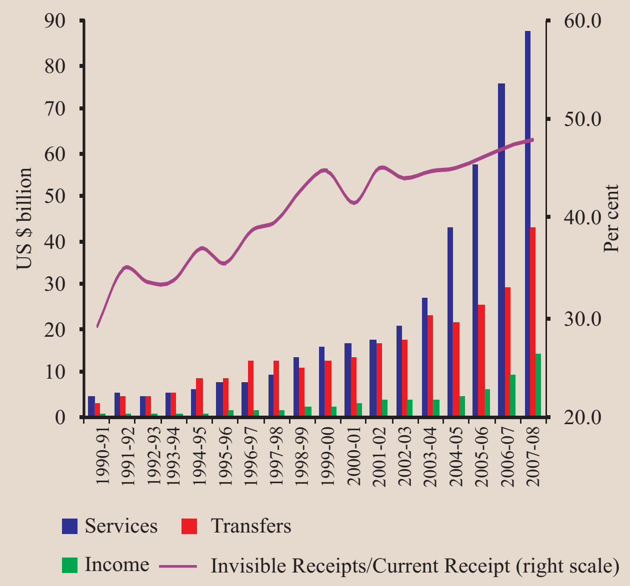
Group/ Country	US $ billion		Variation (per cent)	
	2006-07	2007-08	2006-07	2007-08
1	2	3	4	5
1. OECD Countries	**64.0**	**75.8**	**23.6**	**18.4**
of which:				
a) EU	28.4	33.1	13.0	16.3
Germany	7.5	9.6	25.3	26.8
UK	4.2	5.0	6.2	18.7
b) North America	13.5	15.1	30.3	12.0
US	11.7	13.2	24.1	12.5
2. OPEC	**56.1**	**76.1**	**402.0**	**35.8**
of which:				
UAE	8.7	13.5	98.8	55.6
3. Developing Countries	**59.8**	**80.6**	**57.8**	**34.8**
of which:				
Asia	47.4	64.1	55.5	35.4
People's Republic of China	17.5	27.1	60.7	55.1
Singapore	5.5	8.1	63.7	47.8
South Korea	4.8	6.0	5.3	25.5
4. Total Imports	**185.7**	**239.7**	**24.5**	**29.0**

Source : DGCI&S.

Invisibles

II.6.17 The invisibles account comprises international trade in services, income from financial assets, labour and property and cross border transfers, mainly workers' remittances. Net surplus under invisibles (invisible receipts *minus* payments) was higher at US $ 72.7 billion during 2007-08 (US $ 53.4 billion in 2006-07), reflecting mainly the rise in remittances from overseas Indians and growth in software exports (Table 2.79 and Appendix Table 52). Growth in gross invisible receipts moderated from 28.3 per cent in 2006-07 to 26.2 per cent in 2007-08 mainly on account of deceleration in exports of software and business services in the second quarter of 2007-08. The share of gross invisible receipts in current receipts increased marginally to 47.8 per cent during 2007-08 from 47.3 per cent a year ago (Chart II.28). Invisible payments grew moderately by 17.7 per cent during 2007-08 as against 29.3 per cent in 2006-07. The net surplus under invisibles increased from 5.8 per cent of GDP in 2006-07 to 6.2 per cent of GDP in 2007-08.

Chart II.28 : India's Invisible Receipts



Services

II.6.18 Net surplus under services expanded from US $ 31.8 billion during 2006-07 to US $ 37.6 billion during 2007-08 led by net software services exports. India's services receipts are dominated by travel earnings, transport, software and business services, reflecting enhanced international tourist interest in India, growing importance of India's high skilled workers and technology intensive services (Table 2.80). Similarly, the services payments have been increasing on account of expansion of domestic economy, rising freight cost, the rising outbound tourist traffic, payments related to business and management consultancy, and architectural, engineering and other technical services.

II.6.19 India has emerged as a major exporter of services in the world in recent years benefiting from its comparative advantage in a number of services exports. India was ranked as the 11th largest services exporter in the world in 2006, with a market share of 2.5 per cent as against 0.6 per cent in 1995 (Chart II.29).

II.6.20 Exports of software services reached a level of US $ 40.3 billion during 2007-08, recording a growth of 28.8 per cent despite some moderation in global economic activity. Customer needs, changes in the environment along with low operation cost

Table 2.79: India's Balance of Payments - Key Indicators

(US $ million)

Item/Indicator	1990-91	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07PR	2007-08P
1	2	3	4	5	6	7	8	9
i) Trade Balance	-9,438	-11,574	-10,690	-13,718	-33,702	-51,904	-63,171	-90,060
ii) Invisibles, net	-242	14,974	17,035	27,801	31,232	42,002	53,405	72,657
iii) Current Account Balance	-9,680	3,400	6,345	14,083	-2,470	-9,902	-9,766	-17,403
iv) Capital Account	7,056	8,551	10,840	16,736	28,022	25,470	45,779	108,031
v) Overall Balance #	-2,492	11,757	16,985	31,421	26,159	15,052	36,606	92,164
vi) Foreign Exchange Reserves* [Increase(-) / Decrease (+)]	1,278	-11,757	-16,985	-31,421	-26,159	-15,052	-36,606	-92,164
Indicators (in per cent)								
1. Trade								
i) Exports/GDP	5.8	9.4	10.6	11.0	12.1	13.0	14.0	13.5
ii) Imports/GDP	8.8	11.8	12.7	13.3	16.9	19.4	20.9	21.2
iii) Trade Balance/GDP	-3.0	-2.4	-2.1	-2.3	-4.8	-6.4	-6.9	-7.7
iv) Export Volume Growth	11.0	3.9	21.7	6.0	17.5	11.8	15.8	n.a.
2. Invisibles								
i) Invisible Receipts/GDP	2.3	7.7	8.3	8.9	9.9	11.1	12.5	12.4
ii) Invisible Payments/GDP	2.4	4.5	4.9	4.3	5.5	5.9	6.7	6.2
iii) Invisibles (Net)/GDP	-0.1	3.1	3.4	4.6	4.4	5.2	5.8	6.2
3. Current Account								
i) Current Receipts@/GDP	8.0	16.9	18.8	19.8	21.9	24.0	26.4	25.8
ii) Current Payments/GDP	11.2	16.3	17.6	17.6	22.4	25.3	27.6	27.4
ii) Current Receipts Growth@	6.6	4.5	17.6	25.2	29.3	26.0	24.9	24.9
iii) Current Receipts@/Current Payments	71.5	103.8	106.6	112.8	98.0	94.8	95.9	94.3
iv) Current Account Balance/GDP	-3.1	0.7	1.2	2.3	-0.4	-1.2	-1.1	-1.5
4. Capital Account								
i) Foreign Investment to India (net)/GDP	-	1.7	1.2	2.6	2.2	2.6	3.2	5.2
ii) Capital Flows (net)/GDP	2.2	1.8	2.1	2.8	4.0	3.1	5.0	9.2
iii) Capital Inflows/GDP	7.2	9.1	9.1	12.6	14.0	17.9	25.3	36.5
iv) Capital Outflows/GDP	5.0	7.3	7.0	9.8	10.0	14.8	20.3	27.3
v) Foreign Investment to India (net)/Exports	0.6	18.2	11.2	23.7	18.0	20.3	22.6	38.8
5. Others								
i) Debt-GDP Ratio	28.7	21.1	20.3	17.8	18.6	17.2	17.8	18.8
ii) Debt-Service Ratio	35.3	13.7	16.0	16.1	6.1	9.9	4.8	5.4
iii) Liability - Service Ratio	35.6	14.9	16.1	19.1	7.1	11.2	6.2	6.5
iv) Import Cover of Reserves (in months)	2.5	11.5	14.2	16.9	14.3	11.6	12.5	15.0

PR : Partially Revised. P : Provisional. - : negligible
: Including errors and omissions. * : Excluding valuation changes. @ : Excluding official transfers. n.a. : Not available.

helped India maintain a steady software export growth of around 30.0 per cent since 2003-04. According to NASSCOM, the US and the UK remained the largest export markets (accounting for market share of about 61 per cent and 18 per cent, respectively, in 2006-07). The industry, however, has been steadily increasing its exposure to other geographical regions. To withstand global competition and slowdown of the US economy, Indian companies started moving up the value chain by exploring untapped potential in IT consulting and system integration, hardware support and installation and processing services. As a result of these developments, India continued to maintain its position as a leading exporter of computer and information services (Table 2.81).

II.6.21 Amongst other major services, travel receipts continued to benefit from the robust growth in tourist

Table 2.80: Structure of India's Services Exports

Year	Amount (US $ million)	Share in Total Services Exports (Per cent)					
		Travel	Transportation	Insurance	G.N.I.E.	Software	Miscellaneous*
1	2	3	4	5	6	7	8
1970-71	292	16.8	49.7	5.5	13.7	0	14.4
1980-81	2,804	43.5	16.3	2.3	4.0	0	33.9
1990-91	4,551	32.0	21.6	2.4	0.3	0	43.6
2000-01	16,268	21.5	12.6	1.7	4.0	39.0	21.3
2003-04	26,868	18.7	11.9	1.6	0.9	47.6	19.2
2004-05	43,249	15.4	10.8	2.0	0.9	40.9	29.9
2005-06	57,659	13.6	11.0	1.8	0.5	40.9	32.1
2006-07	76,181	12.0	10.6	1.6	0.3	41.1	34.5
2007-08	87,687	12.9	10.8	1.8	0.4	46.0	28.1

*: Excluding software services.
G.N.I.E. : Government not included elsewhere.

arrivals (Table 2.82). Tourism earnings have remained buoyant since 2003-04, reflecting both business and leisure travel, liberalisation of payments system, growing globalisation, rising services exports and associated business travel. On the other hand, with sustained growth in outbound tourism, travel payments also increased, reflecting rising business and leisure travel in consonance with (i) growing merchandise and services trade; and (ii) growing disposable incomes of residents in an environment of liberalised payments regime. The net receipts under travel account were lower at US $ 2.1 billion in 2007-08 than US $ 2.4 billion during 2006-07.

II.6.22 Under invisible receipts, non-software services exports in 2007-08 were mainly driven by business and professional services (Table 2.83). The category of business services comprise trade related services; operational leasing services without operating crew, including charter hire; legal services; accounting, auditing, book keeping and tax consulting services; advertising, trade fair, market research and public opinion polling service; research

Chart II.29: India's Share in World Exports of Goods and Services

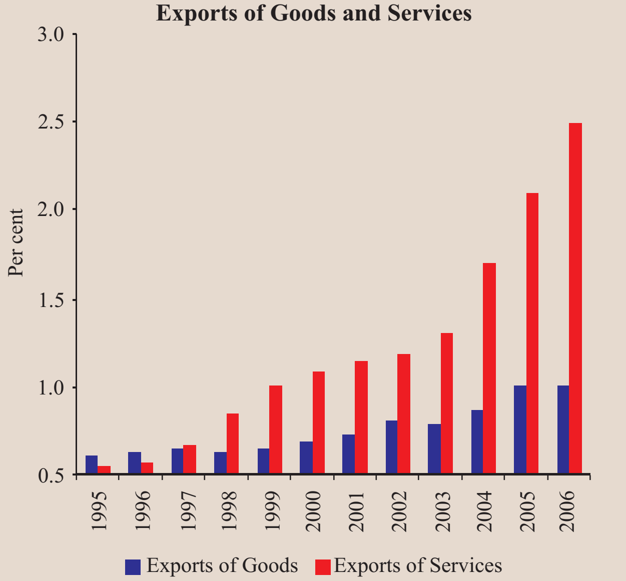


Table 2.81: Computer and Information Services Exports

(US $ billion)

Rank*	Country	2000	2004	2005	2006
1	2	3	4	5	6
1	**India**	**6.3**	**17.7**	**23.6**	**31.3**
2	Ireland	7.5	18.8	19.6	21.0
3	U.K.	4.3	11.7	11.2	12.0
4	Germany	3.8	8.1	8.3	9.6
5	U.S.	5.6	6.7	7.5	7.6
6	Israel	4.2	4.4	4.5	5.3
7	Canada	2.4	3.1	3.9	4.0
8	Spain	2.0	3.0	3.6	4.0
9	Netherlands	1.2	3.7	3.7	3.9
10	Belgium	-	2.4	2.6	2.8

* : Ranking is for the year 2006.
Source : Balance of Payments Statistics Year Book, IMF and Reserve Bank of India.

Table 2.82: Foreign Tourist Arrivals in India and Outbound Tourist Traffic

Year	Arrivals (millions)	Growth Rate %	Departure (millions)	Growth Rate %
1	2	3	4	5
2000	2.65	6.9	4.42	7.5
2001	2.54	-7.4	4.56	3.2
2002	2.38	-4.0	4.94	8.3
2003	2.73	12.5	5.35	8.3
2004	3.46	29.6	6.21	16.1
2005	3.92	11.4	7.18	15.6
2006	4.45	13.5	8.34	16.2
2007	4.98	11.9	n.a.	n.a.

n.a. : Not available.
Source : Ministry of Tourism, Government of India.

and development services; architectural, engineering and other technical services; agricultural, mining and on-site processing services; audio-visual and related services; and personal and cultural services (Table 2.84). The miscellaneous receipts, excluding software exports, were at US $ 24.6 billion in 2007-08 (US $ 26.3 billion in 2006-07).

Private Transfers

II.6.23 Private transfers inflows at US $ 42.6 billion during 2007-08 recorded a growth of 47.1 per cent over US $ 29.0 billion during 2006-07 (Table 2.85). Several factors contributed to the significant increase in workers' remittances, *viz*., increasing migration by Indians, improved incentives to send and invest money, easing of regulations and controls, improved banking access and technology and gradual opening up of the capital account.

II.6.24 India maintained its position as one of the major recipients of remittances in the world with relative stability in such flows (Table 2.86).

Investment Income

II.6.25 Investment income deficit reduced from US $ 6.0 billion in 2006-07 to US $ 5.2 billion in 2007-08, driven mainly by interest earnings on foreign exchange reserves, dividend and profits and reinvested earnings of the Indian companies operating abroad. Investment income receipts rose sharply during 2007-08, reflecting the significant increase in the accretion to reserves.

Current Account

II.6.26 The sustained increase in invisibles surplus during 2007-08 continued to cushion the impact of widening of merchandise trade deficit. As a result, the current account deficit amounted to US $ 17.4 billion during 2007-08 (US $ 9.8 billion in 2006-07) (Appendix Table 51). As a proportion to GDP, the current account deficit at 1.5 per cent in 2007-08 was higher than that of last year (1.1 per cent) led by the higher trade deficit. The merchandise trade deficit, after fluctuating around 3-4 per cent of GDP between the mid-1990s and 2003-04, widened sharply to 6.9 per cent of GDP in 2006-07 and 7.7 per cent of GDP in 2007-08 on account of higher non-oil imports, particularly, import of capital goods

Table 2.83: Non-Software Miscellaneous Receipts and Payments

(US $ million)

Item	Receipts			Payments		
	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08
1	2	3	4	5	6	7
1. Communication Services	1,575	2,099	2,436	289	659	837
2. Construction	242	332	780	724	737	693
3. Financial	1,209	2,913	3,085	965	2,087	2,847
4. News Agency	185	334	643	130	219	413
5. Royalties, copyrights and License Fees	191	97	157	594	1,038	1,038
6. Business Services	9,307	19,266	16,624	7,748	17,093	16,668
7. Personal, Cultural, Recreational	189	173	559	84	116	174
8. Others	5,607	1,042	335	5,997	4,357	1,953
Total (1 to 8)	**18,505**	**26,256**	**24,619**	**16,531**	**26,306**	**24,623**

Table 2.84: Business Services

(US $ million)

Item	Receipts			Payments		
	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08
1	2	3	4	5	6	7
1. Trade Related	521	939	2,223	1,206	1,655	2,258
2. Business and Management Consultancy	2,320	7,346	4,215	1,806	5,027	3,400
3. Architectural, Engineering and Other Technical	3,193	6,134	3,287	1,414	3,673	3,235
4. Maintenance of Offices	1,577	2,334	2,867	2,074	3,424	2,827
5. Others	1,696	2,513	4,032	1,248	3,314	4,947
Total (1 to 5)	**9,307**	**19,266**	**16,624**	**7,748**	**17,093**	**16,668**

to meet expanded investment demand domestically and higher crude oil prices. The hardening of international crude oil prices of the Indian basket (a mix of Oman, Dubai and Brent varieties) to an average of US $ 79.5 per barrel during 2007-08 further enhanced the import payments of India in 2007-08. However, strong receipts under invisibles helped maintain the current account deficit of India at a moderate level during 2007-08 (Chart II.30).

II.6.27 India's current account continued to be in deficit in 2007 unlike most other emerging market economies (Table 2.87).

Capital Account

II.6.28 Favourable domestic financial and economic conditions, continued liberalisation of capital account, sustained growth momentum of India along with prevailing excess liquidity in the global markets during most part of the year resulted in a surge in capital inflows to India during 2007-08. The gross capital inflows to India amounted to US $ 428.7 billion as against outflows of US $ 320.7 billion during 2007-08 (Table 2.88). The key drivers of the capital account during 2007-08 were foreign direct investment, external commercial borrowings, FII flows, outward direct investment and short term credit (Appendix Table 52).

II.6.29 The capital flows were dominated both by the debt and the non-debt flows. The net capital flows (inflows *minus* outflows) at US $ 108.0 billion (9.2

Table 2.85: Composition of Private Transfers to India

(US $ million)

Year	Total	*of which:* Inward Remittances for Family Maintenance	Local Withdrawals/ Redemptions from NRI Deposits
1	2	3	4
2005-06	24,951	10,455	12,454
2006-07	28,951	13,561	13,208
2007-08	42,589	20,950	19,019

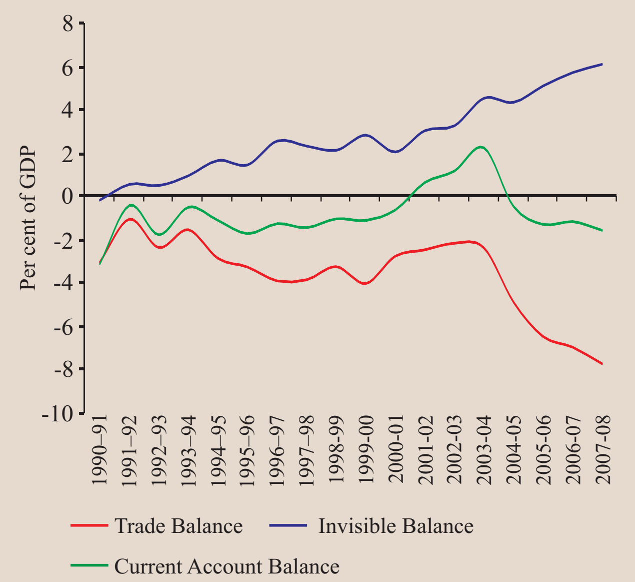
Table 2.86: Workers' Remittances - Top Ten Remittance receiving Countries

(US $ million)

Country	1996	2004	2005	2006
1	2	3	4	5
India	**10,930**	**20,012**	**23,518**	**27,607**
Mexico	4,224	16,613	20,035	23,054
Philippines	569	8,617	10,668	12,481
China	1,672	4,627	5,495	6,830
Spain	2,749	5,196	5,339	6,057
Indonesia	796	1,700	5,296	5,560
Romania	10	18	3,754	5,506
Morocco	2,165	4,221	4,589	5,454
Egypt	3,107	3,341	5,017	5,330
Pakistan	1,284	3,943	4,277	5,113

Source : Balance of Payments Statistics Yearbook, 2007, IMF and Reserve Bank of India.

Chart II.30: India's Current Account



per cent of GDP) in 2007-08 were 2.4 times than those received in 2006-07 (US $ 45.8 billion or 5.0 per cent of GDP) and 4.2 times of the net flows of 2005-06 (US $ 25.5 billion or 3.1 per cent of GDP).

Foreign Investment

II.6.30 Foreign investment in India during 2007-08 was driven by foreign direct investment (FDI) and portfolio investment inflows. Foreign direct investment broadly comprises equity, reinvested earnings and inter-corporate loans. Net FDI flows (net inward FDI *minus* net outward FDI) amounted to US $ 15.5 billion in 2007-08 as compared with US $ 8.5 billion in 2006-07. Gross inward FDI at US $ 32.4 billion during 2007-08 (US $ 22.1 billion in 2006-07) reflected the continued strength of sustained domestic activity and positive investment climate with inflows channelling into financial, manufacturing and construction sectors (Table 2.89). The strength of the corporate performance, positive investor sentiment, further liberalisation of FDI policies in sectors such as telecom, retail, and expanding promotional efforts by the Government also played a role in attracting FDI. Most of the FDI flows were in the form of equity, while portfolio flows comprised largely investments by FIIs.

Table 2.87: Trade and Current Account Balances in Select Countries

(Per cent to GDP)

Country	2001	2002	2003	2004	2005	2006	2007e	2001	2002	2003	2004	2005	2006	2007e
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Current Account Balance							**Trade Balance**						
Argentina	-1.4	8.9	6.3	2.1	1.9	2.5	2.9	2.7	17.6	13.2	8.7	7.2	6.5	5.1
Brazil	-4.2	-1.5	0.8	1.8	1.6	1.2	0.8	0.5	2.6	4.5	5.1	5.1	4.3	3.0
Chile	-1.6	-0.9	-1.1	2.2	1.1	3.6	3.7	2.7	3.5	5.0	10.0	9.1	15.5	14.4
China	1.3	2.4	2.8	3.6	7.2	9.4	11.7	2.6	3.0	2.7	3.1	6.0	8.2	9.7
Egypt	0.0	0.7	2.4	4.3	3.2	0.8	1.4	-7.3	-6.6	-5.2	-8.3	-8.6	-7.9	-9.4
India #	**0.7**	**1.2**	**2.3**	**-0.4**	**-1.2**	**-1.1**	**-1.5**	**-2.4**	**-2.1**	**-2.3**	**-4.8**	**-6.4**	**-6.9**	**-7.7**
Indonesia	4.3	4.0	3.5	0.6	0.1	2.7	1.6	14.1	12.0	10.5	7.8	6.1	8.1	7.6
Japan	2.1	2.9	3.2	3.7	3.6	3.9	4.5	1.7	2.4	2.5	2.9	2.1	1.9	2.4
Korea	1.7	1.0	2.0	4.1	1.9	0.7	0.1	2.8	2.7	3.6	5.5	4.1	3.1	3.1
Malaysia	8.3	8.4	12.7	12.6	15.3	17.2	14.4	19.8	18.0	23.3	22.1	24.2	23.5	20.0
Mexico	-2.8	-2.2	-1.4	-1.0	-0.6	-0.3	-0.7	-1.5	-1.2	-0.9	-1.3	-1.0	-0.7	-1.1
Philippines	-2.5	-0.5	0.4	1.9	2.0	4.3	3.8	-8.8	-7.2	-7.3	-6.5	-7.9	-5.7	-5.7
Russia	11.1	8.4	8.2	10.1	11.1	9.7	8.9	15.7	13.4	13.9	14.5	15.5	14.1	10.2
South Africa	0.3	0.8	-1.1	-3.2	-4.0	-6.5	-6.7	4.4	4.3	2.1	-0.1	-0.4	-2.4	-2.0
Thailand	4.4	3.7	3.4	1.7	-4.5	1.6	3.7	7.4	7.1	7.8	6.7	1.9	6.7	10.6
Turkey	2.4	-0.8	-3.3	-5.2	-6.2	-7.9	-7.5	-1.7	-2.8	-4.4	-5.8	-6.8	-7.7	-7.0

: Data pertain to financial year (April-March). e: Estimate. (-) indicates deficit.

Source : World Economic Outlook, International Financial Statistics and Article IV Consultation Report, IMF; Economist; and Central Bank Websites.

Table 2.88: Gross Capital Inflows and Outflows

(US $ million)

Item	Inflows			Outflows		
	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08
1	2	3	4	5	6	7
1. Foreign Direct Investment	9,178	22,959	34,924	6,144	14,480	19,379
2. Portfolio Investment	68,120	109,622	235,630	55,626	102,560	206,369
3. External Assistance	3,631	3,763	4,241	1,929	1,996	2,127
4. External Commercial Borrowings	14,343	20,973	29,851	11,835*	4,818	7,686
5. NRI Deposits	17,835	19,914	29,321	15,046	15,593	29,142
6. Banking Capital excluding NRI Deposits	3,823	17,295	26,412	5,239	19,703	14,834
7. Short-term Trade Credits	21,505	29,992	49,411	17,806	23,380	31,728
8. Rupee Debt Service	0	0	0	572	162	121
9. Other Capital	5,941	7,724	18,950	4,709	3,771	9,323
Total (1 to 9)	**144,376**	**232,242**	**428,740**	**118,906**	**186,463**	**320,709**

* Including the impact of IMD redemptions amounting to US $ 5.5 billion

II.6.31 FDI and portfolio inflows in India during 2007-08 were more or less of the same order (Chart II.31).

II.6.32 India emerged as the second most favoured FDI destination after China in 2005 and 2006 according to the UNCTAD World Investment Prospects Survey 2007-2009. FDI inflows to India have undergone significant improvement when compared with FDI inflows into all developing economies (Chart II.32).

II.6.33 Country-wise, investments routed through Mauritius remained the largest component of FDI in India during 2007-08, followed by Singapore. The

Table 2.89: Foreign Investment Flows to India

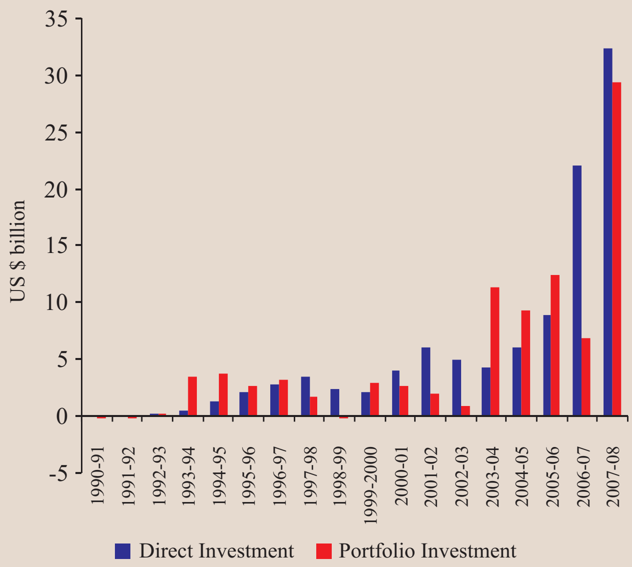
(US $ million)

Item	2004-05	2005-06	2006-07P	2007-08P
1	2	3	4	5
A. Direct Investment (I+II+III)	**6,051**	**8,961**	**22,079**	**32,435**
I. Equity (a+b+c+d)	**3,778**	**5,975**	**16,482**	**25,241**
a) Government (SIA/FIPB)	1,062	1,126	2,156	2,298
b) RBI	1,258	2,233	7,151	17,129
c) Acquisition of shares*	930	2,181	6,278	5,148
d) Equity capital of unincorporated bodies	528	435	897	666
II. Re-invested earnings	**1,904**	**2,760**	**5,091**	**6,884**
III. Other capital #	**369**	**226**	**506**	**310**
B. Portfolio Investment (a+b+c)	**9,315**	**12,492**	**7,003**	**29,395**
a) GDRs/ADRs	613	2,552	3,776	8,769
b) FIIs @	8,686	9,926	3,225	20,328
c) Off-shore funds and others	16	14	2	298
C. Total (A+B)	**15,366**	**21,453**	**29,082**	**61,830**

P : Provisional
* : Relates to acquisition of shares of Indian companies by non-residents under section 6 of the FEMA, 1999.
# : Data pertain to inter-company debt transactions of FDI entities.
@ : Data represent net inflow of funds by FIIs.

Note : 1. Data on Equity capital of unincorporated bodies and reinvested earnings for 2006-07 and 2007-08 are estimates.
2. Data on foreign investment presented in this table represent inflows into the country and may not tally with the data presented in other tables. They may also differ from data relating to net investment in stock exchanges by FIIs.

Chart II.31 : Foreign Investment in India



UK and Netherlands were in the third and fourth position, respectively (Table 2.90). Sector-wise, the financial services sector attracted the largest FDI flows amounting to US $ 3.9 billion in 2007-08 (US $ 1.3 billion in 2006-07). FDI inflows into the construction and manufacturing sectors also increased sharply.

II.6.34 Overseas direct investment from India increased from US $ 13.5 billion during 2006-07 to US $ 17.9 billion during 2007-08. Overseas investment in trading increased significantly from US $ 1.7 billion in 2006-07 to US $ 9.0 billion in 2007-08 (Table 2.91).

II.6.35 Foreign institutional investors (FIIs) made net purchases in the Indian stock market during the year 2007-08 barring the months of August, November, February and March. The large FII inflows (net) in 2007-08 at US $ 20.3 billion as against US $ 3.2 billion in 2006-07 also reflected increased participation of FIIs in the primary market as corporates raised large resources through initial public offerings (IPOs) and seven follow-on public offers (FPOs) aggregating to about US $ 135 billion. Indian companies also raised resources by way of ADRs/GDRs amounting to US $ 8.8 billion in 2007-08 (US $ 3.8 billion in 2006-07). As a result of

Table 2.90: Foreign Direct Investment Flows to India: Country-wise and Sector-wise*

(US $ million)

Country/Sector	2005-06	2006-07	2007-08P
1	2	3	4
Total FDI	**3,359**	**9,307**	**19,427**
Country-wise Inflows			
Mauritius	1,363	3,780	9,518
Singapore	166	582	2,827
UK	261	1,809	601
Netherlands	50	559	601
Cyprus	13	58	570
USA	346	706	486
Germany	45	116	486
Japan	86	80	457
Cayman Island	14	41	228
UAE	47	215	226
Switzerland	68	57	193
France	12	100	136
Hong Kong	26	60	111
South Korea	61	68	86
Italy	39	57	24
Others	762	1,019	2,877
Sector-wise Inflows@			
Financial Services	318	1,330	3,850
Manufacture	1,411	1,641	3,726
Construction	191	967	2,551
Real Estate Activities	34	431	1,336
Business Services	71	2,425	1,158
Computer Services	770	824	1,035
Electricity and other Energy Generation, Distribution and Transmission	70	174	829
Transport	87	165	816
Mining	6	42	461
Restaurants and Hotels	67	153	280
Retail and Wholesale Trade	11	47	200
Trading	17	82	176
Education, Research and Development	10	43	156
Communication Services	8	423	66
Miscellaneous Services #	101	298	1,901
Others	187	262	886

P : Provisional.

* : Data in this table relate to only equity capital under the RBI Automatic route and the Government route. Acquisition of shares of Indian Companies by non-residents under Section 6 of FEMA, 1999 and equity capital of unincorporated bodies are not included.

: Miscellaneous services include services related to community, cultural activities, personnel, public, sanitation, health, repairing and others.

@ : Due to revision in classification of sectors, data for 2005-06 and 2006-07 may not match with those published in earlier issues of the Annual Report.

Table 2.91: India's Direct Investment Abroad

(US $ million)

Industry	2004-05	2005-06	2006-07	2007-08*
1	2	3	4	5
Manufacturing	1,170	3,407	3,545	6,240
Financial Services	7	160	28	26
Non-Financial Services	304	895	7,486	1,635
Trading	192	377	1,739	8,993
Others	100	207	656	1,010
Total	1,776	5,050	13,459	17,910

* : Based on the latest reported revised data. Therefore, these data may differ from the data published under balance of payments.

Note :Data include equity and loan component.

large FII flows and increased resource mobilisation through ADRs/GDRs, net portfolio investment was US $ 29.3 billion in 2007-08 as against US $ 7.1 billion in 2006-07. In 2006, India was one of the largest recipients of portfolio inflows among EMEs (Chart II.32 and Table 2.92).

Debt Flows

II.6.36 Debt flows also recorded a significant increase during 2007-08 led by external commercial borrowings (ECBs) and trade credits. Both gross disbursements and gross repayments were higher during 2007-08, leading to net inflows of US $ 22.2 billion under ECBs. Net short term trade credit was at US $ 17.7 billion (inclusive of suppliers' credit up to 180 days) during 2007-08 as against US $ 6.6 billion during the previous year, reflecting the increased financing requirements of crude oil imports on account of higher crude prices. Out of total short-term trade credit, the suppliers' credit up to 180 days amounted to US $ 6.8 billion (US $ 3.3 billion in 2006-07). Net inflows under non-resident Indians (NRI) deposits moderated to US $ 0.2 billion during 2007-08 from US $ 4.3 billion during 2006-07 partly due to reduction in ceiling interest rates on various deposit schemes and large withdrawals from NRI deposits domestically (Table 2.93).

II.6.37 India received external assistance (net) of US $ 2.1 billion during 2007-08 as compared with US $ 1.8 billion during the corresponding period of the previous year (Appendix Table 54). India contributed to other countries in the form of grants and loans, with Bhutan, Nepal and Bangladesh being the major beneficiaries (Table 2.94).

EXTERNAL DEBT

II.6.38 Reflecting the increased debt flows to India, the external debt amounted to US $ 221.2 billion at end-March 2008, an increase of US $ 51.5 billion over end-March 2007 (Table 2.95 and Appendix Table 55). The increase in the debt during the period was mainly on account of higher ECBs and short term debt. The valuation effect reflecting depreciation of US dollar against major international currencies and Indian rupee accounted for US $ 9.9 billion of the increase. The largest component of the total external debt stock was denominated in US

Chart II.32: Foreign Investment Inflows to India and Developing Countries

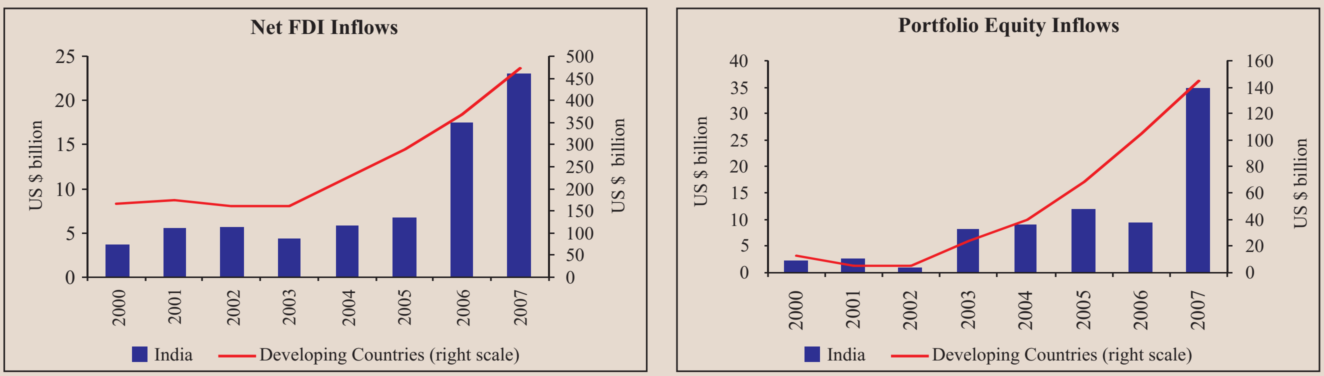


Table 2.92: Foreign Direct and Portfolio Equity Investment Inflows to Select Countries

(US $ million)

Country	2001	2002	2003	2004	2005	2006	2001	2002	2003	2004	2005	2006
1	2	3	4	5	6	7	8	9	10	11	12	13
	Foreign Direct Investment						Foreign Portfolio Investment					
India	5,472	5,626	4,323	5,771	6,677	17,453	2,853	1,022	8,216	9,037	12,144	9,549
Argentina	2,166	2,149	1,652	4,125	5,265	4,840	31	-116	65	-86	-48	662
Brazil	22,457	16,590	10,144	18,166	15,193	18,782	2,481	1,981	2,973	2,081	6,451	7,716
Chile	4,200	2,550	4,307	7,173	6,667	7,952	-217	-320	318	8	1,760	63
China	44,241	49,308	47,077	54,936	79,127	78,095	849	2,249	7,729	10,923	20,346	42,861
Indonesia	-2,977	145	-597	1,896	8,336	5,580	442	877	1,131	2,043	-165	1,898
Malaysia	554	3,203	2,473	4,624	3,966	6,064	0	-55	1,340	4,510	-1,200	2,392
Mauritius	-28	32	63	14	39	107	-9	-1	8	19	36	32
Mexico	29,431	21,096	15,007	22,470	19,881	19,222	151	-104	-123	-2,522	3,353	2,805
Philippines	195	1,542	491	688	1,854	2,345	125	227	501	518	1,465	2,388
Russian Federation	2,748	3,461	7,958	15,444	12,886	30,827	542	2,626	422	233	-215	6,149
South Africa	7,270	735	783	701	6,522	-120	-962	-388	685	6,661	7,230	14,959
Thailand	5,061	3,335	5,235	5,862	8,048	9,010	352	539	1,787	1,319	5,665	5,300

Source : Global Development Finance, World Bank Online database.

dollars (57.1 per cent) followed by Indian Rupees (14.5 per cent), Japanese Yen (12.1 per cent) and SDR (10.2 per cent). The coverage of short-term debt was made more comprehensive with the inclusion of (i) suppliers' credits up to 180 days and (ii) investment by foreign institutional investors (FIIs) in short-term debt instruments, beginning with the quarter ended March 2005.

II.6.39 Indicators of external debt sustainability remained healthy during 2007-08. The ratio of external debt to GDP increased to 18.8 per cent at end-March 2008 from 17.8 per cent at end-March 2007; the ratio was 30.8 per cent at end-March 1995.

Table 2.93: Balances under NRI Deposit Schemes

(US $ million)

Scheme	Outstanding (end-March)		Net Inflows (April-March)	
	2007	2008	2006-07	2007-08P
1	2	3	4	5
1. FCNR(B)	15,129	14,168	2,065	-960
2. NR(E)RA	24,495	26,716	1,830	109
3. NRO	1,616	2,788	426	1,030
Total	**41,240**	**43,672**	**4,321**	**179**

P : Provisional.

Note : 1. All figures are inclusive of accrued interest.

2. Net inflows in respect of NR(E)RA and NRO deposits in columns 4 and 5 may not match with the differences between the outstanding stocks on account of valuation changes during the year.

Table 2.94: India's Grants and Loans to Foreign Governments

(US $ million)

Item	2006-07			2007-08		
	Grant	Loan	Total	Grant	Loan	Total
1	2	3	4	5	6	7
A. Plan (External Affairs)	**41**	**8**	**49**	**63**	**12**	**75**
B. Non-Plan (i+ii+iii)	**306**	**28**	**334**	**360**	**16**	**376**
i. External Affairs	290	0	290	349	0	349
Bangladesh	4	0	4	15	0	15
Bhutan	108	0	108	132	0	132
Nepal	46	0	46	25	0	25
Africa	4	0	4	12	0	12
Myanmar	9	0	9	5	0	5
Sri Lanka	6	0	6	7	0	7
Other Developing Countries	113	0	113	153	0	153
ii. Finance	15	28	43	10	16	26
Contribution to U.N.D.P.	5	0	5	5	0	5
Mauritius	0	2	2	0	0	0
Myanmar	0	0	0	0	0	0
Sri Lanka	0	22	22	0	15	15
Surinam	0	0	0	0	0	0
Other Countries	4	4	8	4	1	5
Development Assistance	6	0	6	1	0	1
iii. Shipping	1	0	1	1	0	1
Bangladesh	1	0	1	1	0	1
C. Grand Total (A+B)	**347**	**36**	**383**	**423**	**28**	**451**

Source : Union Budgets, Government of India.

Table 2.95: India's External Debt

(US $ million)

Item		End-March 2007	End-March 2008	Variation during 2007-08 Amount	Per cent
1		2	3	4	5
1.	Multilateral	35,337	39,312	3,975	11.2
2.	Bilateral	16,061	19,613	3,552	22.1
3.	IMF	0	0	0	0
4.	Export Credit	7,051	10,267	3,216	45.6
5.	External Commercial Borrowings	41,657	62,019	20,362	48.9
6.	NRI Deposits	41,240	43,672	2,432	5.9
7.	Rupee Debt	1,947	2,016	69	3.5
8.	Long-term Debt (1 to 7)	143,293	176,899	33,606	23.5
9.	Short-term Debt	26,376	44,313	17,937	68.0
10.	**Total Debt (8+9)**	**169,669**	**221,212**	**51,543**	**30.4**

The debt service ratio was placed at 5.4 per cent during 2007-08 as compared with 4.8 per cent in the previous year. Reflecting the rise in short-term debt during 2007-08, the ratio of short-term to total debt and short term debt to reserves increased to 20.0 per cent and 14.3 per cent, respectively. As at end-March 2008, foreign exchange reserves were 40.0 per cent in excess of the stock of external debt. Current receipts also exceeded the external debt stock, reflecting the sustained growth in merchandise exports and invisible receipts (Table 2.96).

II.6.40 Cross country data on external debt up to 2006 released by the World Bank for the top twenty debtor countries of the developing world revealed that India was placed fifth in 2006 in terms of external debt stock (Table 2.97). However, in terms of ratio of external debt to gross national product (GNP), India's position was the second lowest after China. Although India was the fifth largest debtor country of the developing world in 2006, its debt-service ratio was the third lowest next only to China and Malaysia.

FOREIGN EXCHANGE RESERVES

II.6.41 As capital inflows during the year were significantly higher than the current account deficit, India's foreign exchange reserves during 2007-08

Table 2.96: External Debt Service Payments

(US $ million)

Item		2005-06	2006-07	2007-08
1		2	3	4
1.	External Assistance @	2,666	2,904	3,241
2.	External Commercial Borrowings*	14,749	6,819	11,317
3.	IMF	0	0	0
4.	NRI Deposits (Interest Payments)	1,497	1,969	1,813
5.	Rupee Debt service	572	162	121
6.	Total Debt Servicing	19,484	11,854	16,492
7.	Total Current Receipts #	1,96,778	2,45,616	3,02,963
8.	External Debt to GDP Ratio (%)	17.2	17.8	18.8
9.	Short Term Debt to Total Debt Ratio (%)	14.1	15.5	20.0
10.	Short Term Debt to Foreign Exchange Reserve Ratio (%)	12.9	13.2	14.3
11.	Foreign Exchange Reserves to External Debt Ratio (%)	109.8	117.4	140.0
12.	Debt Service ratio (6/7) (%)	9.9	4.8	5.4
13.	Interest Payments to Current Receipts Ratio (%)	2.8	2.3	2.7
14.	Debt to Current Receipts Ratio (%)	70.2	69.1	73.0
15.	Liability Service Ratio (%)	11.2	6.2	6.5

@ : Inclusive of non-Government loans. * : Inclusive of interest components of trade credits.

: Excluding official transfers.

Note : 1. Debt service payments in this table follow accrual method of accounting consistent with balance of payments compilation and may, therefore, vary from those recorded on a cash basis.

2. The liability service ratio represents debt service payments and remittances of profits and dividends taken together as a ratio of total current receipts.

Table 2.97: International Comparison of Top Twenty Debtor Countries, 2006

Country	External Debt (US $ billion)	External Debt to GNP (%)	Debt Service ratio (%)	Forex Reserves to Total Debt (%)	Concessional Debt to Total Debt (%)	Short-Term to Total Debt (%)
1	2	3	4	5	6	7
1. China	323	12.1	2.5	334.8	10.9	53.7
2. Russian Federation	251	26.2	13.8	121.0	0.6	16.1
3. Turkey	208	51.7	33.2	30.4	1.9	20.4
4. Brazil	194	18.7	37.3	44.2	1.3	10.5
5. India	**170**	**17.8**	**4.8**	**117.4**	**23.3**	**15.5**
6. Mexico	161	19.5	18.9	47.5	0.9	4.6
7. Indonesia	131	37.5	16.6	32.5	27.1	25.2
8. Poland	126	38.7	24.7	38.5	0.9	17.0
9. Argentina	122	58.6	31.6	26.2	1.1	28.7
10. Hungary	108	102.7	33.1	20.1	1.1	13.9
11. Kazakhstan	74	103.4	33.7	25.8	1.3	17.0
12. Philippines	60	47.1	19.6	38.1	20.7	8.3
13. Thailand	55	27.3	9.4	121.3	12.3	32.2
14. Romania	55	46.7	18.4	54.8	2.0	32.2
15. Malaysia	53	36.0	4.0	157.8	8.4	30.8
16. Ukraine	50	47.6	18.1	44.8	3.6	44.8
17. Chile	48	37.9	20.0	40.4	0.6	19.6
18. Venezuela RB	45	24.7	13.3	82.3	0.4	26.5
19. Colombia	40	26.9	31.3	38.9	2.6	12.1
20. Croatia	37	90.2	33.1	30.7	1.6	14.9

Source : Data for India are as published by national authorities for 2006-07 and those for other countries are at end-December 2006 as available in World Bank's Global Development Finance Online Database.

(comprising foreign currency assets, gold, SDRs and the reserve tranche position with the IMF) increased to US $ 309.7 billion at end- March 2008 as compared with US $ 199.2 billion at end-March 2007 (Table 2.98 and Appendix Table 56). The major sources of increase in foreign exchange reserves during 2007-08 were the inflows received under foreign investment, ECBs, banking capital, software services and private transfer receipts. India turned a creditor to the IMF under the Financial Transactions Plan (FTP) in February 2003. The total quantum of India's contribution under FTP by way of purchase was SDR 493 million at end-June 2005 and there were no such purchases under FTP thereafter. However, India was included in repurchase transactions of the FTP from November 2005. India made 13 repurchase transactions up to November 2007 amounting to SDR 709 million from six countries, *viz*., Turkey, Algeria, Brazil, Indonesia, Uruguay and Ukraine.

II.6.42 India became the third largest holder (as against fourth a year ago) of foreign exchange reserves among the EMEs during 2007-08 (Table 2.99). India's foreign exchange reserves were at a comfortable level as reflected by different adequacy indicators with the merchandise import cover increasing further from 12.5 months at end-March 2007 to 15.0 months at end-March 2008. In terms of the cover of the total current account payments (merchandise imports *plus* invisibles payments), the foreign exchange reserves were equivalent to 11.6 months at end-March 2008 as against 9.5 months at end-March 2007.

II.6.43 India's foreign exchange reserves were US $ 296.2 billion as on August 15, 2008. At this level, reserves were US $ 13.5 billion lower than those at end-March 2008.

Management of Foreign Exchange Reserves

II.6.44 Movements in the foreign currency reserves occur mainly out of purchases and sales of foreign exchange by the Reserve Bank in the market. In addition, there is income from the deployment of

Table 2.98: Foreign Exchange Reserves

(US $ million)

End-March	Gold	SDR	Foreign Currency Assets	Reserve Position in the IMF	Total (2+3+4+5)	Use of IMF Credit
1	2	3	4	5	6	7
1993	3,380	18	6,434	296	10,128	4,799
1994	4,078	108	15,068	299	19,553	5,040
1995	4,370	7	20,809	331	25,517	4,300
1996	4,561	82	17,044	310	21,997	2,374
1997	4,054	2	22,367	291	26,714	1,313
1998	3,391	1	25,975	283	29,650	664
1999	2,960	8	29,522	663	33,153	287
2000	2,974	4	35,058	658	38,694	26
2001	2,725	2	39,554	616	42,897	0
2002	3,047	10	51,049	610	54,716	0
2003	3,534	4	71,890	672	76,100	0
2004	4,198	2	107,448	1,311	112,959	0
2005	4,500	5	135,571	1,438	141,514	0
2006	5,755	3	145,108	756	151,622	0
2007	6,784	2	191,924	469	199,179	0
2008	10,039	18	299,230	436	309,723	0

foreign exchange assets held in the portfolio of the Reserve Bank. External aid receipts of the Government of India also flow into the reserves. In line with the international trends, the Reserve Bank follows the practice of expressing foreign exchange reserves in US dollar terms which implies that the movement of the US dollar against other currencies in which foreign currency assets (FCA) are held would also influence the level of FCA.

II.6.45 The overall approach to the management of India's foreign exchange reserves takes into account the changing composition of the balance of payments and endeavours to reflect its 'liquidity risks'. In line with the international practice, the guiding objectives of foreign exchange reserve management in India are safety, liquidity and optimisation of returns within a framework of preserving the long-term value of the reserves in terms of purchasing power and the need to minimising risk and volatility in returns.

Table 2.99: Foreign Exchange Reserves of the Top Ten EMEs (End-March 2008)

(US $ Billion)

Sr. No.	Country	Forex Reserves
1	2	3
1.	China	1682.2
2.	Russia	493.3
3.	**India**	**309.7**
4.	Taiwan	286.9
5.	South Korea	264.2
6.	Brazil	195.3
7.	Singapore	177.6
8.	Hong Kong	160.2
9.	Malaysia	120.0
10.	Thailand	107.5

Source : The Economist.

II.6.46 The Reserve Bank of India Act, 1934 provides the legal framework for deployment of foreign currency assets and gold. While the major convertible currencies constitute the choice set for currency composition of FCA, the investment universe for FCA comprises deposits with other central banks, Bank for International Settlements (BIS), top-rated foreign commercial banks, securities representing debt of sovereigns and supra-national institutions with residual maturity not exceeding 10 years and any other instruments or institutions as approved by the Central Board of the Reserve Bank in accordance with the provisions of the Act (Table 2.100).

II.6.47 In pursuance of the above legal provisions, the investment strategy aims at diversification with regard to currency, markets and instruments.

Table 2.100: Deployment Pattern of Foreign Currency Assets

(US $ million)

Item		March 31, 2004	March 31, 2005	March 31, 2006	March 31, 2007	March 31, 2008
1		2	3	4	5	6
Foreign Currency Assets		**1,07,448**	**1,35,571**	**1,45,108**	**1,91,924**	**2,99,230**
(a)	Securities	35,024	36,819	35,172	52,996	1,03,569
(b)	Deposits with other Central Banks, BIS and IMF	45,877	65,127	65,399	92,175	1,89,645
(c)	Deposits with Foreign Commercial Banks/Funds placed with External Asset Managers	26,547	33,625	44,537	46,753	6,016

Decisions involving the pattern of investments are driven by the broad parameters of portfolio management with a strong bias for capital preservation and liquidity. All foreign currency assets are invested in assets of the highest quality. A small portion of reserves is assigned to external asset managers with the objectives of gaining access to and deriving benefit from their skills and market research.

II.6.48 The broad strategy for reserve management places emphasis on managing and controlling the exposure to financial and operational risks attendant on deployment of reserves. The risk management functions are aimed at ensuring development of sound governance structures in line with the international best practice, improved accountability, a culture of risk awareness across all operations and efficient allocation of resources for development of in-house skills and expertise. In tune with the global trend in this regard, considerable attention has been paid to strengthen operational risk control arrangements.

II.6.49 The overall approach to reserve deployment is one of stable returns with low risk. Sound internal control systems are in place to identify, measure, monitor and control risks encountered in the conduct of reserve management. The Reserve Bank invests in bonds/ treasury bills which represent debt obligations of high rated sovereigns and supra-national entities. These investments do not pose a major credit risk. Similarly deposits placed with the Bank for International Settlements (BIS) and other central banks are considered risk free. To a large extent, the credit risk in placement of deposits with foreign commercial banks and in other transactions is obviated/mitigated by applying stringent credit criteria while selecting counterparties, *viz*., the banks and security firms. The counterparties are monitored very closely for any downgrade from the rating agencies and any adverse market evaluations/ comments so as to undertake prompt action.

II.6.50 Currency risk arising due to investment in multi-currency and multi-market portfolios is managed through appropriate exposure to different currencies depending on the likely currency movements and other considerations in the medium and long-term, such as, the need to maintain major portion of reserves in the intervention currency, sustaining the approximate currency profile of the reserves in tune with the changing external trade profile of the country, and deriving benefits from diversification of the portfolio. The interest rate sensitivity of the reserves portfolio is identified in terms of benchmark duration and the permitted deviation from the benchmark. The benchmark duration and the leeway for deviation are suitably altered keeping in view the market dynamics and the acceptable level of risk. The choice of instruments maintains the liquidity of the portfolio at the required level.

II.6.51 The movements in foreign exchange reserves of the Reserve Bank are published on a weekly basis.

Disclosure of the international reserves and foreign currency liquidity position is made under Special Data Dissemination Standards (SDDS) of the IMF. The Reserve Bank compiles and makes public half-yearly reports on management of foreign exchange reserves for bringing about greater transparency. The first such report with reference to September 30, 2003 was placed in public domain through websites of both the Government of India and the Reserve Bank in February 2004. Subsequently, nine more reports pertaining to position as at end March and September each year have been placed on the Reserve Bank's website.

INTERNATIONAL INVESTMENT POSITION

II.6.52 India's net international liabilities increased by US $ 11.5 billion between end-March 2007 and end-December 2007, as the increase in international liabilities (US $ 97.9 billion) exceeded the increase in international assets (US $ 86.4 billion). While the increase in liabilities was mainly due to large capital inflows under portfolio investments, direct investments and external commercial loans, the increase in international assets reflected the increase in reserve assets and to some extent rise in direct investment abroad (Table 2.101).

II.6.53 Cross country data reveal that India's gross international assets and liabilities were lower in comparison with Hong Kong, China, Russia and Singapore at end-December 2006 (Table 2.102). Moreover, India's net international liabilities declined during 2006, while the net international assets of China, Hong Kong and Singapore increased.

II.6.54 International liabilities of the Indian banking sector rose by 18.8 per cent in dollar terms during the quarter ended September 2007 over their level at end-March 2007. International assets, however, increased by 8.3 per cent during the same period (Table 2.103). According to country of residence of transacting units, the US accounted for 29.1 per cent of total international liabilities and 23.4 per cent of total international assets of Indian banks. While the assets denominated in foreign currency accounted for 95.9 per cent of total international assets, the proportion of foreign currency denominated liabilities in total international liabilities was lower at 47.5 per cent at end-September 2007.

Table 2.101: International Investment Position of India

(US $ billion)

Item	End-March			End-Dec.
	2005	2006 PR	2007 PR	2007 P
1	2	3	4	5
A. Assets	**165.7**	**184.0**	**245.3**	**331.7**
1. Direct Investment	10.0	15.9	29.4	39.0
2. Portfolio Investment	0.4	1.0	0.8	0.6
2.1 Equity Securities	0.2	0.5	0.4	0.4
2.2 Debt Securities	0.2	0.5	0.4	0.2
3. Other Investment	13.7	15.5	15.9	16.9
3.1 Trade Credits	1.1	-0.3	0.6	2.4
3.2 Loans	1.9	2.4	3.0	3.1
3.3 Currency and Deposits	7.3	10.0	8.1	6.9
3.4 Other Assets	3.4	3.3	4.2	4.5
4. Reserve Assets	141.5	151.6	199.2	275.3
B. Liabilities	**219.6**	**243.7**	**307.7**	**405.6**
1. Direct Investment	44.5	52.4	76.2	102.4
2. Portfolio Investment	56.0	64.3	79.5	124.6
2.1 Equity Securities	43.2	54.7	63.3	103.5
2.2 Debt securities	12.8	9.5	16.2	21.1
3. Other Investment	119.2	127.1	152.0	178.7
3.1 Trade Credits	18.3	21.2	27.7	36.1
3.2 Loans	66.0	68.0	80.9	97.2
3.3 Currency and Deposits	33.6	37.3	42.3	44.1
3.4 Other Liabilities	1.2	0.6	1.1	1.3
C. Net Position (A-B)	**-53.9**	**-59.8**	**-62.4**	**-73.9**
Memo:				
Debt Liabilities / Total Liabilities (%)	60.1	56.1	54.7	49.2
Non-debt Liabilities / Total Liabilities (%)	39.9	43.9	45.3	50.8

PR: Partially revised. P: Provisional

II.6.55 To sum up, the balance of payments remained comfortable during 2007-08. Merchandise trade deficit widened further during the year. However as in the recent years, it was largely financed by the continued growth in net surplus under invisibles, reflecting mainly exports of software services and

Table 2.102: International Investment Position: Select Countries

(End-December 2006, US $ billion)

Item		Argentina	Brazil	Chile	China	Hong Kong	India	Philippines	Russia	Singapore
1		2	3	4	5	6	7	8	9	10
A.	**Total Financial Assets**	**175**	**239**	**122**	**1,626**	**1,929**	**244**	**49**	**706**	**716**
	Direct Investment Abroad	26	114	27	82	677	24	2	209	134
	Portfolio Investment	0	14	56	229	581	1	6	13	156
	Equity	0	4	44	1	339	0	0	1	82
	Debt	0	10	12	228	242	0	6	12	74
	Other Investments	117	25	19	242	515	20	18	180	290
	Monetary Authority	0	1	0	n.a.	0	0	0	0	n.a.
	General Govt	7	0	1	n.a.	0	2	0	74	n.a.
	Banks	3	11	3	n.a.	414	13	11	56	n.a.
	Other Sectors	107	13	15	n.a.	101	5	7	50	n.a.
	Reserve Assets	33	86	19	1073	133	199	23	304	136
	Financial Derivatives	0	0	1	0	23	0	0	0	0
B.	**Total Financial Liabilities**	**156**	**620**	**136**	**965**	**1,411**	**288**	**79**	**769**	**587**
	Direct Investment	62	236	81	544	743	72	16	271	222
	Portfolio Investment	45	300	20	121	260	80	27	260	130
	Equity	5	188	8	107	248	63	7	205	110
	Debt	40	112	12	14	12	17	20	55	20
	Other Investment	44	83	36	300	388	136	36	238	235
	Monetary Authority	0	0	0	n.a.	0	1	0	4	n.a.
	General Govt	22	0	1	n.a.	0	48	14	17	n.a.
	Banks	3	9	6	n.a.	339	41	7	97	n.a.
	Other Sectors	19	74	28	n.a.	49	46	15	120	n.a.
	Financial Derivatives	5	1	1	n.a.	20	0	0	0	n.a.
C.	**Net Position (A-B)**	**18**	**-381**	**-14**	**661**	**518**	**-44**	**-30**	**-63**	**129**

n.a. : not available.
Source : International Financial Statistics, International Monetary Fund.

Table 2.103: International Liabilities and Assets of Banks in India

(US $ million)

Category/Item	Amount outstanding at end of		
	March-06P	March -07P	Sept-07P
1	2	3	4
Total International Liabilities	**68,723**	**82,976**	**98,587**
of which:			
FCNR(B) Deposits	13,025	15,663	16,238
NRE Rupee Deposits	22,483	25,974	27,719
Foreign Currency Borrowings	14,283	14,141	15,865
Bonds	988	2,003	1,997
Non-Resident Ordinary (NRO) Rupee Deposits	1,221	1,577	2,182
ADRs and GDRs	3,325	5,409	8,708
EEFC Accounts	1,348	2,163	2,402
Total International Assets	**35,459**	**46,693**	**50,583**
of which:			
Foreign Currency Loans to Residents	14,173	17,253	22,033
Outstanding Export Bills	7,073	9,396	10,253
NOSTRO Balances	9,978	15,525	13,657

P: Provisional ADR :American Depository Receipts
GDRs : Global Depository Receipts. EEFC: Exchange Earners' Foreign Currency.
Note : All figures are inclusive of accrued interest.

remittances from Indians working abroad. The current account deficit, as per cent to GDP, was placed at 1.5 per cent during 2007-08. Capital flows (net), on the other hand, increased further on the back of foreign investment and external commercial borrowings (ECBs), offsetting the outflows associated with overseas acquisitions by Indian corporates. The overall balance of payments surplus led to an accretion of US $ 110.5 billion to foreign exchange reserves during 2007-08.

PART TWO: THE WORKING AND OPERATIONS OF THE RESERVE BANK OF INDIA

III MONETARY POLICY OPERATIONS

III.1 The conduct of monetary policy during 2007-08 had to contend with several challenges posed by unprecedented capital flows, turbulent global financial markets, and hardening of inflation and inflationary expectations. Significant shifts in both global and domestic developments by the end of the year in relation to initial assessments impacted monetary conditions. The heightened uncertainty surrounding the global financial markets and the unusual policy responses of major central banks provided indications of the serious risks posed by the developments in financial markets. Vulnerability of the global financial system, large changes in the magnitude and direction of capital flows and exchange rate fluctuations made the conduct of monetary and liquidity management complex. The domestic outlook remained positive with indications of some moderation in industrial production and services sector activity. Expansion in non-food credit moderated and remained within the indicative trajectory of the Reserve Bank set out in the Annual Policy Statement released in April 2007. Inflationary pressures emerged during the fourth quarter of 2007-08 partly from supply-side factors such as the surge in global prices of commodities, especially foodgrains, crude oil and steel. The global factors along with domestic demand pressures in the backdrop of supply constraint exacerbated the inflationary pressures and inflationary expectations. This was despite the pre-emptive monetary/ prudential measures initiated by the Reserve Bank on several occasions beginning September 2004. The inflationary spikes towards the end of the year, however, were in line with global trends.

III.2 This chapter delineates the monetary policy operations of the Reserve Bank during 2007-08 and 2008-09 (up to August 2008), which includes the conduct of monetary policy and management of liquidity. Large capital inflows, variations in cash balances of the Central Government and rising inflationary pressures posed enormous challenges for the conduct of monetary policy and management of liquidity during the year. In recent months, sharp increases in wholesale price index and consumer price indices posed a major challenge for monetary management. Given the nature of the inflationary shock, monetary and fiscal policies were used in tandem to contain the inflationary pressure in the economy.

III.3 The Reserve Bank had constituted a Technical Advisory Committee (TAC) on Monetary Policy in July 2005 with external experts in the area of monetary economics, central banking, financial markets and public finance. The Committee was set up as a part of the ongoing process of changes in the institutional framework of monetary policy in India to improve the consultative mechanism. After its tenure ended in January 2007, the Reserve Bank reconstituted and expanded the TAC to benefit from the valuable inputs and suggestions from the external experts with tenure up to January 31, 2009. The expanded TAC has five external members and two members of the Central Board of the Reserve Bank. The Committee is headed by Governor, with the Deputy Governor in charge of monetary policy as the vice-chairman. The three other Deputy Governors of the Bank are also members of the Committee. The TAC meets at least once in a quarter to assess the macroeconomic and monetary developments and advises on the stance and measures of monetary policy. During 2007-08, the TAC generally met a week before the announcement of monetary policy reviews. It reviewed the macroeconomic and monetary developments, assessed the economic scenario, provided useful policy stance and suggestions and advised on monetary policy measures. In 2008-09 so far, apart from the usual meetings before the Annual Policy Statement for 2008-09 in April 2008 and the First

Quarter Review in July 2008, an additional TAC meeting was held on June 23, 2008 to advise the Reserve Bank on appropriate policy responses in the wake of sudden hardening of inflation rate. The role of TAC is advisory in nature. The responsibility, accountability and time path of the decision making remains entirely with the Reserve Bank.

MONETARY POLICY OPERATIONS: 2007-08

Annual Policy Statement for 2007-08

III.4 At the time of announcement of the Annual Policy Statement for 2007-08 (April 24, 2007), global growth was strong, although it was expected to moderate in 2007 relative to 2006. Inflationary pressures were becoming evident globally along with elevated levels of commodity and asset prices. In the global financial markets, the risks, including geopolitical risks, remained under-priced and diffused. On the domestic front, there was evidence of some cyclical elements though it was felt that a significant structural change was taking place in the Indian economy. There was accumulating confidence that the economy was possibly poised on the threshold of a step-up in the growth trajectory. However, demand pressures intensified alongside robust growth and increased supply side pressures were also in evidence. The Annual Policy Statement observed that international trade could not, by its nature, fully mitigate all supply side issues among all sectors and it was prudent to recognise that the first effects of the expansion in demand would be reflected in inflationary pressures and risks to macroeconomic and financial stability. The Annual Policy Statement further observed that the above mentioned factors had been in evidence in the form of sustained demand for capital goods, high rates of money and credit growth, indications of wage pressures in some sectors, rising input costs and the emergence of pricing power. Against this backdrop, the Annual Policy Statement noted that the overarching policy challenge was to manage the transition to a higher growth path while containing inflationary pressures.

III.5 For policy purposes, real GDP growth for 2007-08 in the Annual Policy Statement was placed at around 8.5 per cent, assuming no further escalation in international crude prices and barring domestic or external shocks. In view of the lagged and cumulative effects of monetary policy on aggregate demand and assuming that supply management would be conducive, it was indicated that capital flows needed to be managed actively and in the absence of shocks emanating in the domestic or global economy, the endeavour would be to contain inflation close to 5.0 per cent in 2007-08. The Statement noted that there were indications that the Reserve Bank's self-imposed medium-term ceiling on inflation at 5.0 per cent had had a salutary effect on inflation expectations and that the socially tolerable rate of inflation had come down. In recognition of India's evolving integration with the global economy and societal preferences in this regard, the Statement further added that the resolve, going forward, would be to condition policy and perceptions for inflation in the range of 4.0–4.5 per cent. This objective would be conducive for maintaining self-accelerating growth over the medium-term.

III.6 In view of money supply growth remaining well above indicative projections in 2005-06 and 2006-07, the need to contain monetary expansion in 2007-08 at around 17.0-17.5 per cent in consonance with the outlook on growth and inflation was emphasised. Consistent with the projections of money supply, the growth in aggregate deposits in 2007-08 was placed at around Rs.4,90,000 crore. Based on the overall assessment of the sources of funding, a graduated deceleration of non-food credit, including investments in bonds/debentures/shares of public sector undertakings and private corporate sector and commercial paper (CP), was placed in the range of 24.0-25.0 per cent in 2007-08 consistent with the monetary projections from the average of 29.8 per cent over 2004-07.

III.7 The Annual Policy Statement observed that the stance of monetary policy in 2007-08 would be conditioned by the patterns in which the global and, more particularly, the domestic environment would unfold. The likely evolution of macroeconomic and financial conditions indicated an environment supportive of sustaining the growth momentum in India. The Statement reiterated that monetary policy, while contributing to growth, had to ensure and maintain conditions of price and financial stability. Accordingly, the policy preference for the period ahead was articulated strongly in favour of reinforcing the emphasis on price stability and anchoring inflation expectations.

III.8 In the context of large capital inflows and implications for liquidity and monetary management, the Reserve Bank reviewed the interest rate prescriptions relating to NRI deposits, *viz*., foreign currency non-resident (banks) (FCNR(B)) deposits and Non-Resident (External) Rupee Account (NR(E)RA) deposits, especially in the light of inflation and interest rate differentials between India and the rest of the world. In view of the then prevailing monetary condition, the ceiling on FCNR(B) deposits was reduced from LIBOR *minus* 25 basis points to LIBOR *minus* 75 basis points. Similarly, interest rate ceiling on NR(E) RA deposits was reduced by 50 basis points to make it same as the LIBOR.

First Quarter Review

III.9 In the First Quarter Review of the Annual Statement on Monetary Policy (July 31, 2007), the Reserve Bank observed that the prospects for growth in 2007-08 appeared positive. Against the backdrop of IMD's forecast of normal rainfall for the country as a whole, a return to trend growth in agriculture was expected. Growth in industrial and services sector activity was expected to be sustained. Overall, for policy purposes, the projection of real GDP growth for 2007-08 was retained at around 8.5 per cent, barring domestic or external shocks. The Review noted that there were indications that the combination of lagged and cumulative effects of monetary policy actions, and fiscal and administrative measures for supply management had had a salutary effect on inflation expectations. However, it noted that monetary management would need to be watchful of movements in commodity prices, particularly oil prices, the elevated levels of asset prices and the re-emergence of pricing power among producers as potential threats to inflation expectations. Assuming that aggregate supply management would continue to receive public policy attention and that a more active management of the capital account would be demonstrated, the outlook for inflation in 2007-08 remained unchanged in the Review. While non-food credit growth had decelerated, the Review indicated that the acceleration in money supply and reserve money warranted an appropriate response.

III.10 The Review observed that the global outlook was positive with continuing prospects for strong and stable growth but there were concerns about inflationary pressures worldwide. Monetary authorities were inclined to regard the prevailing levels of real interest rates as warranting further withdrawal of monetary accommodation and were indicating a preparedness to respond to the manner in which the inflation scenario evolved. The Review added that financial markets had been aggressively re-pricing risks; however, the wide diffusion of risks and the abundance of liquidity had imparted considerable uncertainty. Recurrence of volatility in equity and currency markets with worldwide ramifications had imparted an additional dimension of uncertainty to the evolution of the international economic environment. These developments necessitated intensified policy monitoring with a policy preference for insulating domestic real activity from the shocks. Looking ahead, the Review noted that monetary policy in India would continue to be vigilant and pro-active in the context of any accentuation of global uncertainties that posed threats to growth and stability in the domestic economy. The domestic outlook continued to be favourable and would dominate the dynamic setting of monetary policy in the period ahead. It was important to design monetary policy such that it protected growth by contributing to the maintenance of stability. Accordingly, it was stated that while the stance of monetary policy would continue to reinforce the emphasis on price stability and well-anchored inflation expectations and thereby sustain the growth momentum, contextually, financial stability might assume greater importance in the months to come.

III.11 Keeping the above in view, the Review noted that recent developments in financial markets in India and potential uncertainties in global markets warranted a higher priority for managing appropriate liquidity conditions in the policy hierarchy. Accordingly, the Review stated that the Reserve Bank would continue with its policy of active demand management of liquidity through appropriate use of the CRR stipulations and open market operations (OMO) including the MSS and LAF, using all the policy instruments at its command flexibly, as and when the situation warrants. In view of the prevailing macroeconomic and overall monetary and liquidity conditions, it was decided to withdraw the ceiling of Rs.3,000 crore on daily reverse repo under the LAF effective August 6, 2007. The Reserve Bank, however, retained the discretion to re-impose a ceiling as appropriate. The second LAF, which was introduced from November 28, 2005 was withdrawn with effect from August 6, 2007. Also, on a review of the prevailing liquidity conditions, CRR was raised by 50 basis points to 7.0 per cent effective from fortnight beginning August 4, 2007.

Mid-term Review

III.12 In the Mid-Term Review released on October 30, 2007 the Reserve Bank observed that aggregate demand conditions remained firm and on the uptrend. The review noted that the key driver of the economy was the substantial increase in gross fixed investment indicative of the strong pace of capacity building underway while the growth in private consumption and exports remained relatively modest. Investment-driven growth was supported primarily by saving rates, that reached around 32-33 per cent of GDP, higher by 10 percentage points from the beginning of the decade. It noted that the momentum in investment continued in spite of changes in the interest rate cycle and transient slack in industrial activity. The review also noted that monetary aggregates were running well above initial projections, reflecting the impact of higher than expected deposit growth and the exogenous expansionary effects of capital inflows as well as the drawdown of fiscal cash balances. Within the monetary expansion, signs of slowdown in bank credit growth were visible, from excessively high rates of growth in the preceding four years. Moreover, the merchandise trade deficit widened sizeably, despite reasonably strong export growth, attesting to the spill-over of domestic demand into the external sector. The review emphasised that although inflation in terms of wholesale prices had eased considerably, it remained high in terms of consumer prices, particularly for agricultural workers and rural labourers. The Mid-Term Review also raised concern on sub-prime crisis, the quality of debt unsettled in the financial market across the world and the threat to global growth and financial stability. The review mentioned the potential inflationary risk and the uncertainty emanating from systematic and sustained surge in international crude oil prices and historically high level of global food prices.

III.13 In view of the trends in the real sectors, the Mid-Term Review indicated that the momentum in the real economy would be maintained and accordingly placed GDP growth for 2007-08 at 8.5 per cent, same as set out in the Annual Policy Statement of April 2007 and the First Quarter Review. It reiterated that self-imposed medium-term inflation ceiling would be 5.0 per cent during 2007-08 and to condition inflation expectations in the range of 4.0-4.5 per cent as mentioned in the Annual Policy Statement 2007-08. Towards this end, the Mid-Term Review set out a medium-term inflation rate of 3.0 per cent consistent with India's broader integration into the global economy. The review also took note of the rising and volatile international crude oil prices and heightened levels of food prices that posed threats to inflation and inflationary expectations.

III.14 The Mid-Term Review stated that threats to inflation in the future emanated not only from domestic liquidity conditions but also from the underlying global pressures, though the possible impact of injection of liquidity by central banks to meet the turbulence in global financial markets was not clear at that stage. In any case, it noted that globally, pressures on future inflation were embedded in the high and volatile levels of international crude oil prices as well as prices of food and metals. Furthermore, the sharp increase in inflation in China had the possibility to transmit to major trading partners, given the dominant position of China in the global economy. Under such circumstances, the expansion in monetary aggregates and liquidity, essentially driven by capital inflows, were considered to be at unacceptably high levels, warranting priority in policy attention and posing extraordinary challenges for the conduct of monetary policy going forward. On a review of the then prevailing monetary conditions, it was decided to increase the CRR by 50 basis points with effect from the fortnight beginning November 10, 2007 (Table 3.1).

Third Quarter Review

III.15 The Third Quarter Review continued with an assessment of a positive outlook for 2007-08 on the basis of available information. It confirmed a positive outlook for agriculture and also found the prospects for the industrial and services sectors over the rest of 2007-08 to be favourable and positive. Assessing the evolving demand pattern, it noted that while the rate of fixed capital formation increased during the first half of 2007-08, that of private final consumption expenditure moderated. The strength of investment demand was also visible in the strong growth of capital goods production achieved for April-November 2007, which turned out to be the highest since 1993-94.

III.16 The Review noted that from the time of Mid-Term Review, both reserve money and money supply accelerated, reflecting the significant expansionary effects of large capital inflows embodied in the sharp accretion to Reserve Bank's foreign currency assets . Non-food credit, which slowed down in the first half of 2007-08, picked up during the latter part of the year and constrained any slowdown in aggregate deposit growth that had been running well above indicative projections throughout 2007-08.

Table 3.1: Movement in Key Policy Rates and Reserve Requirements

(Per cent)

Effective since	Bank Rate	Reverse Repo Rate	Repo Rate	Cash Reserve Ratio	Statutory Liquidity Ratio
1	2	3	4	5	6
March 31, 2004	6.00	4.50	6.00	4.50	25
September 18, 2004	6.00	4.50	6.00	4.75 (+0.25)	25
October 2, 2004	6.00	4.50	6.00	5.00 (+0.25)	25
October 27, 2004	6.00	4.75 (+0.25)	6.00	5.00	25
April 29, 2005	6.00	5.00 (+0.25)	6.00	5.00	25
October 26, 2005	6.00	5.25 (+0.25)	6.25 (+0.25)	5.00	25
January 24, 2006	6.00	5.50 (+0.25)	6.50 (+0.25)	5.00	25
June 9, 2006	6.00	5.75 (+0.25)	6.75 (+0.25)	5.00	25
July 25, 2006	6.00	6.00 (+0.25)	7.00 (+0.25)	5.00	25
October 31, 2006	6.00	6.00	7.25 (+0.25)	5.00	25
December 23, 2006	6.00	6.00	7.25	5.25 (+0.25)	25
January 6, 2007	6.00	6.00	7.25	5.50 (+0.25)	25
January 31, 2007	6.00	6.00	7.50 (+0.25)	5.50	25
February 17, 2007	6.00	6.00	7.50	5.75 (+0.25)	25
March 3, 2007	6.00	6.00	7.50	6.00 (+0.25)	25
March 30, 2007	6.00	6.00	7.75 (+0.25)	6.00	25
April 14, 2007	6.00	6.00	7.75	6.25 (+0.25)	25
April 28, 2007	6.00	6.00	7.75	6.50 (+0.25)	25
August 4, 2007	6.00	6.00	7.75	7.00 (+0.50)	25
November 10, 2007	6.00	6.00	7.75	7.50 (+0.50)	25
April 26, 2008	6.00	6.00	7.75	7.75 (+0.25)	25
May 10, 2008	6.00	6.00	7.75	8.00 (+0.25)	25
May 24, 2008	6.00	6.00	7.75	8.25 (+0.25)	25
June 11, 2008	6.00	6.00	8.00 (+0.25)	8.25	25
June 25, 2008	6.00	6.00	8.50 (+0.50)	8.25	25
July 5, 2008	6.00	6.00	8.50	8.50 (+0.25)	25
July 19, 2008	6.00	6.00	8.50	8.75 (+0.25)	25
July 30, 2008	6.00	6.00	9.00 (+0.50)	8.75	25
August 30, 2008	6.00	6.00	9.00	9.00 (+0.25)	25

Note: 1. With effect from October 29, 2004, the nomenclature of repo and reverse repo was changed in keeping with international usage. Now, reverse repo indicates absorption of liquidity and repo signifies injection of liquidity. Prior to October 29, 2004, repo indicated absorption of liquidity while reverse repo meant injection of liquidity. The nomenclature in this Report is based on the new usage of terms even for the period prior to October 29, 2004.
2. Figures in parentheses indicate changes in policy rates/ratios.

III.17 Although available data showed some softening of inflation in terms of manufactures and primary food articles (since mid-July 2007), the Third Quarter Review noted that domestic inflationary conditions were increasingly becoming vulnerable to the adverse global developments. The Review noted that inflationary risks would be getting stronger in the period ahead. International foodgrain prices, which had escalated to historic peaks, were poised to enter a prolonged period of hardening, with demand projected to run well ahead of supply and historically low stocks, exacerbated by bio-fuel diversion. In the primary non-food category, the upside inflation risks emanating from the oilseeds/ edible oil group increased substantially, both domestically and globally. The outlook on international metal prices remained uncertain with demand pressures from Asia continuing to be sustained by robust growth in the region.

III.18 The Third Quarter Review indicated that the build-up in the foreign exchange reserves during 2007-08 was unprecedented. The expansion of monetary and liquidity conditions made the task of management of liquidity complex and challenging. In this respect, the Review recognised the risk of increase in asset prices and risks for upward inflationary pressures for the Indian economy, alongside international price pressures particularly on account of oil, metal and food prices. The Review indicated that domestic monetary and liquidity conditions remained more expansionary than before and were likely to be amplified by global factors, particularly, in the wake of massive injections of liquidity by major central banks to activate frozen money markets. It was further stated that the liquidity conditions were being shaped by several underlying factors, and their developments had implications for liquidity management going forward and warranted appropriate and timely action. The Review also noted that the events in the second and third weeks of January 2008 indicated a potential for reversal in capital flows, though it was not certain as to how transient such events would be. The Review also cautioned that the strategic management of the capital account would warrant preparations for all situations and any unexpected events in future.

III.19 In view of the underlying momentum in the manufacturing and services sectors, the overall growth projection was maintained at 8.5 per cent as projected in the Annual Policy Statement April 2007 and reiterated in the Mid-Term Review. The Third Quarter Review reiterated the monetary policy stance of containing inflation close to 5.0 per cent in 2007-08, and going forward, of conditioning the inflation expectations in the range of 4.0-4.5 per cent as mentioned in the Annual Policy Statement and the Mid-Term Review for 2007-08. It also mentioned that consistent with India’s broader integration into the global economy, the medium term objective would be to contain inflation around 3.0 per cent as was mentioned in the Mid-Term Review of 2007-08. The Review noted that aggregate deposit growth was above the Annual Policy projection of Rs. 4,90,000 crore for 2007-08 and also observed that growth in non-food credit was below 24.0-25.0 per cent as projected for 2007-08. It also noted that the growth in broad money remained above the indicative trajectory of 17.0-17.5 per cent for 2007-08 and felt the need to have appropriate responses to moderate it.

III.20 The Third Quarter Review stressed that over the period ahead, liquidity management would continue to receive priority in the conduct of monetary policy. It reinforced the emphasis on price stability while maintaining growth momentum. Credit quality and credit delivery for employment-intensive sectors as well as financial inclusion were also reiterated as policy priority. In view of the developments in international financial system and global macroeconomic scenario, monetary policy further emphasised the need to monitor the evolving heightened global uncertainties and domestic situation impinging on inflation expectations, financial stability and growth momentum for appropriate policy actions.

III.21 In the period following the Third Quarter Review, notable developments in the domestic inflationary scenario and liquidity conditions prompted a swift reinforcement of monetary policy stance. Year-on-year WPI inflation, which was 3.83 per cent on January 12, 2008, *i.e.*, at the time of the announcement of the Third Quarter Review, increased to 7.41 per cent on March 29, 2008 and

7.14 per cent as on April 5, 2008. Its overall impact on inflationary expectations required to be monitored and moderated. The increase in prices of primary articles during 2007-08 was led by food articles and non-food articles such as oilseeds. Increase in prices of edible oil, oil cakes, basic metals, alloys and metal products and basic and heavy inorganic chemicals contributed to the rise in manufacturing prices.

III.22 In the light of prevailing macroeconomic, monetary and anticipated liquidity conditions, and with a view to containing inflation expectations, the Reserve Bank on April 17, 2008 announced a hike in CRR by 50 basis points to 8.0 per cent in two stages, 25 basis points each, effective from the fortnights beginning April 26, 2008 and May 10, 2008, thereby absorbing an estimated amount of about Rs.18,500 crore of resources from the banking system in the first round. The increase in CRR was intended to absorb excess liquidity, pre-empt the stoking of demand pressures and contain the inflationary expectations. This monetary policy measure was consistent with the stance set out in the Annual Policy Statement and the Reviews of the Statement during 2007-08 (Box III.1).

MONETARY POLICY OPERATIONS: 2008-09

Annual Policy Statement for 2008-09

III.23 The Annual Policy Statement for 2008-09 (APS, April 2008) noted that there had been significant shifts in both global and domestic developments in relation to initial assessments for 2007-08. The outlook for the global economy deteriorated from the time of the Mid-Term Review of October 2007, and sharply after the Third Quarter Review of January 2008. The Annual Policy Statement noted that dangers of global recession had increased at the time of announcement of the Statement. It also added that from January 2008, the upside pressures from international food and energy prices appeared set to impart a degree of persistent upward pressure to inflation globally. On the domestic front, the outlook remained positive up to January 2008, with indications of moderation in industrial production, services sector activity, business confidence and non-food credit, as anticipated. The Annual Policy Statement noted that in the ensuing months, consensus assessments of the prospects for growth in the year ahead were trimmed. Beginning from January 2008, risks to inflation and inflation expectations from the upside pressures due to international food, crude and metal prices became more potent and real than before. Against this backdrop, the Annual Policy Statement for 2008-09 emphasised the overreaching policy challenges to mitigate inflationary pressure and global uncertainties while maintaining the growth momentum of the economy.

III.24 Initial forecasts predicted a near-normal rainfall in the 2008 South-West monsoon season, at 99 per cent of the long period average for the country as a whole auguring well for the sustenance of trend growth in agriculture. The Statement noted that the expected decline in world GDP growth in 2008 in relation to the preceding year could temper the prospects of growth in the industrial and services sectors at the margin although the underlying momentum of expansion in these sectors was likely to be maintained. In view of this overall macroeconomic scenario, the Annual Policy Statement of April 2008 placed real GDP growth during 2008-09 in the range of 8.0 to 8.5 per cent for policy purposes assuming that (a) global financial and commodity markets and real economy would be broadly aligned with the central scenario as assessed at that stage; and (b) domestically, normal monsoon conditions prevail. In view of the lagged and cumulative effects of monetary policy on aggregate demand and assuming that supply management would be conducive, capital flows would be managed actively and in the absence of new adversities emanating in the domestic or global economy, the Annual Policy Statement indicated that the monetary policy endeavour would be to bring down inflation from the then high level of above 7.0 per cent to around 5.5 per cent in 2008-09 with a preference for bringing it as close to 5.0 per cent as soon as possible, recognising the evolving complexities in globally-transmitted inflation. The Statement also added that going forward, the Reserve Bank would continue to condition policy and perceptions for inflation in the range of 4.0-4.5 per cent so that an inflation rate of around 3.0 per cent

Box III:1
Stance of Monetary Policy in India

2007-08

Annual Policy Statement (April 2007)

- To reinforce the emphasis on price stability and well-anchored inflation expectations while ensuring a monetary and interest rate environment that supports export and investment demand in the economy so as to enable continuation of the growth momentum.
- To re-emphasise credit quality and orderly conditions in financial markets for securing macroeconomic and, in particular, financial stability while simultaneously pursuing greater credit penetration and financial inclusion.
- To respond swiftly with all possible measures as appropriate to the evolving global and domestic situation impinging on inflation expectations and the growth momentum.

First Quarter Review (July 2007)

- To reinforce the emphasis on price stability and well-anchored inflation expectations while ensuring a monetary and interest rate environment that supports export and investment demand in the economy so as to enable continuation of the growth momentum.
- To re-emphasise credit quality and orderly conditions in financial markets for securing macroeconomic and, in particular, financial stability while simultaneously pursuing greater credit penetration and financial inclusion.
- To respond swiftly with all possible measures as appropriate to the evolving global and domestic situation impinging on inflation expectations, financial stability and the growth momentum.

Mid-term Review (October 2007)

- To reinforce the emphasis on price stability and well-anchored inflation expectations while ensuring a monetary and interest rate environment that supports export and investment demand in the economy so as to enable continuation of the growth momentum.
- To re-emphasise credit quality and orderly conditions in financial markets for securing macroeconomic and, in particular, financial stability while simultaneously pursuing greater credit penetration and financial inclusion.
- To respond swiftly with all possible measures as appropriate to the evolving global and domestic situation impinging on inflation expectations, financial stability and the growth momentum.
- To be in readiness to take recourse to all possible options for maintaining stability and the growth momentum in the economy in view of the unusual heightened global uncertainties, and the unconventional policy responses to the developments in financial markets.

Third Quarter Review (January 2008)

- To reinforce the emphasis on price stability and well-anchored inflation expectations while ensuring a monetary and interest rate environment conducive to continuation of the growth momentum and orderly conditions in financial markets.
- To emphasise credit quality as well as credit delivery, in particular, for employment-intensive sectors, while pursuing financial inclusion.
- To monitor the evolving heightened global uncertainties and domestic situation impinging on inflation expectations, financial stability and growth momentum in order to respond swiftly with both conventional and unconventional measures, as appropriate.

2008-09

Annual Policy Statement 2008-09 (April 2008)

- To ensure a monetary and interest rate environment that accords high priority to price stability, well-anchored inflation expectations and orderly conditions in financial markets while being conducive to continuation of the growth momentum.
- To respond swiftly on a continuing basis to the evolving constellation of adverse international developments and to the domestic situation impinging on inflation expectations, financial stability and growth momentum, with both conventional and unconventional measures, as appropriate.
- To emphasise credit quality as well as credit delivery, in particular, for employment-intensive sectors, while pursuing financial inclusion.

First Quarter Review (July 2008)

- To ensure a monetary and interest rate environment that accords high priority to price stability, well-anchored inflation expectations and orderly conditions in financial markets while being conducive to continuation of the growth momentum.
- To respond swiftly on a continuing basis to the evolving constellation of adverse international developments and to the domestic situation impinging on inflation expectations, financial stability and growth momentum, with both conventional and unconventional measures, as appropriate.
- To emphasise credit quality as well as credit delivery, in particular, for employment-intensive sectors, while pursuing financial inclusion.

became a medium-term objective consistent with India's broader integration into the global economy and with the goal of maintaining self-accelerating growth over the medium-term.

III.25 The Statement also noted that money supply remained above indicative projections persistently through 2005-07 on the back of sizeable accretions to the Reserve Bank's foreign exchange assets and a cyclical acceleration in credit and deposit growth, particularly the latter, during 2007-08. In view of the resulting monetary overhang, the Statement mentioned that there was a need to moderate monetary expansion in the range of 16.5-17.0 per cent in 2008-09 in consonance with the outlook on growth and inflation so as to ensure macroeconomic and financial stability. Consistent with the projections of money supply, the growth in aggregate deposits for 2008-09 was placed at around 17.0 per cent or around Rs.5,50,000 crore. Based on the overall assessment of the sources of funding and the overall credit requirements of various productive sectors of the economy, the growth of non-food credit, including investments in bonds/debentures/shares of public sector undertakings and private corporate sector and commercial paper (CP), was placed at around 20.0 per cent for 2008-09 consistent with the monetary projections.

III.26 Given the unprecedented complexities involved and the heightened uncertainties, the following factors influenced the setting of the stance of monetary policy for 2008-09. First, there was the immediate challenge of escalated and volatile food and energy prices, which possibly contained some structural components apart from cyclical components. Second, while demand pressures persisted, there was some improvement in the domestic supply response. Third, the recent initiatives in regard to supply-management by the Government of India and monetary measures by the Reserve Bank were in the process of impacting the economy. Fourth, policy responses emphasised managing expectations in an environment of the evolving global and domestic uncertainties. Fifth, monetary policy had demonstrated a determination to act decisively on a continuing basis to curb any signs of adverse developments with regard to inflation expectations.

III.27 The Annual Policy Statement mentioned that the stance of monetary policy for 2008-09 was conditioned keeping in view the assessment of the Indian economy, including the outlook for growth and inflation as well as the developments in the global economy. In view of the above unprecedented uncertainties and dilemmas, as discussed, it recognised the importance of making informed judgements with regard to the timing and magnitude of policy actions. The stance of monetary policy emphasised the maintenance of a monetary and interest rate environment that accorded high priority to price stability, well-anchored inflation expectations and orderly conditions in financial markets while being conducive to continuation of the growth momentum. The policy stance further emphasised the importance of credit quality as well as credit delivery, in particular, for employment-intensive sectors, while pursuing financial inclusion. It further indicated that monetary policy would respond swiftly on a continuing basis to the evolving constellation of adverse international developments and to the domestic situation impinging on inflation expectations, financial stability and growth momentum, with both conventional and unconventional measures, as felt appropriate. The Reserve Bank, continuing with its pre-emptive and calibrated approach to contain inflation expectations, raised CRR by 25 basis points to 8.25 per cent with effect from the fortnight beginning May 24, 2008. This followed the hike in CRR by 50 basis points, 25 basis points each effective from the fortnights beginning April 26 and May 10, 2008 as announced on April 17, 2008.

III.28 The Annual Policy Statement for the year 2008-09 had referred to the unprecedented uncertainties and dilemmas that existed and added that "while monetary policy has to respond proactively to immediate concerns, it cannot afford to ignore considerations over a relatively longer term perspective of, say, one to two years, with respect to overall macroeconomic prospects. At the same time, it is critical at this juncture to demonstrate on a continuing basis a determination to act decisively, effectively and swiftly to curb any signs of adverse developments in regard to inflation expectations". The year-on-year WPI inflation which was 4.36 per cent on January 12, 2008 (at the time of announcement of the Third Quarter Review for 2007-08) increased to 7.33 per cent on April 12, 2008 (at the time of announcement of the Annual Policy Statement for 2008-09) and further to a high of 8.24 per cent on May 24, 2008. Further, various measures of CPI inflation, which ranged from 4.8 to 5.9 per cent in January 2008 also increased to a range of 7.8 to 8.9 per cent in April 2008. In light of these developments, and on a review of the then macroeconomic and overall monetary conditions and with a view to containing inflation expectations, the Reserve Bank announced on June 11, 2008 an increase in the repo rate under the Liquidity Adjustment Facility (LAF) by 25 basis points to 8.00 per cent from 7.75 per cent with immediate effect.

III.29 Inflation, based on variations in the wholesale price index (WPI) on a year-on-year basis, increased to 11.05 per cent as on June 7, 2008 from 7.75 per cent at end-March 2008 and 4.28 per cent a year ago. Excluding the fuel sub-group, inflation rose to 9.61 per cent from 5.92 per cent a year earlier. Excluding fuel and food, inflation was 10.33 per cent as against 6.33 per cent in the corresponding period of the preceding year. The rise in inflation for non-fuel commodities partly reflected the second round impacts of the increase in prices of fuel items in earlier period. The Reserve Bank recognised that besides oil prices, there were some underlying inflationary pressures impacting inflation in India. Therefore, monetary policy recognised the importance of an adjustment of overall aggregate demand on an economy-wide basis. It was realised that high and volatile energy prices were not a temporary phenomenon any longer and there was a need for monetary policy to smoothen and enable this adjustment so that inflation expectations were contained. It was also noted that even when all policies were aimed to meet the challenges emanating from inflation, the underlying demand pressure was reflected in the monetary aggregates. On a year-on-year basis, money supply (M_3) increased by 21.4 per cent as on June 6, 2008 over and above the growth of 21.0 per cent a year earlier and well above the indicative projection of 16.5-17.0 per cent set for 2008-09 (APS, April 2008). Aggregate deposits rose by 23.2 per cent on a year-on-year basis on June 6, 2008 which was above the indicative projection of 17.0 per cent for 2008-09. Non-food credit growth at 26.2 per cent was also above the indicative projection of 20.0 per cent. At that juncture, the overriding priority for monetary policy was to eschew any further intensification of inflationary pressures and to firmly anchor inflation expectations and to urgently address aggregate demand pressures which appeared to be strongly in evidence. Accordingly, consistent with the stance of monetary policy as set out in the Annual Policy Statement for 2008-09, on the basis of incoming information on domestic and global macroeconomic and financial developments, the Reserve Bank increased the repo rate under LAF from 8.00 per cent to 8.50 per cent effective from June 25, 2008. The CRR was also raised by 50 basis points to 8.75 per cent in two stages, 25 basis points each, effective from the fortnights beginning July 5 and July 19, 2008, respectively.

First Quarter Review

III.30 The First Quarter Review of the Annual Statement on Monetary Policy for 2008-09 noted that after the announcement of the Annual Policy Statement in April 2008, global as well as domestic developments on both supply and demand sides, pointed to accentuation of inflationary pressures, especially in terms of inflation expectations and perceptions during the first quarter of 2008-09. In an environment of surging global inflation, and with domestic inflation also rising to a 13-year high, the Reserve Bank noted with concern that inflation had emerged as the biggest risk to the global outlook, having risen to very high levels across the world, not generally seen for a couple of decades. The prevailing inflation was identified to be driven mainly by escalating commodity prices, particularly of energy, food and metals. Growing concerns prevailed across economies that rising food and energy prices were triggering a more generalised inflation spiral through second-round effects. Even if the inflation was expected to rise as per the earlier assessment, the size and pace of the subsequent change was clearly unanticipated. While high inflation was now a worldwide phenomenon, country responses have differed widely depending on perceptions of the nature of the shock, their expected persistence, the stage of the inflation cycle and the onset of the second-order impact. Further, the policy responses by central banks in some countries have been constrained by the concerns about the speed and depth of the slowdown in growth as also the possible implications of the same for financial stability.

III.31 It also noted that the upsurge in inflation in India during the current financial year reflects a combination of pass-through of international crude prices and rising inflation in a broad range of manufacturing sector including food, metal and chemical products. The steep rise in input costs through increased import prices and sharp rise in prices of oilseeds, raw cotton and milk and movement in prices of commodities such as coal, edible oil, rice and steel in line with international prices have contributed to the overall inflation. It pointed out that the impact of the escalation in international food, crude and other commodity prices was reflected in a sizeable expansion in the merchandise trade deficit putting persisting downward pressures in the foreign exchange market further aggravated by volatility of capital flows with portfolio outflows and tightening of international bank lending.

III.32 The First Quarter Review stated that bringing down inflation from the current high levels and stabilising inflation expectations assumed the highest priority in the stance of monetary policy. It noted that, looking forward, the global and more importantly, the domestic factors pose severe challenges to monetary management and warrant reinforced policy actions on several fronts. It also stated that against this background, it was expected that inflation would moderate from the current high levels in the months to come and a noticeable decline in inflation could be expected towards the last quarter of 2008-09. Accordingly, it noted that while the policy actions would aim to bring down the prevailing intolerable level of inflation to a tolerable level of below 5.0 per cent as soon as possible and around 3.0 per cent over the medium-term, at this juncture a realistic policy endeavour would be to bring down inflation from the prevailing level of about 11.0-12.0 per cent to a level close to 7.0 per cent by March 31, 2009. It stated that taking into account aggregate demand management and supply prospects described above, the projection of real GDP growth of the Indian economy in 2008-09 in the range of 8.0 to 8.5 per cent as set out in the Annual Policy Statement of April 2008 may prove to be optimistic and hence for policy purposes, a projection of around 8.0 per cent appear to be a more realistic central scenario, barring domestic or external shocks.

III.33 The First Quarter Review emphasised the necessity of moderating monetary expansion and revised the projection of money supply growth in the range of around 17.0 per cent in 2008-09 in consonance with the outlook on growth and inflation so as to ensure macroeconomic and financial stability in the period ahead. Consistent with the projection of money supply, the growth in aggregate deposits in 2008-09 was placed at around 17.5 per cent or around Rs.6,00,000 crore. Based on an overall assessment of the sources of funding and the overall credit requirements of the various productive sectors of the economy, the growth of non-food credit including investments in bonds/debentures/ shares of public sector undertakings and private corporate sector and CPs was placed at around 20.0 per cent in 2008-09, as indicated in the Annual Policy Statement, consistent with the monetary projections.

III.34 The First Quarter Review noted that in view of the criticality of anchoring inflation expectations, a continuous heightened vigil over ensuing monetary and macroeconomic developments is to be maintained to enable swift responses with appropriate measures as necessary, consistent with the monetary policy stance. Furthermore, in view of the prevailing macroeconomic and overall monetary conditions, the First Quarter Review announced an increase in fixed repo rate under the LAF by 50 basis points from 8.5 per cent to 9.0 per cent with effect from July 30, 2008 and an increase of CRR by 25 basis points to 9.0 per cent with effect from August 30, 2008.

Cash Reserve Ratio

III.35 During 2007-08, the CRR was raised by 150 basis points in four stages to 7.5 per cent from 6.0 per cent of the banks' net demand and time liabilities (NDTL) and, during 2008-09 (up to August 2008), the CRR has been raised further by another 150 basis points in six stages of 25 basis points each to 9.0 per cent of the banks' NDTL (Chart III.1). Between December 2006 and July 2008, there has been a cumulative increase of 375 basis points in CRR and the estimated amount of liquidity impounded in the first round due to hike in CRR was Rs.1,22,500 crore. Subsequently, in its First Quarter Review in July 2008, the Reserve Bank increased repo rate by 50 basis points to 9.0 per cent effective from July 30, 2008 and hiked the CRR by 25 basis points to 9.0 per cent effective from the fortnight beginning August 30, 2008.

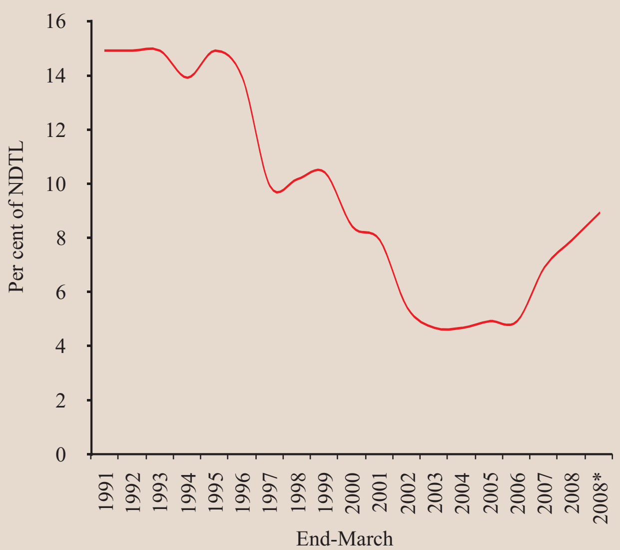
Statutory Liquidity Ratio

III.36 The statutory liquidity ratio (SLR) was kept unchanged at 25 per cent of banks' net demand and time liabilities (NDTL) during 2007-08 and 2008-09 so far. The ratio was last revised in November 1997. Commercial banks' holdings of SLR securities as at end-March 2008 remained at 27.8 per cent of their NDTL – almost the same as at end-March 2007.

Interest Rate Policy

III.37 Interest rates that were once regulated according to their relevance to the monetary authority and the financial sector at different points of time, were gradually deregulated barring some rates. Although some interest rates like interest rate on saving bank deposits, NRE deposits and FCNR(B) deposits and those on export credit and small loans up to Rs.2 lakh are still regulated by the Reserve Bank, it has been the endeavour of the Reserve Bank to modify them in line with the changing scenario. The interest rate on savings bank deposits is currently prescribed at 3.5 per cent per annum; this rate was last revised on March 1, 2003. The Reserve Bank's Annual Policy Statement for the year 2007-08 reduced the ceiling interest rate on both FCNR(B) deposits and NRE deposits rates by 50 basis points. With effect from the close of business of April 24, 2007, the ceiling interest rate on FCNR(B) deposits was stipulated at LIBOR/SWAP rates minus 75 basis points and for NRE deposits rates, the ceiling rate was at LIBOR/SWAP rates for the corresponding maturities (Table 3.2).

Chart III.1: Cash Reserve Ratio



* : August 30, 2008.

III.38 The validity of the reduction in the interest rate ceiling to 250 basis points below BPLR on pre-shipment rupee export credit up to 180 days and post-shipment rupee export credit up to 90 days announced on September 24, 2001 was extended up to October 31, 2008 (Appendix Table 57). On the basis of recommendations of the Working Group to review export credit, the ceiling interest rate on export credit in foreign currency was increased by 25 basis points to LIBOR *plus* 100 basis points with effect from April 18, 2006.

LIQUIDITY MANAGEMENT

III.39 Management of liquidity remained a priority in the policy hierarchy of the Reserve Bank throughout 2007-08. The Reserve Bank continued to ensure that appropriate liquidity was maintained in the system so that all legitimate requirements of credit were met, particularly for productive purposes, consistent with the objective of price and financial stability. Towards this end, the Reserve Bank continued with its policy of active management of liquidity through appropriate use of CRR stipulations and open market operations (OMO), including MSS and LAF and using all the policy instruments at its disposal flexibly as and when the situation warranted (Table 3.3 and Table 3.4). A noteworthy feature in 2007-08 was the anticipatory arrangements made by the Reserve Bank to manage more smoothly the usual year-end demand for liquidity.

III.40 The management of liquidity during 2007-08 turned out to be more complex as the Reserve Bank

Table 3.2: Interest Rate Structure for Non-Resident Deposits

(Basis points)

Effective since	FCNR(B) Deposits (Ceiling Rate)	Effective since	NRE (Rupee) Deposits (Ceiling Rate for 1-3 year maturity)
1	2	3	4
April 19, 2001	LIBOR	July 17, 2003	LIBOR + 250
April 29, 2002	LIBOR – 25	September 15, 2003	LIBOR + 100
March 28, 2006	LIBOR	October 18, 2003	LIBOR + 25
January 31, 2007	LIBOR – 25	April 17, 2004	LIBOR
April 24, 2007	LIBOR - 75	November 1, 2004	LIBOR + 50
		November 17, 2005	LIBOR + 75
		April 18, 2006	LIBOR + 100
		January 31, 2007	LIBOR + 50
		April 24, 2007	LIBOR

Note: LIBOR/swap rates for the respective currency/maturities in case of FCNR(B) deposits and LIBOR/ swap rates for US dollar of corresponding maturity in case of NRE deposits.

had to contain unusual swings in liquidity emanating from the high volatility in foreign exchange flows as well as in cash balances of the Central Government. The liquidity conditions for most part of 2007-08 remained easy though interspersed with transient periods of tightness. This was mainly on account of variation in Central Government cash balances reflecting quarterly advance tax outflows and volatile capital flows. Given the large amount of capital flows to India and some other emerging market economies in recent years, the central banks had to dovetail their liquidity management framework appropriately to manage surplus liquidity emanating from such cross-border inflows (Box III.2).

Table 3.3: Liquidity Management

(Rupees crore)

Outstanding as on Last Friday	LAF	MSS	Centre's Surplus with the RBI @	Total (2 to 4)
1	2	3	4	5
2007				
January	-11,445	39,375	42,494	70,424
February	6,940	42,807	53,115	1,02,862
March *	-29,185	62,974	49,992	83,781
April	-9,996	75,924	-980	64,948
May	-4,690	87,319	-7,753	74,876
June	-8,895	81,137	-15,159	57,083
July	2,992	88,010	-20,199	70,803
August	16,855	1,06,434	20,807	1,44,096
September	-6,070	1,31,473	30,771	1,56,174
October	18,135	1,74,277	23,735	2,16,147
November	-1,320	1,71,468	36,668	2,06,816
December	-33,865	1,59,717	80,591	2,06,443
2008				
January	985	1,66,739	70,657	2,38,381
February	8,085	1,75,089	68,538	2,51,712
March*	-50,350	1,68,392	76,586	1,94,628
April	32,765	1,72,444	36,549	2,41,758
May	-9,600	1,75,362	17,102	1,82,864
June	-32,090	1,74,433	36,513	1,78,856
July	-43,260	1,71,327	15,043	1,43,110

@ : Excludes minimum cash balances with the Reserve Bank in case of surplus.

* : Data pertain to March 31.

Note: 1. Negative sign in column 2 indicates injection of liquidity through LAF repo.

2. Between March 5 and August 5, 2007, daily reverse repo absorptions were restricted to a maximum of Rs. 3,000 crore comprising Rs.2,000 crore in the First LAF and Rs. 1,000 crore in the Second LAF.

3. Negative sign in column 4 indicates injection of liquidity through WMA/overdraft.

III.41 The Reserve Bank during 2007-08 continued to smoothen liquidity through several measures, in tandem with the evolving conditions. Before the commencement of 2007-08, the liquidity adjustment facility was modified on March 2, 2007 and an enhanced MSS programme was put in place so as to restore LAF as a facility for equilibrating very short-term liquidity mismatches. Accordingly, effective March 5, 2007, daily reverse repo absorptions were limited to a maximum of Rs.3,000 crore each day comprising Rs.2,000 crore in the First LAF and Rs.1,000 crore in the Second LAF. As the year 2007-08 commenced, the Reserve Bank allowed State Development Loans (SDLs) as eligible securities under the LAF repo operations effective April 3, 2007. In view of the prevailing liquidity conditions, the Reserve Bank withdrew the ceiling of Rs.3,000 crore on daily reverse repo under the LAF effective August 6, 2007, while retaining the discretion to re-impose a ceiling as appropriate. The second LAF, which was

Table 3.4: Monthly Primary Liquidity Flows and Open Market Operations

(Rupees crore)

Month	RBI's Net Foreign Currency Assets #			Net Repos under the LAF			RBI's Initial Subscription @	Net Open Market Operations			Market Stabilisation Scheme		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2005-06	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Apr	20,832	11,935	15,059	-40,555	-19,189	-83,115	0	-112	-313	-111	4,786	-12,951	-4052
May	4,781	8,138	9,447	-9,440	-5,306	3,155	0	-1,303	-680	-54	-3,541	-11,395	-2918
Jun	2,494	27,655	-8,971	26,935	-7,687	34,610	0	-121	-252	8,860	-5,307	4,702	929
Jul	2,556	25,219	-33,674	-15,760	-3	29,325	0	-968	-664	9,488	-4,603	-2,410	2,993
Aug	2,993	38,817		16,080	-13,855		0	5	-498		-2,205	-21,407	
Sep	5,399	54,039		28,075	22,925		0	-214	-398		-2,133	-25,039	
Oct	4,031	52,372		-10,355	-24,205		0	-233	-531		1,973	-42,804	
Nov	17,066	29,994		-3,725	9,425		0	-131	-146		2,174	-1,104	
Dec	10,536	18,521		36,275	31,080		0	-24	4597		-832	12,716	
Jan	9,478	45,251		-8,470	-34,305		0	-555	680		-1,742	1,607	
Feb	47,268	38,428		-6,650	3,850		0	-60	2321		74	-14,031	
Mar	37,167	20,181		24,025	58,435		10,000	-1,409	1809		-22,557	6,697	
Total	**1,64,601**	**3,70,550**	**-18,139**	**36,435**	**21,165**	**-16,025**	**10,000**	**-5,125**	**5,923**	**18,183**	**-33,913**	**-1,05,419**	**-3,048**

\# : Adjusted for revaluation.
\+ : Indicates injection of liquidity into the banking system.
\- : Indicates absorption of liquidity from the banking system.
@ : From April 2006 onwards, the Reserve Bank has stopped participating in the primary market for Government securities in line with the stipulations of the Fiscal Responsibility and Budget Management (FRBM) Act, 2003.
Note : Data based on March 31 for March and last reporting Friday for all other months.

introduced from November 28, 2005 and was conducted between 3:00 pm and 3:45 pm on a daily basis, was also withdrawn with effect from August 6, 2007. In view of the large and continuous capital inflows, the Government of India, in consultation with the Reserve Bank, revised the ceiling for the MSS for the year 2007-08 by successively raising it to Rs. 2,50,000 crore from the initial limit of Rs. 80,000 crore. This was in consonance with the modified arrangement of the Reserve Bank's liquidity management to enhance the MSS programme and use it more flexibly keeping in view the capital flows in the recent periods, and to restore LAF as a facility for equilibrating very short-term mismatches.

III.42 During the first quarter of 2007-08, liquidity pressures eased gradually from April 4, 2007 onwards partly on account of reduction in the Centre's cash balances from Rs.50,092 crore at end-March 2007 to Rs.32,023 crore by mid-April 2007. Consequently, the amount injected through LAF declined. Liquidity was, in fact, absorbed under the LAF during April 9-15, 2007. The absorption under reverse repo, however, remained limited within the ceiling of Rs.3,000 crore as per the modified arrangements. From mid-April 2007 onwards, liquidity conditions tightened, partly due to the two stage hikes of 25 basis points each in the CRR effective from the fortnights beginning April 14, 2007 and April 28, 2007, leading to daily net injection of liquidity averaging Rs.9,629 crore during April 16-May 27, 2007 (Chart III. 2). Liquidity pressures started easing from May 28, 2007 and conditions remained comfortable during the remaining part of the quarter, reflecting increase in Government expenditure and the Reserve Bank's purchase of foreign exchange from authorised dealers (Table 3.5). The cash balances of the Central Government again turned into deficit on June 29, 2007, reflecting the transfer of the Reserve Bank's stake in the State Bank of India (SBI) to the Central Government. Outstanding balances under the MSS rose from Rs. 62,974 crore at end-March 2007 to Rs 81,137 crore on June 29, 2007, reflecting the enhanced MSS programme as announced on March 2, 2007.

III.43 During the second quarter of 2007-08, the Reserve Bank continued to absorb liquidity under the LAF. Absorption under the LAF window which began on May 28, 2007 continued up to July 2007 except for the transient period between June 28-July 2, 2007. Sustained capital inflows and the decline in Central Government balances towards the end of the first quarter of 2007-08 were reflected in the large absorption of liquidity of Rs. 52,070 crore on August 6, 2007 through reverse repo after the withdrawal of

Box III.2
Challenges to Liquidity Management

Central banks have a framework and a set of instruments to manage liquidity, consistent with the ultimate goals of monetary policy (Bindseil, 2000). The importance of liquidity management lies in the central bank's ability to exercise considerable influence and control over interest rates through its market operations. In this regard, the central bank may directly set at least one of the short-term interest rates that acts as its policy rate. By controlling the short-term interest rate while letting markets determine the rest of the yield curve, the central bank attempts to transmit monetary policy impulses across the yield curve. The sovereign yield curve, in turn, influences the lending and deposit rates in the economy. Once bank lending gets affected, interest rates have an impact on real variables such as consumption and investment, which, in turn, has a bearing on output and inflation. So while active liquidity management has a localised objective of keeping short-term interest rates range bound, it also has a long-term objective of implementing the ultimate goals of monetary policy (Mohan, 2006).

While market operations in most advanced economies are conducted in a setting where the economy is perennially in a liquidity shortage mode, liquidity management in emerging markets is more varied, with alternating surplus and shortage conditions and with greater fluctuations in their external accounts. In recent years, capital flows have been a major factor affecting liquidity management in a large number of emerging market economies facing considerable volatility in flows. In a situation where flows exceed the current account deficit, it results in accumulation of foreign exchange reserves. However, unsterilised capital inflows can result in inflation, currency appreciation, loss of competitiveness and attenuation of monetary control. Even when these flows are sterilised through open market operations, the costs could be large as sterilisation operations raise domestic interest rates thereby inducing even greater inflows. Moreover, the fiscal cost of sterilisation could also be high.

Typically, countries contending with the pressures of large and volatile capital flows face the challenge of the impossible trinity. There are several instances of countries getting into problems in trying to solve the trilemma when faced with opportunities for benefiting from global asset portfolio allocations (Obstfeld *et al.*, 2004). Generally, countries seek to retain their monetary policy independence and keep their exchange rates stable. With greater financial openness, many countries have to move towards greater exchange rate flexibility or accept the primacy of global capital market integration over their own monetary policy goals, which, however, entail some cost.

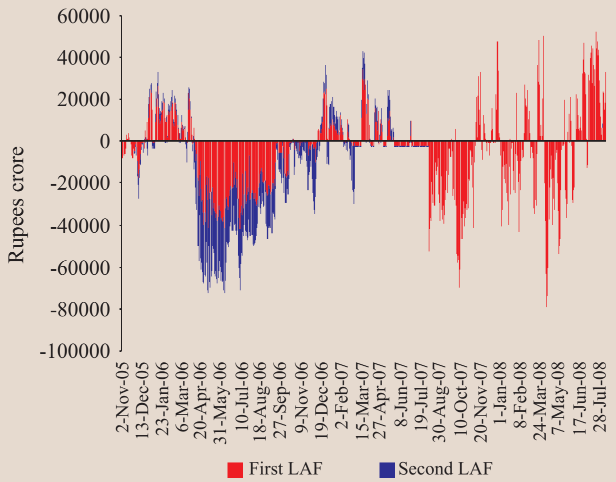
Cross-country experiences in managing capital flows are varied and diverse. Croatia faced surplus liquidity largely on account of FDI inflows, which resulted in higher growth of monetary aggregates. As a result, the Croatian National Bank (CNB) was forced to rely on reserve requirements in order to absorb excess liquidity. In Mexico, the challenge of moderating the impact of capital flows was met by keeping marginal liquidity short through open market operations. While it did help in avoiding some of the ill-effects associated with the surplus, the operating framework provided confusing signals and the transmission channels became blurred. In Pakistan, managing surplus liquidity arising from large direct investment flows met with limited success. On the other hand, the Russian experience has been a mixed one. As the magnitude of foreign flows has been extraordinarily large in emerging market economies (EMEs), market operations are not adequate in addressing the fundamental problem (Saggar, 2006). In Asia, China and Korea have resorted to increasing reserve requirements while issuing central bank bonds to absorb liquidity from the banking system. Measures directly aimed at managing capital flows were initiated in Thailand through the imposition of unremunerated reserve requirements (URR) on most capital inflows, requiring them to be deposited with the central bank for one year. However, the URR stands withdrawn at present. In the same vein, Colombia introduced a URR on external borrowing to be held for six months in the central bank. Additionally, a new ceiling on the foreign exchange position of banks, including gross positions in derivative markets, was stipulated to limit the circumvention of the URR and banks' exposure to counterparty risk (RBI, 2008). Finally, Chile and Brazil's central banks bought large amounts of inflows from the spot market to add to their reserves and also conducted sizeable operations in the forward markets.

In the wake of unprecedented capital inflows in the recent period, the Indian experience with liquidity management has been unique in several ways. First, unlike in several countries, the RBI Act does not permit the monetary authority to float its own securities. Second, a combination of several instruments, *viz*., the LAF window, outright open market operations, market stabilisation scheme (MSS) and CRR is used for liquidity management. In this regard, the MSS has helped the monetary authorities in managing alternating liquidity cycles of surpluses and deficits. The Reserve Bank has now assigned the task of day-to-day liquidity management to LAF, while using MSS for addressing semi-durable liquidity mismatches. Third, liquidity management is presently done on a burden sharing basis where the cost of sterilisation operations are shared by all stakeholders, *i.e*., the Government in case of MSS, the Reserve Bank in case of LAF reverse repo and the banking system in case of CRR. Fourth, monetary measures are supplemented by regulatory and prudential measures whereby calibrated deceleration in credit to sensitive sectors were brought about through changes in risk weight and provisioning norms. Fifth, by adopting a more gradual and a phased approach towards capital account liberalisation, it has been possible to sustain capital inflows on a more stable basis even with the imposition of temporary capital controls.

References

1. Bindseil, U. (2000), "Central Bank Liquidity Management: Theory and Practice", April, European Central Bank.
2. Mohan, R (2006): "Coping With Liquidity Management in India: A Practitioner's View" *Reserve Bank of India Bulletin*, April.
3. Obstfeld. M, Shambaugh, J.C. and A.M. Taylor (2004): "The Trilemma in History: Tradeoffs Among Exchange Rates, Monetary Policies and Capital Mobility", *NBER Working Paper* No.10396.
4. Reserve Bank of India (2008): Annual Policy Statement for the Year 2008-9, April 29.
5. Saggar, M (2006): "Monetary Policy and Operations in Countries with Surplus Liquidity", *Economic and Political Weekly*, March 18.

Chart III.2: Repo (+)/ Reverse Repo (-) under LAF



Note: Additional LAF on March 31, 2006 and March 31, 2007 are shown under second LAF. Since August 2007 second LAF has been discontinued and, therefore, all Special LAF and additional LAF thereafter are included in first LAF. Second LAF was re-introduced on Reporting Fridays with effect from August 1, 2008.

the ceiling on reverse repo. The large absorption under reverse repo declined gradually with the increase in cash balances of the Central Government from of the second week of August and the impact of increase in CRR by 50 basis points to 7.0 per cent effective from the fortnight beginning August 4, 2007. The outstanding amount of MSS reached Rs.1,06,434 crore on August 31, 2007 from Rs.92,954 crore on August 3, 2007. Subsequently the liquidity started building up during August 28-September 13, 2007, on account of decline in Central Government cash balances with the Reserve Bank. Advance tax outflows from the banking system to the Government in mid-September resulted in decline in absorptions under the LAF. The Reserve Bank, in fact, injected liquidity through LAF operations on September 21, 2007 (Rs.1,200 crore) for the first time in this quarter, and subsequently once more on September 28, 2007.

III.44 The third quarter of 2007-08 began with somewhat easy liquidity conditions, reflecting some decline in Central Government surplus and net purchase of foreign exchange by the Reserve Bank. The average daily net absorption by the Reserve Bank through LAF operations was Rs.36,665 crore during October 2007. The continued upsurge in

Table 3.5: Reserve Bank's Liquidity Management Operations

(Rupees crore)

	2004-05	2005-06	2006-07	2007-08	2007-08			
					Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9
A. Drivers of Liquidity (1+2+3+4+5)	**59,268**	**-31,696**	**62,278**	**2,04,026**	**51,146**	**1,11,169**	**-1,984**	**43,695**
1. RBI's net purchases from Authorised Dealers	91,105	32,884	118,994	3,12,054	39,791	1,00,896	88,545	82,822
2. Currency with the Public	-40,892	-57,256	-69,786	-84,571	-12,946	9,465	-47,422	-33,667
3. Surplus cash balances of the Centre with the Reserve Bank	467	-22,726	-1,164	-26,594	49,992	-30,771	-49,820	4,005
4. WMA and OD	0	0	0	0	15,159	-15,159	0	0
5. Others (residual)	8,589	15,403	14,234	3,137	-40,850	46,739	6,712	-9,465
B. Management of Liquidity (6+7+8+9)	**-57,896**	**57,969**	**-24,257**	**-1,17,743**	**-53,943**	**-68,621**	**-11,189**	**16,010**
6. Liquidity impact of LAF Repos	15,315	12,080	36,435	21,165	-20,290	-2,825	27,795	16,485
7. Liquidity impact of OMO (Net) *	0	10,740	720	13,510	10	40	5,260	8,200
8. Liquidity impact of MSS	-64,211	35,149	-33,912	-1,05,419	-18,163	-50,336	-28,244	-8,675
9. First round liquidity impact due to CRR change	-9,000	0	-27,500	-47,000	-15,500	-15,500	-16,000	0
C. Bank Reserves (A+B) #	**1,372**	**26,273**	**38,021**	86,283	**-2,797**	**42,548**	**-13,173**	59,705

WMA : Ways and means advances. OD: Overdraft.
(+) : Indicates injection of liquidity into the banking system.
(-) : Indicates absorption of liquidity from the banking system.
: Includes vault cash with banks and adjusted for first round liquidity impact due to CRR change.
* : Adjusted for Consolidated Sinking Funds (CSF) and including private placement.
Note : Data pertain to March 31 and last Friday for all other months.

capital inflows necessitated upward revisions in the ceiling for the MSS to Rs. 2,00,000 crore on October 4, 2007 and further to Rs. 2,50,000 crore on November 7, 2007. Liquidity conditions came under stress towards the end of October and early part of November 2007 on account of festival season currency demand and increase in surplus of the Central Government with the Reserve Bank. Liquidity conditions tightened reflecting the hike in CRR by 50 basis points in November 2007 and increase in surplus cash balances of the Central Government. The Reserve Bank, therefore, had to inject liquidity; the average daily net liquidity injection under LAF was at Rs. 10,341 crore during November 12-30, 2007. The investment of Central Government surplus cash balances in dated securities (up to Rs. 20,000 crore), which was temporarily suspended between October 4, 2007 and November 19, 2007, was restored with tightening of liquidity conditions. The tightness in liquidity conditions continued in December 2007 largely on account of quarterly advance tax outflows. Average daily net injection under the LAF amounted to Rs. 10,804 crore in December 2007.

III.45 Some easing of the liquidity conditions was observed in the beginning of the last quarter of 2007-08 on account of reduction in the surplus cash balances of the Central Government and foreign exchange operations by the Reserve Bank in the wake of large capital flows over the period. Keeping in view the evolving liquidity conditions, auction of dated securities under the MSS was resumed in January 2008, after a gap of two-and-half months. However, in the second-half of January 2008, surplus liquidity declined with the increase in Centre's cash balances with the Reserve Bank. The average daily net liquidity absorption through LAF was Rs.15,692 crore during January 2008. During February 2008, the LAF window shifted from absorption to injection mode on account of further increase in surplus cash balances of the Central Government with the Reserve Bank. The average daily net liquidity injection was Rs. 1,294 crore in February 2008. In view of the prevailing liquidity conditions, no auction under the MSS was conducted from the middle of the month. The liquidity conditions eased in the beginning of March 2008 due to reduction in the surplus cash balances of the Centre and purchase of securities under the OMO[1] by the Reserve Bank. The absorption under the LAF was Rs. 30,335 crore as on March 13, 2008.

III.46 Liquidity conditions tightened from March 17, 2008 in view of advance tax outflows and the concomitant increased in the Centre's surplus from Rs. 66,241 crore on March 14, 2008 to Rs. 1,03,645 crore on March 28, 2008. The Reserve Bank, in anticipation of the usual schedule of advance tax outflows and demand for funds at the end-of-the financial year, made additional arrangements for smoothening the liquidity and conducted (i) three-day repo/reverse repo auctions under additional LAF on March 14, 2008; (ii) seven-day repo auction under additional LAF on March 17, 2008; and (iii) two-day repo/reverse repo auctions under additional LAF on March 31, 2008. The Reserve Bank injected Rs. 50,350 crore on March 31, 2008 through its LAF operation (Table 3.6). The average daily net outstanding liquidity injection was Rs. 8,271 crore during March 2008.

III.47 During 2007-08, the Reserve Bank injected liquidity through repo operations on 86 days (64 days in 2006-07), while it absorbed liquidity through reverse repo on 225 days (244 days in 2006-07) (Table 3.7). There was net injection of liquidity on 75 days and net absorption on 171 days during 2007-08 (48 days and 197 days, respectively, during 2006-07). No bid was received on November 26, 2007 under repo/reverse repo window of the LAF.

III.48 Liquidity conditions eased from the beginning of April 2008, mainly due to substantial reduction in the cash balances of the Central Government. On a review of the liquidity situation, the Reserve Bank on April 17, 2008 announced a two-stage hike of CRR by 25 basis points each to 8.0 per cent, effective from the fortnights beginning from April 26, 2008 and

[1] During 2007-08, the total amount of Central Government securities purchased under OMO was Rs. 13,510 crore. The OMO operations are liquidity neutral up to the amount of redemption of Government securities in the portfolio of the Reserve Bank.

Table 3.6: Reserve Bank's Holdings of Central Government Dated Securities

(Rupees crore)

Year	Devolvement on Reserve Bank	Private Placement taken by Reserve Bank	OMO Purchases by Reserve Bank	Conversion of Special Securities into Dated Securities	Total Addition to Stock of Reserve Bank's Investments (2+3+4+5)	Open Market Sales by Reserve Bank	Net Addition to Stock (6-7)	Outstanding Holding by Reserve Bank (end period) *	Memo: Net Repo (+)/ Reverse Repos (-) Out-standing #
1	2	3	4	5	6	7	8	9	10
1996-97	3,698	–	623	–	4,321	11,206	-6,885	6,666	-2,300
1997-98	7,028	6,000	467	20,000	33,495	8,081	25,414	31,977	-4,202
1998-99	8,205	30,000	–	–	38,205	26,348	11,857	42,212	-400
1999-00	–	27,000	1,244	–	28,244	36,614	-8,370	35,190	-
2000-01	13,151	18,000	4,471	–	35,622	23,795	11,827	41,732	-1,355
2001-02	679	28,213	5,084	–	33,976	35,419	-1,443	40,927	-4,355
2002-03	5,175	31,000	–	40,000	76,175	53,780	22,395	55,438	-2,415
2003-04	–	21,500	–	61,818	83,318	41,849	41,469	77,397	-34,645
2004-05	847	350	-	-	1,197	2,899	-1,702	80,770	-19,330
2005-06	-	10,000	740	-	10,740	4,653	6,087	83,205	-7,250
2006-07	-	-	720	-	720	5,845	-5,125	75,537	29,185
2007-08	-	-	13,510	-	13,510	7,587	5,293	68,965	50,350

*: Inclusive of securities sold under the LAF. # : Data pertain to end-March.

May 10, 2008, respectively. Auctions under MSS were resumed and the balances under MSS stood at Rs.1,72,444 crore as on April 25, 2008. The daily average net outstanding liquidity absorption under LAF was Rs.26,359 crore during April 2008. The Annual Policy Statement issued on April 29, 2008 announced further increase in CRR by 25 basis points to 8.25 per cent with effect from the fortnight beginning May 24, 2008. Reflecting the impact of the CRR hikes, average daily net absorption under LAF declined to Rs.11,841 crore during May 2008. No auctions of dated securities under MSS was conducted during May 2008. Liquidity conditions eased in the early part of June and the average daily net absorption under the LAF was placed at Rs.15,469 crore during June 1-9, 2008.

III.49 On a review of the prevailing macroeconomic and overall monetary conditions and with a view to containing inflationary expectations, the Reserve Bank increased the repo rate under the LAF by 25 basis points to 8 per cent with effect from June 12, 2008. Subsequently, with the build-up in Central Government balances in the face of advance tax collections, liquidity conditions turned into a deficit mode and the average daily net injection under LAF during June 10-27, 2008 was Rs.17,288 crore. With a view to containing demand pressures, as reflected in the increase in inflation and inflationary expectations, engendered by unrelenting pressures from international commodity prices, particularly crude and metals, the Reserve Bank increased the repo rate under LAF by 50 basis points to 8.5 per cent with effect from June 25, 2008 and also increased the CRR by 50 basis points to 8.75 per cent in two stages (25 basis points each) with effect from the fortnights beginning July 5 and July 19, 2008, respectively. No MSS auction was conducted during June 2008. The average daily net injection through the LAF during June was Rs. 8,622 crore.

III.50 Liquidity conditions eased during the first week of July mainly on account of a decline in the cash balances of the Central Government but tightened significantly thereafter reflecting the two stage hike in CRR announced in the previous month. The average daily net liquidity injection during July 2008 was at Rs.27,961 crore. Auctions under the MSS were resumed in July 2008 and the outstanding balance under the MSS was placed at Rs.1,71,327 crore as on July 25, 2008. In response to suggestions from the market participants for fine-tuning the management of bank reserves on the last day of the maintenance period, Reserve Bank introduced a second LAF (SLAF) on reporting Fridays effective from August 1, 2008. Liquidity conditions remained tight during August 2008 so far. The average daily net injection under LAF was Rs. 22,928 crore during August 1-14, 2008.

Table 3.7 : Reverse Repo/Repo Bids under LAF

Year/ Month	Reverse Repo					Repo				
	No. of days bids were received	No. of days all bids were rejected	No. of days of full acceptance of bids	No. of days with less than full acceptance of bids	No. of days of partial acceptance of bids	No. of days bids were received	No. of days all bids were rejected	No. of days of full acceptance of bids	No. of days with less than full acceptance of bids	No. of days of partial acceptance of bids
1	2	3	4	5	6	7	8	9	10	11
2004-05	**242**	**0**	**242**	**0**	**0**	**23**	**0**	**23**	**0**	**0**
2005-06	**244**	**0**	**244**	**0**	**0**	**78**	**0**	**76@**	**2**	**0**
2006-07	**244**	**0**	**234**	**0**	**10**	**64**	**0**	**63@**	**1**	**0**
2007-08	**225**	**0**	**165**	**0**	**60**	**86**	**0**	**86**	**0**	**0**
April	19	0	11	0	8	15	0	15	0	0
May	21	0	12	0	9	14	0	14	0	0
June	21	0	2	0	19	2	0	2	0	0
July	21	0	0	0	21	0	0	0	0	0
August	21	0	18	0	3	0	0	0	0	0
September	19	0	19	0	0	2	0	2	0	0
October	22	0	22	0	0	0	0	0	0	0
November	11	0	11	0	0	12	0	12	0	0
December	13	0	13	0	0	13	0	13	0	0
January	23	0	23	0	0	7	0	7	0	0
February	20	0	20	0	0	11	0	11	0	0
March	14	0	14	0	0	10	0	10	0	0
2008-09	**48**	**0**	**48**	**0**	**0**	**45**	**0**	**45**	**0**	**0**
April	18	0	18	0	0	1	0	1	0	0
May	19	0	19	0	0	7	0	7	0	0
June	6	0	6	0	0	16	0	16	0	0
July	5	0	5	0	0	21	0	21	0	0

@ : Number of days of full acceptance of bid was less than the number of days bids were received on account of non-acceptance of one bid each on technical grounds on January 24, 2006, March 23, 2006 and April 4, 2006.

Note: 1. With effect from October 29, 2004, the nomenclature of repo and reverse repo was changed in keeping with international usage. Now, reverse repo indicates absorption of liquidity and repo signifies injection of liquidity. Prior to October 29, 2004, repo indicated absorption of liquidity while reverse repo meant injection.

2. With effect from November 28, 2005, the data are inclusive of the Second LAF. The Second LAF was discontinued from August 6, 2007. Second LAF was re-introduced on Reporting Fridays with effect from August 1, 2008.

3. Between March 5 and August 5, 2007, daily reverse repo absorptions were restricted to a maximum of Rs. 3,000 crore comprising Rs.2,000 crore in the First LAF and Rs. 1,000 crore in the Second LAF.

III.51 Keeping in view the systemic implications of the liquidity and other related issues faced by Public Sector Oil Companies arising from the unprecedented escalation in international crude oil prices, the Reserve Bank announced Special Market Operation (SMO) on May 30, 2008, for the smooth functioning of financial markets and for overall financial stability. These operations commenced from June 5, 2008. Under SMO, the Reserve Bank conducted open market operation (outright or repo at its discretion) in the secondary market through designated banks in oil bonds held by public sector oil marketing companies in their own accounts subject to an overall ceiling of Rs.1,500 crore (revised upwards from Rs.1,000 crore on June 11, 2008) on any single day, and provided equivalent foreign exchange through designated banks at market exchange rate to the oil companies. The settlement of the foreign exchange and the Government securities legs of the operations were synchronised so that there was no liquidity impact. These operations were *adhoc,* temporary and exceptional in nature and were subject to review on a continuous basis. The total amount of oil bonds purchased by the Reserve Bank under SMO aggregated Rs.19,325 crore. The SMO was an exceptional measure taken in the interest of financial stability. It was terminated effective August 8, 2008.

IV CREDIT DELIVERY

IV.1 During 2007-08, the Reserve Bank continued with its endeavour to improve credit delivery, particularly to the agriculture and small enterprises sectors, by creating a conducive environment for banks. The Reserve Bank also emphasised the need for promoting greater financial inclusion and financial literacy. In order to improve credit delivery and promote financial inclusion, a number of initiatives were taken during 2007-08. These included revision of guidelines on lending to the priority sectors with emphasis on enhanced flow of credit to those sectors of the economy which impact large segments of the population and are employment intensive; strengthening of the rural co-operatives; and restructuring of regional rural banks, which cater predominantly to the rural areas. The Reserve Bank also continued with its policy of encouraging multiple channels of lending such as self-help groups (SHGs), micro-finance institutions (MFIs), adoption of business facilitator (BF)/ business correspondent (BC) model; and emphasising the simplification of the procedures and processes for lending to the agriculture and micro, small and medium enterprises (MSME) sectors. In order to provide banking and financial services available to hitherto excluded sections of the population at affordable cost, the Reserve Bank encouraged the banking sector to adopt information and communication technology (ICT) solutions that would enable them to achieve greater outreach and reduce the transaction cost.

IV.2 In the above backdrop, this Chapter delineates the initiatives taken by the Reserve Bank for improving the credit flow to the needy sectors of the economy[1]; encouraging micro-finance; and promoting financial inclusion, financial literacy and credit counseling. Revised guidelines were issued by the Reserve Bank on lending to the priority sector, whereby targets are computed over a broader base (comprising net bank credit and investments in non-SLR bonds held in HTM category) from April 30, 2007. The underlying principle of these guidelines is to ensure adequate flow of bank credit to the priority sector. The Chapter also delineates the various initiatives taken by the Reserve Bank and the Government of India for facilitating credit to the agricultural sector. The various relief measures for the farmers, including the scheme of agricultural debt waiver and debt relief announced in the Union Budget 2008-09, are also discussed. Progress made in the flow of credit to the micro and small enterprises is set out along with the status of credit to sick micro and small enterprises. Micro finance activity and the role played by the banks under the self-help group-bank linkage programme are also discussed along with the initiatives taken to improve transparency in maintaining the accounts by the SHGs. The progress achieved in making available basic banking ‘no-frills’ accounts towards achieving 100 per cent financial inclusion is covered. Broad features of Financial Inclusion Fund (FIF) and Financial Inclusion Technology Fund (FITF), the constitution of which was announced in the Union Budget 2007-08 for meeting the cost of developmental and promotional interventions for promoting financial inclusion, and the cost of technology adoption, are also covered. Several other initiatives currently underway for furthering financial inclusion such as setting up of various financial literacy and credit counseling centres on a pilot basis, launching of a national financial literacy campaign, forging linkages with informal sources with suitable safeguards through appropriate legislation, evolving industry wide-standards for IT solutions to facilitate low cost remittance products, are also included in this Chapter.

PRIORITY SECTOR LENDING

IV.3 Based on the draft Technical Paper submitted by an Internal Working Group on Priority Sector Lending (Chairman: C.S. Murthy) in September 2005 and the feedback received thereon from the Governments, banks, financial institutions,

[1] For discussion on sectoral/industry-wise deployment of credit, see Chapter II.3.

non-banking financial companies, association of industries, media, public and the Indian Banks' Association, the guidelines on lending to priority sector were revised with effect from April 30, 2007. The guiding principle of the revised guidelines on lending to the priority sector has been to ensure adequate flow of bank credit to those sectors of the society/economy that impact large segments of the population and weaker sections, and to the sectors that are employment-intensive such as agriculture, and tiny and small enterprises. The priority sector lending targets were retained at 40 per cent and 32 per cent for the domestic and foreign banks, respectively. However, from April 2007 these are calculated as a percentage of adjusted net bank credit (ANBC) (net bank credit plus investments made by banks in non-SLR bonds held in HTM category) or credit equivalent amount of off-balance sheet exposures (OBE), whichever is higher, as on March 31 of the preceding accounting year, instead of as a percentage of net bank credit earlier. The outstanding FCNR (B) and NRNR deposits balances are no longer deducted for the purpose of computation of ANBC for priority sector lending.

IV.4 According to the extant guidelines on priority sector, domestic scheduled commercial banks (SCBs) are required to lend 10 per cent of ANBC or credit equivalent amount of OBE, whichever is higher, to weaker sections. It was, however, noted that most of the banks were not achieving this sub-target for lending to weaker sections. In order to ensure that the sub-target of lending to the weaker sections is achieved, the Reserve Bank advised banks that the shortfall in lending to weaker sections will also be taken into account, for the purpose of allocating amounts for contribution to the Rural Infrastructure Development Fund (RIDF) maintained with NABARD or funds with other financial institutions, with effect from April 2009.

IV.5 Consequent upon the announcement made in the Reserve Bank's Annual Policy Statement for the year 2008-09, like SCBs, the RRBs have also been allowed to sell loan assets held by them under priority sector categories in excess of the prescribed priority sector lending target of 60 per cent.

IV.6 Public sector banks achieved the overall target for priority sector lending as on the last reporting Friday of March 2008. Although private sector banks and foreign banks as groups, achieved the overall target for priority sector lending as on the last reporting Friday of March 2008, two out of 23 private sector banks and four out of 28 foreign banks did not achieve the overall priority sector lending target of 40 per cent and 32 per cent, respectively (Table 4.1).

IV.7 Lending to agriculture by banks, both in the public and private sectors, continued to fall short of the stipulated target of 18 per cent. However, the outstanding advances to agriculture, as percentage of net bank credit, in respect of both public and private sector banks increased steadily in the last few years. The targets have been linked to ANBC or

Table 4.1: Priority Sector Advances

(Amount in Rupees crore)

As on the Last Reporting Friday of March	Public Sector Banks	Private Sector Banks	Foreign Banks
1	2	3	4
2002	1,71,484 (43.5)	24,184 (38.4)	9,936 (34.6)
2003	1,99,786 (41.2)	36,648 (44.1)	14,555 (33.1)
2004	2,44,456 (43.6)	48,920 (47.3)	17,960 (34.1)
2005	3,07,046 (42.8)	69,886 (43.6)	23,843 (35.3)
2006	4,09,748 (40.3)	1,06,586 (42.8)	30,439 (34.4)
2007	5,21,376 (39.7)	1,44,549 (42.9)	37,831 (33.4)
2008*	6,08,963 (44.6)	1,63,223 (47.5)	50,301 (39.5)

* : Data are provisional.

Note : 1. Figures in parentheses are percentages to the net bank credit, except for March 2008 which are percentages to ANBC or credit equivalent of OBE, whichever is higher, in the respective groups.

2. The target for aggregate advances to the priority sector are 40 per cent of the net bank credit for domestic banks and 32 per cent of net bank credit for the foreign banks. The targets have been linked to ANBC or credit equivalent of OBE, whichever is higher, with effect from April 30, 2007.

credit equivalent of OBE, whichever is higher, with effect from April 30, 2007(Table 4.2).

IV.8 Even though the share of agriculture in GDP has declined over the years, the number of people dependent on agriculture for their food and livelihood has remained unchanged. Therefore, a number of measures were taken by the Reserve Bank and the Government of India for facilitating increased credit flows to the agriculture sector. Under the Special Agricultural Credit Plan (SACP), the banks are required to fix self-set targets for achievement during the year (April-March). The targets are generally fixed by the banks about 20 to 25 per cent higher over the disbursements made in the previous year. With the introduction of SACP, the flow of credit to agricultural sector increased significantly from Rs.8,255 crore in 1994-95 to Rs.1,22,443 crore in 2006-07 which were higher than the projection of Rs.1,18,160 crore. As against the target of Rs.1,52,133 crore for the financial year 2007-08, disbursements to agriculture by public sector banks under the plan were Rs.1,11,543 crore (provisional). As recommended by the Advisory Committee on Flow of Credit to Agriculture and Related Activities from the Banking System (Chairman: Shri V.S. Vyas), the Mid-Term Review of Annual Policy for 2004-05 made the SACP mechanism applicable to private sector banks from the year 2005-06. Disbursements to agriculture by private sector banks under SACP during 2006-07 aggregated to Rs.44,093 crore against the target of Rs.40,656 crore. As against the target of Rs.41,427 crore for the financial year 2007-08, disbursements to agriculture by private sector banks aggregated Rs.45,905 crore (provisional) (Table 4.3).

IV.9 With a view to doubling credit flow to agriculture within a period of three years and to provide some relief to farmers affected by natural calamities within the limits of financial prudence, the Union Finance Minister announced several measures on June 18, 2004. Accordingly, the Reserve Bank and NABARD issued necessary operational guidelines to banks. From the very beginning, the actual disbursements exceeded the targets for each of the last four years (Table 4.4). As against the target of Rs.2,25,000 crore for 2007-08, all banks disbursed Rs.2,25,348 crore (provisional). During 2007-08, 7.29 million new farmers were financed by commercial banks and RRBs as against the target of 5 million farmers fixed by the Union Finance Minister for the year. The Finance Minister, in his Budget Speech for the year 2008-09, urged the banks to increase the level of credit to Rs.2,80,000 crore during the year 2008-09.

Table 4.2: Outstanding Agricultural Advances

(Amount in Rupees crore)

As on the Last Reporting Friday of March	Public Sector Banks		Private Sector Banks	
	Amount Outstanding	Per cent of Net Bank Credit	Amount Outstanding	Per cent of Net Bank Credit
1	2	3	4	5
2002	58,142	14.8	6,581	8.5
2003	70,501	14.5	9,924	10.9
2004	84,435	15.1	14,730	12.7
2005	1,09,917	15.3	21,636	12.3
2006	1,55,220	15.3	36,712	13.6
2007	2,02,614	15.4	52,034	12.7
2008*	2,48,685	17.4	57,702	15.4

* : Data are provisional.

Note : The target for advances to agriculture is 18 per cent of net bank credit for the domestic banks. The targets have been linked to ANBC or credit equivalent of OBE, whichever is higher, with effect from April 30, 2007.

Table 4.3: Disbursement under Special Agricultural Credit Plans

(Amount in Rupees crore)

Year	Target	Disburse-ments	Achiev-ement of Target (per cent)	Growth (y-o-y) in Disburse-ments (per cent)
1	2	3	4	5
Public Sector Banks				
2004-2005	55,616	65,218	117.3	54.5
2005-2006	85,024	94,278	110.9	44.6
2006-2007	1,18,160	1,22,443	103.6	29.9
2007-2008*	1,52,133	1,11,543	73.3	
Private Sector Banks				
2005-2006	24,222	31,199	128.8	
2006-2007	40,656	44,093	108.5	41.3
2007-2008*	41,427	45,905	110.8	

* : Provisional.

Table 4.4: Targets and Actual Disbursement to Agriculture by Banks

(Amount in Rs. crore)

	(2004-05)		(2005-06)		(2006-07)		(2007-08)*	
Agency	Target	Disbursement	Target	Disbursement	Target	Disbursement	Target	Disbursement
1	2	3	4	5	6	7	8	9
Comm. Banks	57,000	81,481	87,200	1,25,477	1,19,000	16,64,486	1,50,000	1,56,850
Coop. Banks	39,000	31,231	38,600	39,786	41,000	42,480	52,000	43,684
RRBs	8,500	12,404	15,200	15,223	15,000	20,435	23,000	24,814
Other Agencies		193						
Total	1,05,000	1,25,309	1,41,000	1,80,486	1,75,000	2,29,401	2,25,000	2,25,348

RRBs : Regional Rural Banks. * : Provisional

Source : NABARD

Kisan Credit Cards (KCC)

IV.10 The Kisan Credit Card (KCC) Scheme was introduced in 1998-99 to enable farmers to purchase agricultural inputs and draw cash for their production needs in a hassle free and cost effective manner. During 2006-07, public sector banks issued 4.8 million KCCs for limits aggregating Rs.26, 215 crore. During 2007-08 public sector banks issued 4.6 million KCCs covering limits aggregating Rs.59,582 crore (provisional). The cumulative number of KCCs issued by public sector banks aggregated 31.22 million (provisional) up to March 31, 2008 involving an amount of Rs.1,54,294 crore.

Rural Infrastructure Development Fund (RIDF)

IV.11 The domestic scheduled commercial banks, both in the public and private sectors, which fail to achieve the priority sector and/or agriculture lending targets are required to deposit into RIDF such amounts as may be allocated to them by the Reserve Bank. The Fund has so far completed 13 years of operation. Pursuant to the announcement made by the Union Finance Minister in his Budget speech for the year 2007-08, RIDF – XIII was set up with NABARD with a corpus of Rs.12,000 crore along with a separate window with a corpus of Rs.4,000 crore for the rural roads component of the Bharat Nirman Programme, with contributions from domestic banks, which had not achieved their target in lending to the priority sector and/or agriculture as on the last reporting Friday of March 2007.

IV.12 The total allocation under RIDF (I to XIII), including separate windows under RIDF for rural roads component under Bharat Nirman, was of the order of Rs.80,000 crore. Cumulative sanctions to State Governments and National Rural Road Development Agency (NRRDA) under various tranches of RIDF (I to XIII) were at Rs.74,159 crore and Rs.8,000 crore, respectively, as on May 31, 2008. The cumulative disbursements to various State Governments under various tranches of RIDF (RIDF I to XIII) were at Rs.46,601 crore, as on the same date. In addition, a loan of Rs.4,500 crore has so far been disbursed to NRRDA for funding the rural roads component of Bharat Nirman. During 2007-08, various State Governments were sanctioned loans aggregating to Rs.12,795 crore. The disbursements under the various tranches of RIDF during the year 2007-08 amounted to Rs.8,035 crore.

IV.13 The Union Finance Minister announced in the Union Budget 2008-09 setting up of RIDF XIV, with a corpus of Rs.14,000 crore, and a separate window under RIDF XIV for the rural roads component under Bharat Nirman, with a corpus of Rs.4,000 crore with NABARD for the year 2008-09. The Union Finance Minister also announced that certain other funds will be setup with NABARD/SIDBI/ NHB during the year 2008-09 from contributions to be made by scheduled commercial banks which failed to achieve their priority sector lending targets. These funds were set up in June 2008 and the corpus allocations were revised in August 2008. The revised corpus allocations are:- Rs.10,000 crore for RIDF XIV and Rs.5,000 crore for short-term Co-operative Rural Credit (STCRC) (refinance) Fund with NABARD; Rs.1,600 crore for Micro, Small and Medium Enterprises (MSE) (refinance) Fund and Rs.1,000 crore for MSE (risk capital) Fund with SIDBI; and Rs.1,000 crore for Rural Housing Fund with NHB. The corpus allocation under the separate window of RIDF XIV for rural roads component of Bharat Nirman Programme during the year 2008-09 remains unchanged at Rs.4,000 crore.

IV.14 During 2008-09, twelve State Governments have been sanctioned loans aggregating Rs.2,572 crore under RIDF XIV, which include Rs.277 crore sanctioned to the distressed districts of two States.*viz.* Andhra Pradesh and Maharashtra, identified in the Prime Minister's Relief Package for mitigation of distress farmers. The disbursements under RIDF XIV during the year 2008-09 amounted to Rs.58 crore.

IV.15 The recovery of direct agricultural advances of public sector banks in relation to demand has increased in recent years (Table 4.5). The recovery as a per cent of demand has improved after 2003-04 and remained close to 80 per cent.

Relief Measures for Farmers

IV.16 During the year, several measures were initiated to mitigate the hardships of farmers. Pursuant to the announcement made by the Union Finance Minister in the Budget Speech for the year 2006-07, commercial banks were advised to grant relief of two percentage points in the interest rate on the principal amount up to Rs.1 lakh on each crop loan granted by banks during *Kharif* and *Rabi* of 2005-06, and credit the relief so granted to the borrower's account before March 31, 2006. Furthermore, consequent upon the announcement made by the Union Finance Minister in his Budget Speech for the year 2006-07, public sector banks and regional rural banks were advised that with effect from *Kharif* 2006-07, Government would provide interest rate subvention of 2 per cent per annum to them in respect of short-term production credit up to Rs.3 lakh provided to farmers. Government of India provided Rs.1,100 crore for reimbursing the claims submitted by banks in this regard.

IV.17 The Government also decided to provide additional subvention, as a one time measure, for the period April 1, 2007 to June 30, 2007 in respect of those farmers/borrowers in the Vidarbha region, who could not pay on the due date, *i.e.*, March 31, 2007 but repaid/would repay before June 30, 2007. The extended subvention up to June 30, 2007 was done in respect of repayment of *Kharif* loans. The Government announced in the Union Budget for the years 2007-08 and 2008-09 that the two per cent subvention scheme for short-term crop loans would also continue for the years 2007-08 and 2008-09.

IV.18 Avian Influenza (bird flu) broke out in some areas of the country. Keeping in view the loss of income that had occurred due to culling of birds as well as steep fall in the demand for poultry products and their prices, the Reserve Bank advised the banks to consider (i) converting principal and interest due on working capital loans as also instalments and interest on term loans which have fallen due for payment on/after December 31, 2007 but remained unpaid, into term loans and recovering such loans in instalments over a period up to three years with an initial moratorium of up to one year; (ii) rescheduling remaining portion of term loan with a moratorium period up to one year depending upon the cash flow generating capacity of the unit; (iii) reschedulement/conversion to be completed on or before April 30, 2008; (iv) treating the rescheduled/ converted loans as current dues. Banks were also advised that the borrower will be eligible for fresh need based finance and the relief measures may be

Table 4.5: Public Sector Banks - Recovery of Direct Agricultural Advances

(Amount in Rupees crore)

Year ended June	Demand	Recovery	Overdues	Percentage of Recovery to Demand
1	2	3	4	5
2004	33,544	25,002	8,542	74.5
2005	45,454	35,733	9,721	78.6
2006	46,567	37,298	9,269	80.1
2007@	73,802	58,840	14,958	79.7

@ : Provisional data.

extended to all accounts of poultry industry, which were classified as standard accounts as on December 31, 2007.

IV.19 The Union Budget, 2008-09 announced (i) a scheme of agricultural debt waiver and debt relief for farmers with the total value of overdue loans being waived estimated at Rs.50,000 crore; and (ii) a one-time settlement (OTS) relief on the overdue loans at Rs.10,000 crore for the implementation by all scheduled commercial banks, RRBs and co-operative credit institutions. The modalities of the scheme were finalised by the Government of India in consultation with the Reserve Bank and the NABARD, and the scheme was notified on May 23, 2008. The Union Finance Minister further announced on May 23, 2008 that the cost of the scheme is likely to be in the order of about Rs.71,680 crore. Accordingly, the Reserve Bank advised all scheduled commercial banks, including local area banks, to take necessary action towards implementation of the Scheme at the earliest. According to the guidelines issued, the implementation of the Scheme was required to be completed by June 30, 2008. NABARD issued similar guidelines to RRBs and co-operatives (Box IV.1). The mode of financing the scheme reveals that the Central Government would reimburse to the lending institutions on the basis of duly certified and audited claims through the respective nodal agencies (Reserve Bank and NABARD, as the case may be) in instalments.

IV.20 The Reserve Bank had constituted a Working Group (Chairman: Shri C. P. Swarnkar) to examine Procedures, and Processes for Obtaining Agricultural Loans. The Group submitted its report in April 2007. In order to obviate the need for obtaining 'no dues' Certificate (NDC) by the farmers, all scheduled commercial banks (including RRBs) were advised to dispense with the requirement of NDC for small loans up to Rs.50,000 granted to small and marginal farmers, share croppers and the like and, instead, obtain a self-declaration from the borrower. Further, in order to overcome the problem of producing identification/status documents by the landless labourers, share croppers and oral lessees, banks were advised to accept certificates provided by local administration/*panchayati raj* institutions regarding the cultivation of crops in case of loans to these categories of borrowers.

IV.21 The Committee on Agricultural Indebtedness (Chairman: Dr. R. Radhakrishna) constituted by the Government of India submitted its report, which, *inter alia*, addressed issues relating to creation of credit absorption capacities, need for risk mitigation practices, introduction of cyclical credit system, dispute resolution mechanisms and setting up of a debt redemption fund. Consequent upon the announcement made in the Mid-Term Review of the Annual Policy Statement for the year 2007-08, an internal working group was constituted (Chairman: Shri V. S. Das) to examine the recommendations of the Radhakrishna committee that were relevant to the banking system in general and the Reserve Bank in particular. The internal group submitted its report in April 2008. Based on the recommendations of this Group, it was announced in the Annual Policy Statement for the year 2008-09 that each domestic commercial bank, including RRBs, would be asked to select one district for introduction, on a pilot basis, of a simplified cyclical credit product for farmers to enable them to continuously utilise a core component of 20 per cent of the credit limit. This arrangement should ensure minimum year-round liquidity as long as the interest is serviced. It was also announced to introduce a simplified procedure for crop loans to landless labourers, share croppers, tenant farmers and oral lessees whereby banks could accept an affidavit giving details of land tilled/crops grown by such persons for loans up to Rs.50,000 without any need for independent certification. Banks could also encourage the Joint Liability Group (JLG)/ SHG mode of lending for such persons. The modalities for implementation of the announcements are being finalised.

Flow of Credit to Micro and Small Enterprises

IV.22 Micro and small enterprises constitute an important and crucial segment of the industrial sector. The small enterprises have been accorded high priority in industrial policy on account of the vital role they play by value addition, employment generation,

Box IV.1

AGRICULTURAL DEBT WAIVER AND DEBT RELIEF SCHEME (ADWRS), 2008

The Finance Minister, in his Budget Speech for 2008-2009, announced a Debt Waiver and Debt Relief Scheme for farmers. The Scheme covers direct agricultural loans extended to 'marginal and small farmers' and 'other farmers' by scheduled commercial banks, regional rural banks, cooperative credit institutions (including urban cooperative banks) and local area banks.

Under the scheme, *'direct agricultural loans'* include short term production loans and investment loans provided directly to farmers for agricultural purposes, including such loans provided directly to groups of individual farmers (for example, self-help groups and joint liability groups), provided banks maintain disaggregated data of the loan extended to each farmer belonging to that group or such data are maintained at the level of the SHG (having reflected in its books of accounts to the satisfaction of the lending institutions). *'Short term production loan'* was defined as a loan given for raising of crops which is to be repaid within 18 months. It includes working capital loan, not exceeding Rs. 1 lakh, for traditional and non-traditional plantations and horticulture. *'Investment loan'* includes credit for direct agricultural activities extended for meeting outlays relating to the replacement and maintenance of wasting assets and for capital investment designed to increase the output from the land; and credit for allied activities extended for acquiring assets in respect of activities allied to agriculture. Under the scheme *'co-operative credit institution'* is defined as co-operative society that provides short-term crop loans to farmers and is eligible for interest subvention from the Central Government; carries on banking activities regulated or supervised by the Reserve Bank or NABARD; or is part of the short-term co-operative credit structure or long-term co-operative credit structure in a State or Union Territory. The farmer who cultivates (as owner or tenant or share cropper) agricultural land up to 1 hectare (2.5 acres) was mentioned as *'marginal farmer'*, whereas a farmer cultivating (as owner or tenant or share cropper) agricultural land of more than 1 hectare and up to 2 hectares (5 acres) was categorised as *'small farmer'*. Similarly, a farmer cultivating (as owner or tenant or share cropper) agricultural land of more than 2 hectares (more than 5 acres) was treated as *'other farmer'*.

In the debt waiver scheme, a farmer, who had obtained investment credit for allied activities where the principal loan amount did not exceed Rs. 50,000, was classified as 'small and marginal farmer' and where the principal amount exceeded Rs. 50,000, was to be classified as 'other farmer', irrespective in both cases of the size of the land holding, if any. In the case of a short-term production loan, the amount of such loan (together with applicable interest) and in the case of an investment loan, the instalments of such loan that are overdue (together with applicable interest on such instalments), was eligible for debt waiver or debt relief, as the case may be, if the loan was (a) disbursed up to March 31, 2007 and overdue as on December 31, 2007 and remained unpaid until February 29, 2008; (b) restructured and rescheduled by banks in 2004 and in 2006 through the special packages announced by the Central Government, whether overdue or not; and (c) restructured and rescheduled in the normal course up to March 31, 2007 as per applicable Reserve Bank's guidelines on account of natural calamities, whether overdue or not.

The debt waiver scheme was announced to waive the entire 'eligible amount' in the case of a small or marginal farmer. In the case of 'other farmers', the scheme announced a one-time settlement (OTS) scheme under which the farmer will be given a rebate of 25 per cent of the 'eligible amount', subject to the condition that the farmer pays the balance of 75 per cent of the 'eligible amount'. In the case of 237 revenue districts covering Drought Prone Area Programme (DPAP), District Development Programme (DDP) areas and the Prime Minister's Special Relief Package districts (listed in Annex-I of the Scheme), for 'other farmers' the scheme made provision to give OTS rebate of 25 per cent of the 'eligible amount' or Rs. 20,000, whichever is higher, subject to the condition that the farmer pays the balance of the 'eligible amount'.

A farmer classified as 'small farmer' or 'marginal farmer' in the scheme was also made eligible for fresh agricultural loans upon the eligible amount being waived. In the case of a short-term production loan, the 'other farmers' were made eligible for fresh short-term production loan upon paying one-third of his share, while in the case of an investment loan (for direct agricultural activities or allied activities), the 'other farmer' will be eligible for fresh investment loan upon paying his share in full.

The scheme did not cover any advances made against pledge or hypothecation of agricultural produce other than standing crop. It also does not cover agricultural finance to corporates, partnership firms, societies other than cooperative credit institutions as defined in the Scheme, and any other similar institution. Moreover, the loans disbursed by a lending institution prior to March 31, 1997 (except those which are restructured and rescheduled under special packages of 2004 and 2006, and RBI guidelines on natural calamities) was not covered under this scheme.

For implementation of the scheme, the Reserve Bank is the nodal agency in respect of scheduled commercial banks, urban co-operative banks and local area banks. NABARD is the nodal agency in respect of regional rural banks and rural co-operative credit institutions.

Every lending institution is responsible for the correctness and integrity of the lists of farmers eligible under this scheme and the particulars of the debt waiver or debt relief in respect of each farmer. Every lending institution is required to appoint one or more grievance redressal officers for each State (having regard to the number of branches in that State). The grievance redressal officer shall have the authority to receive representations from aggrieved farmers and pass appropriate orders thereon, which shall be final. If any doubt arises on the interpretation of any provision under the scheme, Government of India (GOI) shall resolve the doubt and the decision of the GOI shall be final.

equitable distribution of national income, regional dispersal of industries, mobilisation of capital, improvement in entrepreneurial skills and contribution to export earnings. Bank credit to small scale industrial (SSI) sector (now micro and small enterprises) constitutes a major segment of credit to the non-farm sector. The total outstanding credit provided by public sector banks to micro and small enterprises sector as on the last reporting Friday of March 2008 was Rs.1,48,651 crore, constituting 10.9 per cent of adjusted net bank credit (ANBC) and 24.4 per cent of their total priority sector advances (Table 4.6). The total credit provided by private sector banks to small enterprises sector as on the last reporting Friday of March 2008 was Rs.46,069 crore, constituting 13.4 per cent of ANBC and 28.2 per cent of their total priority sector advances. Public sector banks were advised to operationalise at least one specialised SME branch in every district and centre having cluster of SME units. At the end of March 2007, 636 specialised SME bank branches were operationalised by the banks. The share of loans to MSE to the total bank credit for the public sector bank has declined since 2002. However, the latest trend up to March 2008 has indicated a turnaround.

IV.23 Based on the recommendations of the Working Group on rehabilitation of sick SSI units (Chairman: Shri. S.S. Kohli), the Reserve Bank issued detailed revised guidelines to banks in January 2002 for detection of sickness at an early stage and taking remedial measures for rehabilitation of sick small enterprises identified as potentially viable. As per these guidelines, the rehabilitation package should be fully implemented within six months from the date the unit is declared as viable/potentially viable. Although the total number of sick small enterprises declined, the amount of credit outstanding against them in the books of scheduled commercial banks increased at end-March 2007 in comparison with end-March 2006 (Table 4.7)

Table: 4.6: Bank Credit to Micro and Small Enterprises by Public Sector Banks

(Amount in Rupees crore)

As on the Last Reporting Friday of March	Outstanding advances to SSI	Percentage to NBC
1	2	3
2002	54,268	13.8
2003	52,646	10.8
2004	58,311	10.3
2005	68,000	9.5
2006	82,434	8.1
2007	1,02,550	7.8
2008 (provisional) @	1,48,651	10.9*

* : As percentage of ANBC or credit equivalent of off balance sheet exposure, whichever is higher.

@ : With effect from April 30, 2007, SSIs have been redefined as MSEs.

IV.24 While reviewing the position of rehabilitation of sick SSI/SME units in the 8th meeting of the Standing Advisory Committee on flow of institutional credit to SME sector held on January 16, 2007, it was observed that there was considerable delay in rehabilitation/nursing of the potentially viable units. It was clarified that in many of these cases, the delay in rehabilitation/nursing of the units was due to the inability of the promoters to bring in additional contribution. As indicated in the Mid-Term Review (2007-08), a Working Group, was constituted (Chairman: Dr. K. C. Chakraborty) to look into the issues and suggest remedial measures so that potentially viable sick units could be rehabilitated at the earliest. The Group submitted its report in April 2008 which was placed on the Reserve Bank's website and the comments received thereon are under examination.

IV.25 The Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 came into effect from October 2, 2006. The Act classified enterprises broadly into (i) manufacture/ production of goods and (ii) providing and rendering of services. The enterprises are further classified into micro enterprises, small enterprises and medium enterprises, depending upon the level of investment in plant and machinery and equipment, respectively. The definition of micro and small enterprises as defined in the Act was incorporated into the revised priority sector guidelines issued on April 30, 2007. Consequent upon the announcement made in the Annual Policy Statement for the year 2007-08, all SLBC convener banks were advised on May 8, 2007

Table 4.7: Credit to Sick, Micro and Small Enterprises

(Amount in Rs. crore)

End-March	Total Sick Units		Potentially Viable		Non-Viable		Viability yet to be Decided		Units put Under Nursing	
	No. of Units	Amount Outstanding	No. of Units	Amount Outstanding	No. of Units	Amount Outstanding	No. of Units	Amount Outstanding	No. of Units	Amount Outstanding
1	2	3	4	5	6	7	8	9	10	11
2004	143,366	5,773	2,406	551	138,081	4,937	2,938	266	729	281
2005	138,041	5,380	3,922	435	132,153	4,884	1,966	61	2,080	260
2006	126,824	4,981	4,594	498	117,148	4,141	5,082	342	915	234
2007	114,132	5,267	4,287	428	109,011	4,757	834	82	588	269

to review their institutional arrangements for delivering credit to the MSE sector, especially in 388 clusters identified by United Nations Industrial Development Organisation (UNIDO) spread over 21 states in various parts of the country.

IV.26 The Banking Codes and Standards Board of India (BCSBI) constituted a Working Group comprising members drawn from select banks, Indian Banks' Association and the Reserve Bank to formulate a banking code for MSE customers. After discussions with industry associations, banks, SIDBI and Government agencies, the Working Group finalised the code on March 11, 2008. The 'Code of Banks' which represents commitments to customers of Micro and Small Enterprises (MSE) was released by the Union Finance Minister on May 31, 2008. This is a voluntary code, reflecting the banks' positive commitment to its MSE customers to provide easy, speedy and transparent access to banking services in their day-to-day operations and in times of financial difficulty. The code was introduced with multiple objectives, including to provide a positive thrust to the MSE sector through easy access to efficient banking services, encourage fair banking practices, enhance transparency, improve business understanding through effective communication, encourage market forces to achieve higher operating standards, promote a fair and cordial relationship and foster confidence in the banking system.

Export Credit Subvention

IV.27 The Government announced a package of measures on July 12, 2007 to provide relief for a temporary period in terms of interest rate subvention of 2 percentage points per annum on rupee export credit availed of by exporters in nine categories of exports, *viz.*, textiles (including handlooms), readymade garments, leather products, handicrafts, engineering products, processed agricultural products, marine products, sports goods and toys and to all exporters from SME sectors defined as micro enterprises, small enterprises and medium enterprises. Accordingly, the Reserve Bank advised banks to charge interest rate not exceeding BPLR minus 4.5 percentage points on pre-shipment credit up to 180 days and post-shipment credit up to 90 days on the outstanding amount for the period April 1, 2007 to December 31, 2007 to all SME sectors and the nine sectors as defined above.

IV.28 On October 6, 2007 the Government of India partially modified the interest rate subvention to exporters to extend the scheme by three months up to March 31, 2008 and increased the coverage of the scheme to include jute and carpets, processed cashew, coffee, tea, solvent extracted de-oiled cake, plastics and linoleum.

IV.29 On November 30, 2007 the export credit subvention was further extended by an additional 2 percentage points (in addition to the 2 percentage points subvention offered earlier) in pre-shipment and post-shipment export credit for the following sectors, *viz.,* leather and leather manufacturers, marine products, all categories of textiles under the existing scheme, including readymade garments (RMG) and carpets but excluding man-made fibre and handicrafts. Banks, therefore, were required to charge interest rates not exceeding BPLR minus 6.5 percentage points on pre-shipment credit up to 180 days and post-shipment credit up to 90 days on the outstanding amount in respect of the above-mentioned sectors. However, the total subvention was subject to the condition that the interest rate, after subvention, would not fall below 7 per cent which is the rate applicable to the agriculture sector under priority sector lending. The above dispensation was valid from November 1, 2007 to March 31, 2008. The above interest subvention scheme on export credit was extended for one more year from April 1, 2008 till March 31, 2009. Subsequently, the Government of India has decided to bring the scheme of interest rate subvention on rupee export credit to a close with effect from September 30, 2008 which was communicated by the Reserve Bank on August 1, 2008, so that exporters get adequate time to make necessary adjustments.

IV.30 In view of the global and domestic developments during August-September 2007 and with a view to giving an opportunity to small and medium enterprises to manage the challenges in the global markets, the Reserve Bank, in consultation with Government of India, permitted all exporters from October 6, 2007 to earn interest on Exchange Earner's Foreign Currency (EEFC) accounts to the extent of outstanding balances of US $ 1 million per exporter in the form of term deposits up to one year maturing on or before October 31, 2008. The rate of interest in this scheme is determined by the banks themselves. The Reserve Bank in consultation with the Government of India, however, has decided subsequently to withdraw this facility from November 1, 2008. Accordingly, effective November 1, 2008 all EEFC accounts can only be permitted to be opened and maintained in the form of non-interest bearing current accounts.

Internal Working Group to study the Recommendations of the Report on Conditions of Work and Promotion of Livelihoods in the Unorganized Sector (Arjun K. Sengupta Committee)

IV.31 The National Commission for Enterprises in the Unorganised Sector (Chairman: Dr. Arjun K. Sengupta) submitted a comprehensive report on 'Conditions of Work and Promotion of Livelihood in the Unorganised Sector', to the Central Government. The report suggested a package of measures for addressing some critical issues relating to the farm and non-farm sectors. Consequent upon the announcement made in the Mid-Term Review of the Annual Policy Statement for the year 2007-08, an internal working group (Chairman: Shri. K.U.B. Rao) was constituted within the Reserve Bank to study the various recommendations of the report of the Sengupta Committee relevant to the financial system and to suggest an appropriate action plan for implementation of acceptable recommendations. The internal group's report has been placed in public domain.

Lead Bank Scheme

IV.32 As announced in the Mid-Term Review of the Annual Policy Statement for the year 2007-08, a High Level Committee (Chairperson: Smt. Usha Thorat) with members drawn from financial institutions, banks, chief secretaries of selected States etc, was constituted to review the Lead Bank Scheme and improve its effectiveness, with a focus on financial inclusion and recent developments in the banking sector. The Committee has conducted ten meetings (up to June 20, 2008) with select banks, senior officers of certain State Governments, representatives of MFIs/NGOs, academicians of reputed educational institutions and others. The committee forwarded a questionnaire covering various aspects of the Lead Bank Scheme to all State Governments and major banks. The Committee is expected to submit its report shortly.

Revival of Rural Co-operative Credit Structure: Status

IV.33 Based on the recommendations of the Task Force on Revival of Rural Co-operative Credit Institutions (Chairman: Prof. A.Vaidyanathan) and in consultation with the State Governments, the Government of India approved a package for revival of the short-term rural co-operative credit structure. So far, 25 States (Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Jammu and Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamilnadu,Tripura, Uttarakhand, Uttar Pradesh and West Bengal) have executed Memoranda of Understanding (MoUs) with the Government of India and the NABARD, as envisaged under the package. Eight States carried out necessary amendments to their Co-operative Societies Acts. An aggregate amount of Rs.3,348 crore has been released by the NABARD as the Government of India's share. Seven State Governments have released their shares to the tune of Rs.338 crore for recapitalisation assistance of primary agricultural credit societies (PACS). Implementation and monitoring of the revival package are being overseen by the National Implementing and Monitoring Committee (NIMC) set up by the Government of India. Furthermore, a study of the long-term co-operative credit structure was entrusted to the same Task Force by the Government of India, which submitted its report in August 2006. It was announced in the Union Budget 2008-09 that the Central Government and the State Governments have reached an agreement on the content of the package for revival of the long-term cooperative credit structure. The cost of the package was estimated at Rs.3,074 crore, of which the Central Government's contribution would be Rs.2,642 crore.

Special Task Force in North-East Region

IV.34 Consequent upon the discussions between the Governor, Reserve Bank and the Chief Ministers and other officials of North-Eastern States, in May 2008, a Special Task Force (STF) was constituted (Chairperson: Smt. Usha Thorat) to obtain a list of centres for opening new branches, currency chests and extension of foreign exchange and Government business facilities, from the State Governments in the North Eastern Region, perceived as necessary by public policy. It will also work out a mechanism of cost sharing among banks, State Governments and the Reserve Bank for extension of the aforesaid facilities at centres which were not found to be commercially viable by banks. The task force has since decided to initially take up one State and Meghalaya has been identified for implementation of its decisions.

Government Sponsored Schemes

IV.35 Under the *Swarna Jayanti Gram Swarozgar Yojana* (SGSY), a total number of 1,432,701 *swarozgaris* received bank credit during the year 2007-08, amounting to Rs.1,272.5 crore (and Government subsidy amounting to Rs.465.2 crore). Of the *Swarozgaris* assisted, 338,169 (23.60 per cent) were scheduled castes and scheduled tribes (SC/ST); 711,653 (49.67 per cent) were women and 11,433 (0.79 per cent) were physically handicapped.

IV.36 Disbursements under the *Swarna Jayanti Shahari Rozgar Yojana* (SJSRY) amounting to Rs.236.84 crore were made in 67,234 cases (out of 135,042 applications received) during 2007-08. Of this Rs.60.3 crore were disbursed to 18,106 SC/STs, Rs.62.5 crore to 16,801 women and Rs.3.6 crore to 780 disabled persons during the year 2007-08.

IV.37 Under the Scheme for Liberation and Rehabilitation of Scavengers (SLRS), in all 9,402 applications were received for financial assistance during 2007-08. A total amount of Rs.16.5 crore was sanctioned and Rs.14.3 crore was disbursed to 6,009 beneficiaries. Of this, Rs.12.4 crore were disbursed to 5,065 SC/ST beneficiaries (84.3 per cent of total disbursements) and Rs.1.2 crore to 632 OBCs beneficiaries (10.5 per cent of total disbursements) during the year. During 2007-08, Rs.4.5 crore were disbursed to 1800 women (30.0 per cent).

IV.38 Assistance under the Prime Minister's Rozgar Yojana (PMRY) scheme as on March 2008 amounted to Rs.1,746 crore for 234,165 beneficiaries. The Government of India decided to merge PMRY with Rural Employment Generation Programme (REGP) to form a new scheme *.viz.,* Prime Minister's Employment Generation Programme (PMEGP). Accordingly, all implementing banks were requested on March 5, 2008 to take necessary steps to achieve the various targets under the programme year 2007-08 and also programme year 2006-07 (if any) and forward their final subsidy requirement for the programme year 2007- 08, if any, latest by March 31, 2008. The Government has since announced the new scheme on August 15, 2008.

IV.39 In the 11th meeting of the Central Level Coordination Committee (CLCC) of SGSY held on February 8, 2008, the representatives of the commercial banks and State Governments agreed that the training institutes like Rural Development and Self-employed Training Institutes (RUDSETIs) need to be established for assisting the beneficiaries of SGSY in capacity building and skill upgradation to ensure sustainability of the benefits of the Scheme to the rural poor. Accordingly, all State Level Bankers Committee (SLBC)/Union Territory Level Bankers Committee (UTLBC) Convener banks were advised in April 2008 to set up at least one RUDSETI in each of the districts under their jurisdiction.

Self Employment Scheme for Rehabilitation of Manual Scavengers (SRMS)

IV.40 The Government of India has approved a new and improved scheme named "Self Employment Scheme for Rehabilitation of Manual Scavengers" (SRMS) in place of the Scheme for Liberation and Rehabilitation of Scavengers (SLRS). The new Scheme is aimed at rehabilitating the remaining scavengers and their dependents by March 2009. The approved scheme contains provisions for capital subsidy, concessional loans and capacity building for rehabilitation of manual scavengers in alternative occupations. Accordingly, public sector banks were advised on April 15, 2008 to implement the scheme.

MICRO FINANCE

IV.41 Although the branch network of the formal financial institutions expanded rapidly beginning the early 1970s, a large segment of the population remained outside the banking fold, especially for its credit requirements. This led to the search for alternative policies and mechanisms for reaching out to the poor to satisfy their felt needs. In this context, micro finance interventions were recognised all over the world as an effective tool that could raise incomes, contribute to individual and household security and change social relations for the better.

IV.42 Though there are different models for purveying micro-finance, the SHG-bank linkage programme has emerged as the major microfinance programme in the country. It is being implemented by commercial banks, RRBs and co-operative banks. As on March 31, 2007, 2.89 million SHGs were bank linked with outstanding bank loans of Rs.12,366 crore. While commercial banks accounted for 71 per cent of the outstanding loans, RRBs and co-operative banks accounted for 23 per cent and 6 per cent, respectively (Table 4.8). During 2006-07, banks financed 1.1 million SHGs, including repeat loan to existing SHGs to the tune of Rs.6,570 crore. As on March 31, 2007, the number of SHGs maintaining savings bank accounts with the banking sector was 4.2 million with outstanding savings of Rs.3,513 crore, thereby covering more than 58 million poor households under the SHG-Bank linkage programme. The commercial banks had the maximum share of the SHG's savings (53.9 per cent), followed by RRBs (32.9 per cent) and co-operative banks (13.2 per cent). Out of 290 reporting banks, 73 per cent of banks had more than 80 per cent recovery rate on loans given to SHGs as on March 31, 2007. The banks also financed non-governmental organisations/micro-finance institutions (NGOs/MFIs) for on-lending under micro-finance. As on March 31, 2007, the number of MFIs that had outstanding bank loans was 550 amounting to Rs.1,585 crore. During the year 2006-07, banks financed 334 MFIs amounting to Rs.1,152 crore.

IV.43 Micro finance activity has grown rapidly since the late 1990s due to the following reasons: (i) ability to reach out to the poor; (ii) promise of financial sustainability; (iii) the potential to build on traditional systems; (iv) provision of informal and flexible financial services to the poor for meeting their modest consumption and livelihood needs (v) the availability of better financial products as a result of experimentation and innovation; and (vi) provision of collateral-free micro credit to the poor. Microfinance helps the poor people meet their need

Table 4.8: Bank Loans Outstanding Against SHGs – As on March 31, 2007

Agency	No. of SHGs	Share in per cent	Amount (Rs. crore)	Share in per cent	Per SHG Outstanding Loan (Rupees)
1	2	3	4	5	6
Commercial Banks (Public Sector)	1,810,353	62.5	8,225	66.5	45,435
Commercial Banks (Private sector)	82,663	2.9	535	4.3	64,719
Sub Total (Commercial Banks)	**1,893,016**	**65.4**	**8,760**	**70.8**	**46,277**
Regional Rural Banks	729,255	25.2	2,802	22.7	38,419
Co-operative Banks	272,234	9.4	804	6.5	29,546
Total	**2,894,505**	**100.0**	**12,366**	**100.0**	**42,724**

SHG: Self Help Group
Source : NABARD

for small credit and other financial services. The informal and flexible services offered to low-income borrowers for meeting their needs have made the microfinance movement grow at rapid pace in the country. Recognising the potential of microfinance to positively influence the development of the poor, the Reserve Bank has been providing a facilitating environment for orderly development of the microfinance sector in the country.

IV.44 On an earlier occasion, the Reserve Bank advised commercial banks that micro credit should cover not only consumption and production loans for various farm and non-farm activities of the poor, but also include their other credit needs such as housing and shelter improvements. Consequent upon the announcement made by the Union Finance Minister in his Budget speech for the year 2008-09, these instructions were reiterated and banks were advised to meet the entire credit requirements of SHG members. A Microfinancial Sector (Development and Regulation) Bill, 2007, which envisages the regulation of the sector, is under consideration of the Parliament.

IV.45 Pursuant to the announcement made in the Annual Policy statement for the year 2007-08, the regional offices of the Reserve Bank undertook an evaluation of the SHG-bank linkage programme with a view to ascertaining the degree of transparency in maintaining the accounts by the SHGs and their adherence to well accepted best practices. The study results are being analysed.

FINANCIAL INCLUSION

IV.46 The Reserve Bank has emphasised access to banking services for all sections of the society and all regions from time to time, which is reflected in the branch licensing policy and the guidelines on priority sector lending. Although these initiatives resulted in a sharp increase in the number of bank branches, a large segment of the households was left outside the coverage of the formal banking sector. According to the National Sample Survey Organisation (NSSO) survey, only 15.1 per cent of rural households and 42.8 per cent of the urban households reported deposits with commercial or cooperative banks in 1991. Census data revealed that in 2001, the proportion of rural households availing banking (deposit) services was 30.1 per cent, while for urban households, it was 49.5 per cent. The extent of exclusion was higher for specific population groups and regions. The NSSO (59th Round, 2003) data revealed that 45.9 million farmer households in the country, *i.e.*, 51.4 per cent of the total of 89.3 million households do not access credit, either from institutional or non-institutional sources. Further, despite the vast network of bank branches, only 27 per cent of total farm households were indebted to formal sources (of which one-third also borrow from informal sources). Farm households not accessing credit from formal sources, as a proportion to total farm households, was especially high at 95.9 per cent, 81.3 per cent and 77.6 per cent in the North Eastern, Eastern and Central Regions, respectively. Thus, apart from the fact that exclusion in general is large, it also varied widely across regions, social groups and asset holdings. The poorer the group, the greater was the exclusion.

IV.47 Concerns on financial inclusion also emanated from the results of the All-India Debt and Investment Survey (AIDIS), 2002, which revealed that over a period of 40 years, the share of non-institutional sources of credit in sources of credit for cultivator households declined sharply from about 93 per cent in 1951 to about 30 per cent in 1991, with the share of money lenders declining from 69.7 per cent to 17.5 per cent. However, in 2002, the AIDIS revealed that the share of money lenders again increased to 27 per cent and that of non-institutional sources overall rose to 39 per cent. In other words, notwithstanding the outreach of banking, the formal credit system has not been able to adequately penetrate the informal financial markets. Further, it may be noted that the rate of agricultural growth during the last decade slowed down, particularly in respect of foodgrains production.

IV.48 The Reserve Bank, therefore, initiated policies focusing on financial inclusion from the year 2005. In simple terms, financial inclusion may be defined as delivery of banking services at an affordable cost to the vast sections of disadvantaged and low-income groups who tend to be excluded. The Reserve Bank's broad approach to financial inclusion aims at 'connecting people' with the banking system and not just credit dispensation; giving people access to payments system and portray financial inclusion as a viable business model and opportunity. In consonance with the above approach, the Reserve Bank has undertaken a number of measures for bringing the financially excluded population into the structured financial system.

No-Frills Accounts

IV.49 The Reserve Bank advised the scheduled commercial banks and RRBs in November 2005 to make available a basic banking 'no-frills' account with nil or low minimum balances as well as charges, that would make such accounts accessible to vast sections of the population. Significant progress has been made by banks in this regard and the number of no-frills accounts opened by banks and, particularly, by public sector banks increased sharply during the last few years (Table 4.9).

IV.50 As announced in the Annual Policy Statement for the year 2008-09, and in order to give further impetus to financial inclusion, banks were advised in May 2008 to classify overdrafts up to Rs.25,000 (per account) granted against 'no-frills' accounts in rural and semi-urban areas as indirect finance to the agriculture sector under priority sector with immediate effect.

IV.51 The Reserve Bank advised the convenor banks of the State Level/Union Territory Level Bankers' Committees (SLBC/UTLBC) in all States/ Union Territories on April 28, 2006 to identify at least one suitable district in each State/Union Territory for achieving 100 per cent financial inclusion by providing a "no-frills" account and issue of General Credit Card (GCC). They were also advised that on the basis of experience gained, the scope for providing 100 per cent financial inclusion may be extended to cover other areas/districts. The SLBCs/ UTLBCs were further advised to allocate villages to the various banks operating in the State for ensuring 100 per cent financial inclusion and also to monitor the progress under financial inclusion in the meetings of the SLBC/UTLBC from September 2006 onwards. So far, 340 districts have been identified for 100 per cent financial inclusion and the target has reportedly been achieved in 153 districts in 19 States and six Union Territories. Notably all districts of Haryana, Himachal Pradesh, Karnataka, Kerala, Uttarakhand, Puducherry, Daman & Diu, Dadra & Nagar Haveli, Goa and Lakshdweep have reported achieving 100 per cent financial inclusion.

Table 4.9: Number of No Frills Accounts

Bank Group	As on		
	31.03.2006	31.03.2007	31.03.2008*
1	2	3	4
Public Sector Banks	332,878	5,865,419	13,925,674
Private Sector Banks	156,388	860,997	1,879,073
Foreign Banks	231	5,919	33,115
Total	489,497	6,732,335	15,837,862

* : Provisional.
Note : The figures are cumulative.

IV.52 The Reserve Bank had undertaken an evaluation study of the progress made in achieving 100 per cent financial inclusion in 26 districts that had reported 100 per cent financial inclusion, through external agencies, to draw lessons for further action in this regard. The studies were carried out in the States of Gujarat, Karnataka, Orissa, Himachal Pradesh, West Bengal, Andhra Pradesh, Punjab and Rajasthan. The study results are being examined.

Use of Intermediaries as Agents

IV.53 In January 2006, the Reserve Bank permitted banks to utilise the services of non-governmental organisations (NGOs/SHGs), micro-finance institutions (other than regular NBFCs) and other civil society organisations as intermediaries in providing financial and banking services through the use of business facilitator (BF) and business correspondent (BC) models. The BC model allows banks to do 'cash-in/ cash-out' transactions at a location much closer to the rural habitation, thus addressing the last mile problem. Banks are also entering into agreements with India Post for using the vast network of post offices as business correspondents, thereby increasing their outreach and leveraging on the postman's intimate knowledge of the local population.

IV.54 ICT offers a solution for enhancing the level of financial inclusion by enabling the provision of affordable financial services at the village level. The Reserve Bank has been encouraging the use of ICT solutions by banks for enhancing their outreach with the help of their business correspondents. The BCs carry hand held devices, which are essentially smart card readers. Mobile phones have also been developed to serve as card readers. The information captured is transmitted to a central server where the accounts are maintained. These devices are used for making payments to rural customers and receiving cash from them. Account holders are issued smart cards, which have their photographs and finger impressions. Pilot studies have shown that the technology is practical and robust as also affordable. Scaling up is, at present, the challenge, and some States like Andhra Pradesh are keen that all Government payments should be routed through these accounts to ensure transparency and efficiency in such payments apart from providing a huge opportunity for ensuring financial inclusion. Recognising that IT-enabled services have the potential for improving financial inclusion, the Reserve Bank urged the banks in May 2007 to scale up their financial inclusion efforts by utilising appropriate technology. The Reserve Bank also advised banks to ensure that the solutions developed are highly secure, amenable to audit and follow widely accepted open standards to allow inter-operability among the different systems adopted by different banks.

IV.55 Pursuant to the announcement made by the Union Finance Minister in the Union Budget 2008-09, banks were permitted to engage retired bank employees, ex-servicemen and retired government employees as business correspondents (BCs) with effect from April 24, 2008, in addition to the entities already permitted, subject to appropriate due diligence. While appointing such individuals as BCs, the Reserve Bank advised banks to ensure that these individuals are permanent residents of the area in which they propose to operate as BCs and also institute additional safeguards as may be considered appropriate to minimise agency risk. With a view to ensuring adequate supervision over the operations and activities of the BCs, the Reserve Bank advised banks that every BC should be attached to and be under the oversight of a specific bank branch to be designated as the base branch. The distance between the place of business of a BC and the base branch, ordinarily, should not exceed 15 Kms in rural, semi-urban and urban areas. In metropolitan centres, the distance could be up to 5 kms. However, in case a need is felt to relax the distance criterion, the matter can be referred to the District Consultative Committee (DCC) of the district concerned for approval. Where such relaxations cover adjoining districts, the matter may be cleared by the State Level Bankers' Committee (SLBC), which shall also be the designated forum for metropolitan areas. Such requests may be considered by the DCC/SLBC on merits in respect of under-banked areas or where the population is scattered over large area and where the need to provide banking services is imperative but having a branch may not be viable, keeping in view the ability of the base branch of the bank making the request to exercise sufficient oversight on the BC. Where currently BCs are operating beyond the distance limits specified above, DCC/SLBC may be kept informed and steps taken to conform to the stipulated limits within six months time, unless specific approval would be accorded by the DCC/SLBC on the grounds indicated above. Banks were also advised that they should bring to the notice of the Reserve Bank any important issues to facilitate prompt corrective steps. Further, the implementation of the BF/BC model should be monitored closely by controlling authorities of banks, who should specifically look into the functioning of BFs/BCs during the course of their periodical visits to the branches. Banks have also been advised to put in place an institutionalised system for periodically reviewing the implementation of the BF/BC model at the Board level.

IV.56 The extant Know Your Customer (KYC) regime was supplemented by putting in place reporting of Cash Transaction Report (CTR)/ Suspicious Transaction Report (STR) by banks to Financial Intelligence Unit-India (FIU-IND) under the requirements of Prevention of Money Laundering Act, 2002; on February 15, 2006. Banks have also been advised on April 13, 2007 to incorporate complete originator information (names, address, account number) in wire transfer transactions. Based on feedback received on the extant KYC/AML/CFT regime, the relevant guidelines were revised on February 18, 2008. These guidelines include among others (i) in case of close relatives who find it difficult to furnish documents relating to place of residence while opening accounts, banks can obtain an identity document and a utility bill of the relative with whom the prospective customer is living, along with a declaration from the relative that the said person (prospective customer) wanting to open an account is a relative and is staying with him/her. Banks can also use any supplementary evidence such as a letter received through post for further verification of the address; (ii) banks have been advised to keep in mind the spirit of the instructions and avoid undue hardships to individuals who are otherwise classified as low risk customers; (iii) banks should review the risk categorization of customers at a periodicity of not less than once in six months.

IV.57 Reserve Bank advised banks (on June 4, 2008) to ensure that all the banking facilities such as cheque book facility including third party cheques, ATM facility, Net banking facility, locker facility, retail loans, credit cards *etc.* are invariably offerred to the visually challenged without any discrimination. Banks were also advised to instruct their branches to render all possible assistance to the visually challenged for availing the various banking facilities.

Improvement of Banking Services in Different States/ Union Territories

IV.58 The Reserve Bank had in the recent past constituted Working Groups to suggest measures for improving the outreach of banks and their services, and promoting financial inclusion in certain less developed States such as Bihar, Uttarakhand, Chattisgarh, and those in the North Eastern Region, and for supporting the development plans of these State Governments. These working groups have made specific recommendations for enhancing the outreach of banks and promoting financial inclusion, strengthening of financial institutions, improving currency and payments systems, and for revitalisation of the Regional Rural Banks and urban cooperative banks in the respective regions. The recommendations of these Groups are under implementation.

IV.59 Three separate working groups to undertake studies of the banking services in the States of Himachal Pradesh and Jharkhand and the Union Territory of Lakshadweep were constituted. The groups have since submitted their reports. The recommendations of the groups have been forwarded to the respective agencies for implementation.

General Purpose Credit Cards

IV.60 With a view to providing credit card like facilities in the rural areas, with limited point-of-sale (POS) and limited ATM facilities, the Reserve Bank advised all scheduled commercial banks, including RRBs, in December 2005 to introduce a General Credit Card (GCC) Scheme for issuing GCC to their constituents in rural and semi-urban areas, based on the assessment of income and cash flow of the household similar to that prevailing under a normal credit card. The Reserve Bank also advised banks to classify fifty per cent of the credit outstanding under loans for general purposes under General Credit Cards (GCC), as indirect finance to agriculture under priority sector. The Reserve Bank further advised banks in May 2008 to classify 100 per cent of the credit outstanding under GCCs as indirect finance to agriculture sector under the priority sector with immediate effect.

Differential Rate of Interest (DRI) Scheme

IV.61 The outstanding advances of public sector banks under the DRI Scheme as on the last reporting Friday of March 2008 amounted to Rs.669 crore under 191 thousand borrowal accounts, constituting 0.05 per cent of the outstanding adjusted net bank credit or credit equivalent of off-balance sheet exposures, whichever was higher, at the end of the previous year, as against the target of 1.0 per cent. Consequent upon the announcement made by the Union Finance Minister in the Union Budget 2007-08, the limit of loans under the DRI Scheme was raised from Rs.6,500 to Rs.15,000 and that of the housing loans under the Scheme from Rs.5,000 to Rs.20,000 per beneficiary. It was further announced in the Union Budget 2008-09 that the borrower's eligibility criteria as annual family income would be Rs.18,000 in rural areas and Rs.24,000 in urban areas.

Financial Inclusion Fund (FIF) and Financial Inclusion Technology Fund (FITF)

IV.62 The "Committee on Financial Inclusion" set up by the Government of India (Chairman: Dr. C. Rangarajan) in its Interim Report recommended the establishment of two Funds, namely the "Financial Inclusion Promotion and Development Fund" for meeting the cost of developmental and promotional interventions for ensuring financial inclusion, and the "Financial Inclusion Technology Fund (FITF)" to meet the cost of technology adoption. The Union Finance Minister, in his Budget Speech for 2007-08 announced the constitution of the Financial Inclusion Fund (FIF) and the FITF, with an overall corpus of Rs.500 crore each at NABARD (Box IV.2). The Government advised that for the year 2007-08 it was decided to initially contribute Rs.25 crore each in the two funds by the Central Government, RBI and NABARD in the ratio 40:40:20. The final report of the Committee has been submitted to the Government in January 2008.

FINANCIAL LITERACY AND CREDIT COUNSELLING

IV.63 Recognising that lack of awareness is a major factor for financial exclusion, the Reserve Bank has taken a number of measures towards imparting financial literacy and promotion of credit counselling services. The Reserve Bank has undertaken a project titled "Project Financial Literacy". The objective of the project is to disseminate information regarding the central bank and general banking concepts to various target groups, including, school and college going children, women, rural and urban poor, defence personnel and senior citizens. It would be disseminated to the target audience with the help of, among others, banks, local government machinery, schools/colleges using pamphlets, brochures, films, as also, the Reserve Bank's website. The Reserve Bank has also created a link on its web site 'For the Common Person' to give him the ease of access to information, in Hindi, English and 11 regional languages (Assamese, Bengali, Gujarati, Kannada, Malayalam, Marathi, Oriya, Punjabi, Tamil, Telugu and Urdu).

IV.64 A 'Financial Education' site link on the Reserve Bank's website was launched on November 14, 2007, mainly aimed at teaching basics of banking, finance and central banking to children in different age groups. The comic books format has been used to explain the complexities of banking, finance and central banking in a simple and interesting way for children. The site has films on security features of currency notes of different denominations and an educative film to persuade citizens not to staple notes. The site also has a games section. This

BOX IV.2

Financial Inclusion Fund and Financial Inclusion Technology Fund

Pursuant to the announcement made by the Union Finance Minister in his Budget Speech for the year 2007-08, a Financial Inclusion Fund (FIF) and Financial Inclusion Technology Fund (FITF), with an overall corpus of Rs. 500 crore each, has been set up with NABARD, with initial funding to be contributed by the Government of India, the Reserve Bank and National Bank for Agriculture and Rural Development in a ratio of 40:40:20. The funding would be contributed in a phased manner over a maximum period of five years, depending upon utilisation of funds. Depending on the outflow from the Fund, annual replenishments may be made by Government, the Reserve Bank and NABARD and from other stakeholders/ institutions as may be decided by the Government. The FIF/ FITF would be in operation until financial inclusion to the extent of 100 per cent of rural families in all districts is achieved, over a period of five years from the date of commencement of the Fund or for such enhanced period as may be decided by the Government.

FINANCIAL INCLUSION FUND (FIF)

The objective of the FIF is to support "developmental and promotional activities" with a view to securing greater financial inclusion, particularly among weaker sections, low income groups and in backward regions/ hitherto unbanked areas.

Eligible Activities/ Purposes

The FIF would be used for the following activities /purposes: (i) funding support for capacity building inputs to business facilitators and business correspondents; (ii) providing promotional support to institutions such as resource centres, farmers' service centres and rural development and self employment training institutes to enable them to provide improved technical and financial services (including counseling) aimed at increasing technology adoption, effective management of assets, nurturing entrepreneurial capacity and increasing financial education and literacy; (iii) providing funding support for promotion, nurturing and credit linking of self-help groups (SHGs); (iv) capacity building of personnel of NABARD, banks, post offices, State Government Departments, MFIs, NGO, Local Level Associations, members of SHGs/ joint liability groups, among others; (v) Defraying expenses of approved institutions for undertaking interventions for financial inclusion in Central, Eastern and North-Eastern Regions, J&K, Himachal Pradesh and Uttarakhand; (vi) funding support for setting up of Rural Credit Bureaus and credit rating of rural customers; (vii) supporting initiatives of local level associations/federations; (viii) supporting pilot projects for development of innovative products, processes and prototypes for financial inclusion; and (ix) any other developmental and promotional interventions recommended by the Advisory Body for the FIF.

Eligible Institutions

(i) financial Institutions, *viz.,* NABARD, commercial banks, regional rural banks and cooperative banks; (ii) NGOs, MFIs, SHGs, farmers' clubs, local level associations; (iii) training and research organisations, academic institutions, universities; (iv) service providers like insurance companies (providing micro insurance services), post offices, railways, and (v) any other organisation whose objectives are in conformity with the overall objectives of the FIF and are approved by the Advisory Board from time to time.

FINANCIAL INCLUSION TECHNOLOGY FUND (FITF)

The objectives of the FITF is to enhance investment in information communication technology (ICT) aimed at promoting financial inclusion, stimulating the transfer of research and technology in financial inclusion, increase the technological absorption capacity of financial service providers/users and encourage an environment of innovation and cooperation among stakeholders.

Eligible Activities/ Purposes

The FITF would be used for the following activities /purposes: (i) encouraging user friendly technology solutions; (ii) providing financial support to technological solutions aimed at providing affordable financial services to the disadvantaged sections of the society; (iii) creating a common technology infrastructure with comprehensive credit information; (iv) funding support to technologies facilitating the documentation for processing of loans; (v) providing viability gap/pilot project funding for unproven but potential technological interventions; (vi) conduct of studies, consultancies, research, evaluation studies relating to technological interventions for financial inclusion; (vii) promoting seminars, conferences and other mechanisms for discussions, dissemination relating to financial inclusion technological interventions; (viii) publication of financial inclusion technology literature and publicity material, *etc*.; (ix) capacity building of personnel of banks, post offices, state government departments, MFIs, NGOs, VAs and other stakeholders; and (x) Any other activity as may be approved by the Advisory Board.

Eligible Institutions

(a) financial institutions, *viz.,* NABARD, commercial banks, regional rural banks and cooperative banks; (b) NGOs, MFIs, SHGs, Farmers' Clubs, local level associations, *etc*.; (c) technology Service providers and other service providers like insurance companies (providing micro insurance services), Post Offices, Railways; and (d) any other institution/ organisation whose objectives are in conformity with the overall objectives of the FITF and are approved by the Advisory Board.

Advisory Board and Management of FIF/FITF: Advisory Boards constituted by the Government of India shall guide and render policy advice on various aspects relating to the FIF/FITF. The nature, quantum and terms of assistance to eligible institutions/organisations for various promotional and developmental interventions for promoting technological solutions for financial inclusion shall be decided by the Advisory Boards for the FIF/FITF. The Advisory Boards may determine their own procedures for day to day functioning in respect of FIF/FITF, including constitution of committees, sub-committees, task forces for examination, implementation and monitoring of various issues.

The programme sanction, implementation, monitoring and administration of the FIF/FITF shall vest with NABARD. The interest accrued/income earned from the FIF/FITF shall be ploughed back into the FIF/FITF as per the investment policy approved by the Advisory Board. The administering charges incurred in conduct of meetings of the Advisory Board and other expenses (except salaries/allowances of personnel involved in the sanction, implementation and monitoring of FIF/FITF) of NABARD in connection with discharge of its functions related to FIF/FITF shall be met out of the funds on such basis as may be decided by the Advisory Board from time to time.

section aims at educating children through entertainment. The Reserve Bank put up an exhibition on the evolution of banking in India since independence aboard the Azadi Express, a train run by the Government of India all over the country to celebrate 60 years of India's Independence. The Reserve Bank also organised essay competitions across the country to generate interest among the children in the area of banking and finance. A Young Scholar's Internship Award Scheme, designed at giving opportunity to young college students to work as interns with the Reserve Bank during their vacations, is under implementation.

IV.65 The Working Group (Chairman: Prof. S. S. Johl) constituted by the Reserve Bank to suggest measures for assisting distressed farmers recommended that financial and livelihood counselling were important for increasing the viability of credit. Furthermore, the Working Group constituted to examine procedures and processes for agricultural loans (Chairman: Shri C. P. Swarnkar) also recommended that banks should actively consider opening of counselling centres, either individually or with pooled resources, for credit and technical counselling with a view to giving special thrust for credit delivery in the relatively under-developed regions. In the light of the recommendations of these two Groups and as announced in the Annual Policy Statement for the year 2007-08, State Level Bankers' Committee convenor banks were advised to set up a financial literacy-cum-counselling centre in any one district on a pilot basis and extend it to the other districts in due course, based on the experience gained. Various banks are in the process of setting up credit counselling centres on a pilot basis.

IV.66 In the Mid-term Review of the Annual Policy for the year 2007-08, it was stated that a concept paper on Financial Literacy and Credit Counselling Centres would be prepared and placed on the Reserve Bank's website. In the Union Budget for 2008-09, the Finance Minister indicated that individuals such as retired bank officers, ex-servicemen, among others, will be allowed to be appointed as credit counsellors. In this backdrop, a concept paper on Financial Literacy and Credit Counselling Centres was prepared and placed on the Reserve Bank's website on April 3, 2008 for public feedback in order to take the initiative forward (Box IV.3). The feedback received on the concept paper is being examined for deciding the future course of action.

CREDIT INFORMATION SYSTEM

IV.67 The need of credit information system was felt a long time back in order to alert the banks and financial institutions (FIs) and put them on guard against borrowers who have defaulted in their dues to other lending institutions. It was also imperative to arrest accretion of fresh NPAs in the banking system through an efficient system of credit information on borrowers as a first step in credit risk management. In this context, the requirement of an adequate, comprehensive and reliable information system on the borrowers through an efficient database system has been keenly felt by the Reserve Bank/ Government as well as credit institutions. A Working Group (Chairman: Shri N.H. Siddiqui) with representatives from select public sector banks, IDBI, ICICI, Indian Banks' Association and Reserve Bank was constituted by the Reserve Bank in the year 1999, to explore the possibilities of setting up a Credit Information Bureau (CIB). The Working Group had recommended to set up a CIB under the Companies Act, 1956 with equity participation from commercial banks, FIs and NBFCs registered with the Reserve Bank. As per the recommendations made by the Working Group, Credit Information Bureau (India) Ltd., (CIBIL) was set up by State Bank of India in association with HDFC in January 2001.

IV.68 In order to get over the legal constraints of customer confidentiality *vis-à-vis* providing information on banks' customers to CIBIL, pending enactment on the Credit Information Companies (Regulation) Act, the Reserve Bank advised banks and financial institutions on October 1, 2002 to obtain consent from all existing borrowers and guarantors at the time of renewal of loans and consent of all the new borrowers/guarantors for sharing the credit information in respect of non-suit filed accounts with

Box IV.3
Financial Literacy and Credit Counselling Centres : Concept Paper

The concept paper on Financial Literacy and Credit Counselling Centres (FLCCs)has three parts. Part A deals with matters relating to definition and the need for financial literacy, while Part B deals with definition, the need and various issues relating to credit counselling. Part C outlines the suggested Scheme for FLCCs. In order to make credit counselling more effective and popular, a scheme for setting up of FLCCs has been suggested. The features of the Scheme suggested in the concept paper are as under:

Objectives 1. The broad objective of the FLCCs will be to provide free financial literacy/education and credit counselling. The specific objectives would be:(a) to educate the people in rural and urban areas with regard to various financial products and services available and to make the people aware of the advantages of being connected with the formal financial sector; (b) to provide face-to-face financial counselling services. (c) to formulate debt restructuring plans for borrowers in distress and recommend the same to formal financial institutions, including cooperatives, for consideration; (c) to take up any such activity that promotes financial literacy, and amelioration of debt-related distress of an individual. FLCCs should not, however, act as investment advice centres.

2. Debt counselling/credit counselling can be both preventive and curative. In case of preventive counselling, the centre would provide awareness regarding cost of credit and availability of backward and forward linkages, where warranted. In the case of curative counselling, the clients may approach the counselling centres and the centre could work out effective debt restructuring plans, if necessary, in consultation with the bank branch.

Coverage: Given the low literacy and dependence on informal sector in the rural areas, the centres in such areas could concentrate on financial literacy and counselling for farming communities and those engaged in allied activities while the centres in metro/urban areas could focus on individuals with overdues in credit cards, personal loans, housing loans, *etc*. among others.

Organisational / Administrative Set-up: To start with, banks may set up Trusts/Societies for running the FLCCs, singly or jointly with other banks. A bank may induct respected local citizens on the Board of such Trust/Society. However, serving bankers may not be included in the Board. FLCCs may be fully funded by the bank/banks to begin with. In order to have maximum coverage, FLCCs may need to be set up at various levels, *viz.,* block, district, town and city levels. SLBCs may discuss and coordinate with banks, both in public and private sectors, and arrive at a plan for setting up of FLCCs at different levels in a phased manner. However, to start with, lead banks may take the initiative for setting up FLCCs in the district headquarters. While the endeavour should be to keep costs as low as possible, in order to support banks in the setting up FLCCs in rural and urban areas where there is concentration of low income borrowers, cost-sharing through the Financial Inclusion Fund set up in NABARD could be considered. Once the system stabilises the counselling centres could cover part of the cost by levying nominal charges on the banks whose borrowers have commenced repayments due to the credit counselling and debt management plan drawn up by the counselling centre. Consulling and debt managment services may be provided free of charge to the cutomers so as to put no addtional burden on them.

Infrastructure: Proper infrastructure would have to be put in place by banks with adequate communication and networking facilities.

Mechanism for Credit Counselling and Debt Settlement: Banks may encourage their own customers in distress or customers of any bank to approach the FLCCs set up by it. Information about such FLCCs can be provided through the various fora available under the Lead Bank Scheme. The FLCCs may conduct open-house seminars either at the centre or at various places in the district for group counselling. For single-creditor-debts, the FLCCs could assist the borrower in negotiating with the bank concerned. In the case of multiple credits availed of by individuals, the FLCCs may negotiate with the bank/s having the largest exposure to restructure the debt and the recoveries to be shared on a pro-rata basis. The FLCCs would, however, not involve themselves in recovering and distributing money. This could be left to the bank concerned, or the bank having the largest exposure to act on behalf of all the banks.

Qualification and Training – Counsellors: Qualified / trained counsellors may be selected to man the centre on a full time basis. In his Budget speech for the year 2008-09, the Finance Minister indicated that individuals such as retired bank officers, ex-servicemen, etc. will be allowed to be appointed, among others, as credit counsellors. Credit counsellors should have sound knowledge of banking, law, finance, excellent communication and team building skills and would constantly upgrade and update with latest developments. Specialised courses on credit counselling and debt management may be conducted by Indian Institute of Banking and Finance (IIBF) and other professional bodies.

Types of interface: Counselling centres should be equipped to deal with requests received in person, by phone, e-mails, post, among others. They should have a toll free line, e-mail and fax facilities for easy contact. Mobile units could also be set up to service all the blocks in the districts.

Monitoring: The functioning of the FLCCs in each State may be monitored by a Committee headed by the Regional Director of the Reserve Bank and feedback provided to the banks on a regular basis.

Transparency / Disclosure of Information: To help the customers make informed decisions, all banks may display on their websites particulars of all fees, interest rates, yields and other features of standard products offered by them. The Reserve Bank may also display the consolidated data on its website for one-stop information on all banks.

Information sharing: It is imperative that credit information companies are set up and up-scaled quickly to provide both positive and negative information to the banks. The FLCCs, in turn, could obtain comprehensive credit information from the concerned bank or the bank having the largest exposure to the defaulting borrower.

Publicity: All forms of publicity, *viz.,* press conferences, workshops, publications, websites, road shows, mobile units, village fairs, among others should be actively explored. In order to proceed in a planned manner, a Standing Committee on Financial Literacy and Counselling may be set up by the Reserve Bank with members from the Reserve Bank, NABARD, IBA, BCSBI, CIBIL, NGOs working in the area and consumer organisations. The list of counselling centres should be placed on the websites of IBA, BCSBI, the Reserve Bank, and regularly updated.

the CIBIL. A Working Group (Chairman: Shri S.R. Iyer) set up in 2002 observed that while some modalities like 'consent clause' could be adopted as a base to begin with, for limited operations of a CIB, such modalities cannot be a substitute for a special legislation. The Working Group, therefore, recommended the enactment of an appropriate legislation by the Government of India expeditiously, in consultation with the Reserve Bank.

IV.69 With a view to strengthening the legal mechanism and facilitating the Bureau to collect, process and share credit information on the borrowers of credit institutions, the Credit Information Companies (Regulation) Act, 2005 was passed in May 2005 by Parliament and notified in the Gazette of India on June 23, 2005. The Government of India also notified the rules and regulations for the implementation of the Credit Information Companies (Regulation) Act, 2005 on December 14, 2006 making the Act operational.

IV.70 The Reserve Bank issued a press release on April 18, 2007 inviting applications from companies interested in continuing/commencing the business of credit information. An external High Level Advisory Committee (HLAC) (Chairman: Dr. R.H. Patil) has been set up by the Reserve Bank for screening the applications and recommending the names of the companies to which certificate of registration can be granted by the Reserve Bank. After the announcement of the FDI policy for credit information companies on March 12, 2008, the processing of applications has been taken up and 'in-principle approval' for setting up of credit information companies would be granted by the Reserve Bank shortly.

Outlook

IV.71 The Reserve Bank continued with its endeavour to improve credit delivery through its various measures. There has been significant improvement in the credit flow to the agriculture and the MSE sectors in recent years. Given the significance of these sectors for the economy, the need is to maintain the momentum. In the coming years, therefore, banks would be encouraged further to work towards achieving the stipulated targets for advances to the priority sector, especially agriculture and weaker sections. Efforts to promote financial inclusion have so far yielded good results with a large number of people having been brought within the banking fold. The momentum gained in respect of micro-finance through SHG-bank linkage programme, the largest of its kind in the world, would also be maintained. In future, greater emphasis would be placed on leveraging technology through a multi-agency approach, which would not only expand banking outreach but also reduce the transaction costs and make the process of financial inclusion sustainable. While improving credit delivery, the Reserve Bank would continue to emphasise the maintenance of credit quality.

V DEVELOPMENT AND REGULATION OF FINANCIAL MARKETS

V.1 During 2007-08, the Reserve Bank continued its efforts to develop the financial markets and provide operational flexibility to participants in the financial markets. Various segments of the financial market in India were generally insulated from the turbulence in the global financial market. The institutional framework for financial markets was further strengthened in terms of new instruments, better market infrastructure and new participants, all of which helped improve the price discovery process. The broad policy objectives in the money market continued to be ensuring stability, minimising default risk and achieving a balanced development of its various segments. In the Government securities market, the endeavour of the Reserve Bank was to broaden and deepen it in terms of participants, instruments and processes. Consequent upon the implementation of the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 and withdrawal of the Reserve Bank from the primary segment, development of the Government securities market has assumed vital importance. The Government Securities Act, 2006 has provided enhanced powers to the Reserve Bank in the matter of consolidation and management of Government securities.

V.2 In the foreign exchange market, the Reserve Bank took several initiatives to rationalise and simplify the procedures in the conduct of foreign exchange transactions with a view to facilitating prompt and efficient customer service. Keeping in view the recommendations of the Committee on Fuller Capital Account Convertibility (CFCAC), a number of measures were taken towards liberalisation of foreign exchange transactions. The Reserve Bank of India (Amendment) Act, 2006 provided enhanced operational flexibility and greater manoeuvrability to the Reserve Bank in monetary and financial sector management. The Act empowered the Reserve Bank to regulate interest rate, foreign currency derivatives and credit derivatives. Accordingly, the Reserve Bank took several measures to further develop derivatives in the country. The Technical Advisory Committee (TAC) on Money, Foreign Exchange and Government Securities Markets provided valuable guidance to the Reserve Bank on issues relating to the development and regulation of financial markets.

V.3 This Chapter sets out the various regulatory and development measures initiated by the Reserve Bank during 2007-08 towards further widening and deepening of various segments of the financial market under its jurisdiction, *viz.*, the money market, the Government securities market and the foreign exchange market. In the money market, State Development Loans (SDLs) were made eligible securities under the liquidity adjustment facility (LAF). The reporting platform for over-the-counter (OTC) rupee interest rate derivatives was made operational by the Clearing Corporation of India Limited (CCIL). Recognising the need for a robust interest rate futures market as an effective instrument for management of interest rate risk, a Working Group was set up to go into all the relevant issues and suggest measures to facilitate the development of the interest rate futures market in India. In the Government securities market, the membership of the Negotiated Dealing System - Order Matching (NDS-OM) platform was extended to certain qualified gilt account holders. Short sales and "when issued" transactions were permitted to be covered outside NDS-OM platform and a settlement mechanism was put in place to permit settlement of Government securities transactions through fund accounts maintained with commercial banks. In the foreign exchange market, the limit for remittances by resident individuals under the liberalised remittance scheme (LRS) was raised during 2007-08. The limits on remittances for overseas investments for corporates were further raised to facilitate overseas acquisitions. The guidelines for external commercial borrowings (ECBs) were liberalised by raising the prepayment limits, increasing the all-in-cost ceilings, enhancing the permissible end-uses (rupee capital expenditure) and allowing entities in the service sector to avail ECBs. In view of the experience gained by market participants in using various hedging instruments such as forward foreign exchange contracts, swaps and options, and improvements in liquidity and accounting systems relating to these instruments, an Internal Working Group on Currency Futures set up to study the international experience and suggest a suitable framework to operationalise the proposal submitted its Report during the year. A Reserve Bank-SEBI Standing Technical Committee constituted to advise on operational aspects with regard to trading of currency futures on exchanges submitted its Report during the year. Accordingly, guidelines were issued to allow resident individuals on trading of currency futures in recognised stock/new exchanges.

MONEY MARKET

V.4 A well developed money market is the key to the effective transmission of monetary policy impulses and integration among various segments of the financial market. With a view to improving the functioning of various segments of the money market and enhancing the smooth flow of funds across instruments and participants, a host of measures were undertaken by the Reserve Bank in recent years. These measures helped in improving transparency, facilitating price discovery and providing avenues for better liquidity and risk management.

Liquidity Adjustment Facility

V.5 With a view to widening the collateral base, the SDLs were made eligible securities under the LAF-Repos with effect from April 3, 2007. A margin of 10 per cent has been applied in respect of SDLs.

Reporting Platform for Interest Rate Swaps

V.6 The Reserve Bank issued comprehensive guidelines in respect of interest rate derivatives (IRDs) in April 2007, incorporating the broad regulatory framework for undertaking derivative transactions. In respect of OTC derivative transactions, it became necessary to have a mechanism for transparent capturing and dissemination of trade information as well as an efficient post-trade processing infrastructure to address some of the attendant risks. In this context, CCIL was advised to start a trade reporting platform for rupee interest rate swaps (IRS). The reporting platform became operational on August 30, 2007. Banks and primary dealers (PDs) have started reporting the IRS and forward rate agreements (FRAs) on the platform on a daily basis.

Interest Rate Futures

V.7 An anonymous order driven system for trading in interest rate futures was introduced on exchanges in 2003. Banks were allowed to hedge the risk in their underlying investment portfolio, while PDs were also permitted as market-makers. Since then, the Government securities market has undergone numerous developmental changes, including the introduction of short selling and when-issued markets. Recognising the need for a robust interest rate futures market as an effective instrument for management of interest rate risk and, in pursuance of the recommendation of the Reserve Bank's TAC on Money, Foreign Exchange and Government Securities Markets, a Working Group on Interest Rate Futures (Chairman: Shri V. K. Sharma) was set up in August 2007 to go into all the relevant issues and suggest measures to facilitate the development of interest rate futures market. The Report of the Working Group was placed on the Reserve Bank's website on March 3, 2008 for public feedback and comments. The Report was finalised by the TAC after taking into account the feedback and comments received from the public, experts, banks, market participants and the Government of India and released on August 8, 2008 (Box V.1).

GOVERNMENT SECURITIES MARKET

V.8 The Reserve Bank initiated significant measures during 2007-08 to further broaden and deepen the Government securities market in consultation with market participants. The salient features of the developmental measures undertaken during the year included: (i) permitting short sales and "when issued" transactions to be covered outside NDS-OM platform; (ii) extension of NDS-OM platform to certain qualified gilt account holders; and (iii) putting in place a settlement mechanism to permit settlement of Government securities transactions

Box V.1
Report on Interest Rate Futures

In the wake of deregulation of interest rates as part of financial sector reforms, a need was felt to introduce hedging instruments to manage interest rate risk. The Reserve Bank had introduced interest rate swaps (IRS) and forward rate agreements (FRA) in March 1999. Subsequently, the National Stock Exchange of India Ltd. (NSE) introduced, in 2003, exchange-traded interest rate futures (IRF) contracts. However, there was muted market response to the product, and liquidity completely dried up subsequently.

Against this backdrop, the Reserve Bank's Technical Advisory Committee on Money, Foreign Exchange and Government Securities Markets (TAC) set up a Working Group on Interest Rate Futures (Chairman: Shri V. K. Sharma). The objectives of the Working Group were: (i) to review the experience with IRF with particular reference to product design and make recommendations for activating IRF; (ii) to examine the need for aligning regulatory guidelines for IRF with those for IRS/FRA; and (iii) to examine the scope of participation of non-residents, including FIIs. The Report of the Working Group was placed on the Reserve Bank's website on March 3, 2008 for public feedback and comments. The Report was finalised by the TAC after taking into account the feedback and comments received from the public, experts, banks, market participants and the Government of India and released on August 8, 2008.

The major recommendations of the Report are:

- Banks may be allowed to take trading positions in IRF, subject to prudential regulations including capital requirements. Furthermore, the current practice of banks' participation in IRF for hedging risk in their underlying investment portfolio of Government securities classified under the available for sale (AFS) and held for trading (HFT) categories be extended to the interest rate risk inherent in their entire balance sheet – including both on, and off, balance sheet items – synchronously with the re-introduction of the IRF.
- Present dispensation to hold the entire SLR portfolio in held-to-maturity (HTM) category be reviewed synchronously.
- Using the powers conferred on it through the RBI Amendment Act, 2006, the Reserve Bank may mandate appropriate accounting standards for IRS, IRF and the underlying Government securities as envisaged in Accounting Standard 30 to ensure that these are symmetrical and aligned.
- The time limit on short selling be extended so that term/tenor/maturity of the short sale is co-terminus with that of the futures contract.
- A system of transparent and rule-based pecuniary penalty for subsidiary general ledger (SGL) bouncing be put in place in lieu of the regulatory penalty currently in force.
- The liquidity and efficiency of the repo market be improved.
- Considering Reserve Bank's role in, and responsibility for, ensuring efficiency and stability in the financial system, the broader policy on IRF, including those relating to product and participants, should be the responsibility of the Reserve Bank, while the micro-structure details, which evolve through interaction between exchanges and participants, be left to respective exchanges.
- FIIs be allowed to take long position in the IRF market, subject to the condition that the total gross exposure in the cash and the IRF market does not exceed the extant maximum permissible cash market exposure limit. FIIs may also be allowed to take short position in IRF only to hedge exposure in the cash market up to the maximum permitted limit. The same may also apply, *mutatis mutandis*, to non-resident Indians participation in IRF.
- IRF contract based on a notional, coupon bearing, 10-year Government of India (GoI) security be introduced in the bond futures segment at the beginning. Introduction of contracts based on 2-year, 5-year and 30-year GoI securities or those of any other maturities or coupons by the exchanges concerned may be considered based on market response and appetite.
- The contracts should be settled physically and the necessary micro-structure changes be carried out including improvements in the liquidity of the underlying market to support the contract.
- In order to mitigate the possibility of market manipulation, the universe of deliverable securities by exchanges may be restricted to securities with an indicative minimum total outstanding stock of Rs. 20,000 crore.
- As the contract would be physically settled, the trading hours of IRF be synchronised with those of the underlying GoI securities.
- The existing contract on 91-day Treasury Bills futures be retained with settlement price based on the yield discovered at the weekly Reserve Bank auction. A contract based on an index of traded/actual call rates may also be considered.
- Delivery-based, longer term/tenor/maturity short selling be allowed in the cash market only to banks and primary dealers.
- For ensuring symmetry between cash market in GoI securities (and other debt instruments) and IRF, as also imparting liquidity to the IRF market which is an important step towards deepening the debt market, IRF may be exempted from Securities Transaction Tax (STT).
- Options on interest rates may be introduced as a natural sequel.

through fund accounts maintained with commercial banks.

NDS-Order Matching Platform

V.9 Access to NDS-OM – the anonymous order-driven Government securities trading module on NDS – which was launched in August 2005, was initially allowed to commercial banks and PDs but later extended to other NDS members such as insurance companies, mutual funds and bigger provident funds. In addition to the direct access, indirect access through Constituent Subsidiary General Ledger (CSGL) route was permitted from May 2007 to select category of participants, *viz.*, deposit-taking NBFCs, provident funds, pension funds, mutual funds, insurance companies, cooperative banks, regional rural banks and trusts. With effect from November 2007, the CSGL facility was extended to the Systemically Important Non-Deposit taking NBFCs (NBFC-ND-SI). From May 2008, access to the CSGL facility on NDS-OM was further extended to other non-deposit taking NBFCs, corporates and FIIs. These entities are allowed to place orders on NDS-OM through direct NDS-OM members, *viz.*, banks and PDs, using the CSGL route. Such trades will settle through the CSGL account and current account of the NDS-OM member.

Short Sales and When Issued Transaction Outside NDS-OM

V.10 The short sale and “when issued” transactions, introduced in February 2006 and May 2006, respectively, were initially permitted to be undertaken only on NDS-OM. With a view to encouraging wider market participation, the cover transactions of short sales and “when issued” were permitted to be undertaken outside NDS-OM, *i.e.,* through the telephone market or through purchases in primary issuance with effect from January 1, 2008.

Multi Modal Settlements in Government Securities on NDS

V.11 Holding a current account and SGL account with the Reserve Bank was mandatory for settlement of Government security transactions by the NDS members. However, the medium term objective of the Reserve Bank is to allow current account facility only to banks and PDs, which necessitates phasing out of current accounts held by the non-bank and non-PD entities. In this regard, to facilitate the settlement of Government security transactions undertaken by the non-bank and non-PD NDS members, a system of ‘Multi Modal Settlements’ (MMS) in Government securities market was put in place. Under this arrangement, the funds leg of the transactions is settled through the fund accounts maintained by these entities with select commercial banks chosen as ‘designated settlement banks’ (DSB). All Government securities related transactions, *viz.*, secondary market, primary market and servicing of Government securities (interest payments and repayments) for these entities will be carried out through the current account of the ‘DSB’ with whom the non-bank and non-PD entities open the settlement account. Guidelines to this effect were issued on June 2, 2008 and the system became effective from June 16, 2008.

Corporate Bond Market

V.12 The Reserve Bank continued its efforts to implement the recommendations of the High Level Expert Committee on Corporate Bonds and Securitisation (Chariman: Dr. R.H. Patil). One of the recommendations of the Committee was to set up reporting platforms for corporate bonds. The trade reporting platforms have since been set up by the National Stock Exchange of India Limited (NSE), Bombay Stock Exchange Limited (BSE) and the Fixed Income Money Market and Derivatives Association of India (FIMMDA). The Reserve Bank has issued guidelines to its regulated entities to report their OTC trades on the FIMMDA platform. As regards introduction of repos in corporate bonds, the Reserve Bank in its Annual Policy Statement for the year 2008-09, announced that the same would be considered once the prerequisites, *viz.*, efficient price discovery through greater public issuances and secondary market trading, and an efficient and safe settlement system based on delivery *versus* payment (D*v*P) III and straight through processing (STP) are met.

Primary Dealers

V.13 The number of PDs in operation increased to 19 at end-March 2008 from 17 at end-March 2007. Of these, nine were non-bank entities (stand-alone PDs) and the remaining 10 were banks undertaking PD business departmentally (Bank-PDs). In July, 2006, PDs were prohibited from setting up step-down subsidiaries. PDs, which already had step-down subsidiaries (in India and abroad), were required to restructure the ownership pattern of those subsidiaries. These guidelines were complied with by the stand-alone PDs during 2007-08.

V.14 The Government securities market has developed significantly over the years and PDs, which were first allowed in 1996, have made significant contribution to the process of Government securities market development (Box V.2).

FOREIGN EXCHANGE MARKET

V.15 During 2007-08, the Reserve Bank took several initiatives to provide a more conducive environment for the conduct of foreign exchange business. The prime objective was to provide prompt and efficient customer service by progressively liberalising foreign exchange related transactions, removing restrictions and simplifying procedures. Concomitantly, powers were delegated to authorised dealers (ADs) with a view to improving ease of transactions for the common person. India's cautious approach towards opening of the capital account and viewing capital account liberalisation as a process contingent upon fulfilment of certain preconditions has held India in good stead. Keeping in view the recommendations of the Committee on Fuller Capital Account Convertibility (CFCAC), a host of measures were initiated towards further liberalisation of foreign exchange transactions.

Current Account Measures

Exports

V.16 ADs were permitted to allow refund of export proceeds for goods re-imported into India on account of poor quality, subject to submission of evidence of re-import. The condition of submission of evidence of re-import was relaxed, subject to an undertaking by the exporter that the goods would be re-imported within three months from the date of remittance.

Imports

V.17 The following liberalisation/simplification procedures were undertaken with regard to the facilities available to importers:

(i) AD banks were permitted to remit business process outsourcing (BPO) companies in India towards the cost of equipment to be imported and installed at their overseas sites, subject to certain terms and conditions.

(ii) Airline companies, which have been permitted by the Directorate General of Civil Aviation to operate as a schedule air transport service, were allowed to make advance remittance, without bank guarantee up to US$ 50 million. In all other cases, the existing limit of US$ 1,000,000 for advance remittance without bank guarantee/letter of credit continued.

(iii) AD banks were permitted to allow remittance for imports up to US$ 300,000 where the importer of rough diamonds, rough precious and semi-precious stones has received the import bills documents directly from the overseas supplier.

Remittance Facilities

V.18 Indian corporates with a proven track record were allowed to make remittances out of their foreign exchange earnings for setting up chairs outside India as against the earlier practice of case-to-case basis. AD banks were delegated power to allow donations by Indian corporates for specified purposes, subject to a limit of one per cent of the foreign exchange earnings during the previous three financial years or US$ 5 million, whichever was less. The limit for consultancy services procured from outside India by Indian companies executing infrastructure projects was enhanced from US$ 1 million to US$ 10 million per project. In all other cases, the existing limit of US$ 1 million per project continues. AD banks were permitted to allow reimbursement of pre-incorporation expenses incurred in India up to five

Box V.2
Government Securities Market and Primary Dealers

One of the thrust areas of the Government securities market reforms process, initiated in 1992, was to develop a system of dedicated institutional arrangement for facilitating active secondary market trading in Government securities. This led to inception of the primary dealer (PD) system in India in 1996 with the objective of strengthening the institutional infrastructure in the Government securities market. The roles envisaged for the PDs included supporting the primary market issuances and promoting liquidity in the secondary market.

An analysis of data pertaining to auctions conducted by the Reserve Bank for dated Government securities during 2005-06 to 2007-08 shows that PDs have played a key role in primary market activity. This assumes significance in the backdrop of the Reserve Bank's exit from the primary market from April 1, 2006, in terms of the provisions of the Fiscal Responsibility and Budget Management Act, 2003.

PDs have the responsibility to underwrite auctions of dated Central Government securities and also bid for an amount at least equal to their underwriting commitment. Expectedly, a significant portion of market demand for Government securities in the primary market emanates from the PDs. The aggregate bids submitted by PDs in auctions of Treasury Bills and dated securities, as reflected in the bid-cover ratio, have shown an upward trend in recent years. PDs have been particularly competitive in bidding in the auctions of short and medium term securities. The PDs have also maintained a dominant share (over 45 per cent) in primary auction allotments (Chart). However, the success ratio of PDs is relatively low compared to other investor groups who do not have minimum bidding obligations.

Reliance on the Reserve Bank in primary issuances has been gradually reduced over the years (Table). With the strengthening of the PD system, Government borrowings have been completed successfully without market disruption, even after the Reserve Bank exited from the primary market with effect from April 1, 2006.

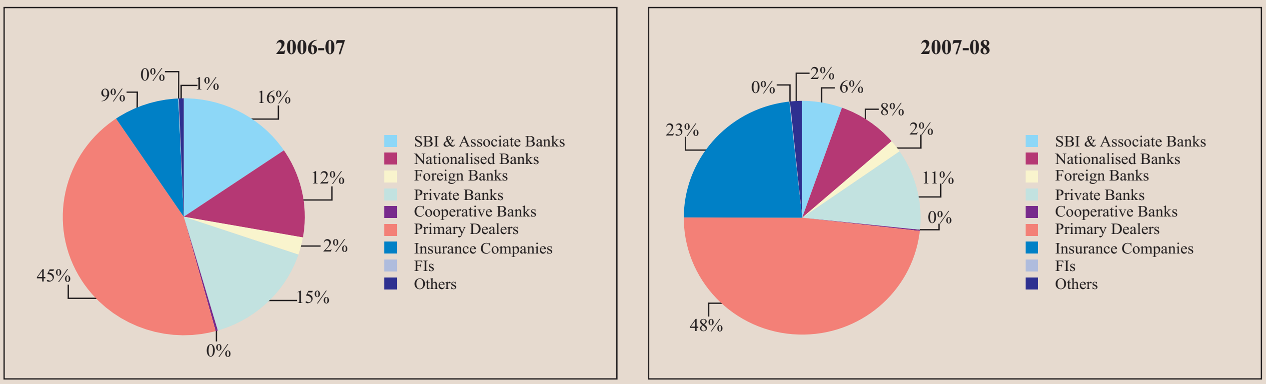
Table: Government of India – Market Borrowing

(Rupees crore)

Year	Gross Market Borrowings (Dated securities)	Raised through Auctions	Devolvement on the Reserve Bank
1	2	3	4
1996-97	27,911	27,911	3,698
1997-98	43,390	37,390	7,028
1998-99	83,753	53,753	8,205
1999-00	86,630	59,630	-
2000-01	1,00,183	82,183	13,151
2001-02	1,14,213	86,000	679
2002-03	1,25,000 *	94,000	5,175
2003-04	1,21,500 *	1,00,000	-
2004-05	80,350	80,000	847
2005-06	1,31,000	1,21,000	-
2006-07	1,46,000	1,46,000	-
2007-08	1,56,000	1,56,000	-
2008-09 #	82,000	82,000	-

*: Includes borrowings for pre-payment of external debt.
#: Up to August 11, 2008.

Chart: Investor Category-wise Share in Primary Issues



per cent of the investment brought in or US$ 100,000, whichever is higher (earlier limit was up to US$ 100,000 only).

V.19 Ship-manning/crew managing agencies in India, that are rendering services to shipping companies incorporated outside India, were allowed to open non-interest bearing foreign currency accounts in India for the purpose of undertaking transactions in the ordinary course of their business, subject to certain terms and conditions. AD banks were permitted to allow payment towards cash calls to the operator for the purpose of oil exploration in India, either by credit to the foreign currency or rupee account in India, subject to certain conditions.

V.20 The guidelines for maintaining *vostro* accounts by foreign exchange houses abroad under the Rupee Drawing Arrangements (RDA) was liberalised further in February 2008. In recent years, private remittances under the RDA and Money Transfer Service Scheme (MTSS) increased sharply, reflecting the Reserve Bank's efforts in facilitating such transfers (Box V.3).

Exchange Earners' Foreign Currency Account

V.21 With a view to giving an opportunity to small and medium enterprises (SMEs) to manage challenges in the global markets, all Exchange Earners' Foreign Currency (EEFC) account holders were permitted to maintain outstanding balances to the extent of US$ 1 million in the form of term deposits up to 1 year maturing on or before October 31, 2008.

Box V.3
Rupee Drawing Arrangement and Money Transfer Service Scheme

The sustained expansion in remittances since the 1990s has been underpinned by structural reforms including market based exchange rate, current account convertibility as well as shift in the labour outflow pattern from semi-skilled to increasingly high-skilled categories. Policy initiatives to facilitate remittance flows through speedier and cost effective money transfer arrangements such as the banking channels, money transfer agencies and post offices also contributed to increased remittances. While banking channels account for bulk of the inward remittances to India, the two other schemes, *viz.*, (i) Rupee Drawing Arrangements (RDA) and (ii) Money Transfer Service Scheme (MTSS) have also assumed significance in recent years. These two schemes provide benefits of easier and speedier operations and play an important role in expanding the outreach of remittances services to the remote locations in the country.

Rupee Drawing Arrangements (RDAs)

Under the RDAs Scheme, Category-I ADs are permitted by the Reserve Bank to open *vostro* accounts of Exchange Houses of the Gulf countries, Hong Kong and Singapore for channelising cross-border inward remittances into India. RDAs fall into three categories, *viz.*, Designated Depository Agency (DDA), non-DDA and Speed Remittances. Separate vostro accounts in Indian rupees are required to be opened by the Exchange Houses for each of these arrangements. No cash payments are made under these arrangements. These arrangements cannot be utilised for making donations/contributions to charitable organisations. Under these arrangements, trade remittances up to Rs.2,00,000 (per transaction) can be made. Credit to NRE account is also permitted. However, no outward remittance is envisaged under these arrangements.

By April 2008, 39 banks and 69 Exchange Houses were having tie-ups under RDA. Out of the 69 Exchange Houses, 66 were incorporated in Gulf countries, one in Hong Kong and two in Singapore. The remittances received under these Schemes have increased consistently since 2003 (Table A).

Money Transfer Service Scheme (MTSS)

MTSS is a quick and easy way of transferring personal remittances from abroad to beneficiaries in India. Only personal remittances such as remittances towards family maintenance and remittances favouring foreign tourists visiting India are permissible under the Scheme. Donations/contributions to charitable institutions/trusts are not permitted under the MTSS. The system envisages a tie-up between reputed money transfer companies abroad and agents in India such as ADs and full-fledged money changers who would disburse the funds to the beneficiaries at ongoing exchange rates. The system does not envisage the repatriation of such inward remittances. Under the scheme, the Indian agent pays the beneficiaries first, on instructions from the Overseas Principal and is reimbursed the amount and his/her commission, by the Overseas Principal within a day or two through normal banking channels. A cap of US$ 2,500 has been placed on individual transaction under the scheme. Amounts up to Rs.50,000 may be paid in cash. Any amount exceeding this limit shall be paid by means of cheque/demand draft/pay orders or credited directly to the beneficiary's account. Only 12 remittances can be received by a single individual during a calendar year.

At end-April 2008, there were 26 Indian agents and 11 Overseas Principals under the MTSS. The total remittances received have shown a continuous increase since 2003 (Table B).

Table A: Remittances Received under RDA

Year	US$ million	Variation (Per cent)
1	2	3
2003	5,414	-
2004	6,125	13.2
2005	7,334	19.7
2006	8,834	20.5
2007	11,635	31.7

Table B: Remittances Received under MTSS

Year	US$ million	Variation (Per cent)
1	2	3
2003	836	-
2004	1,261	51.0
2005	1,982	57.1
2006	3,271	65.1
2007	5,344	63.4

The rate of interest on such deposits, however, is determined by the banks themselves. It was decided to withdraw this facility from November 01, 2008. Accordingly, all EEFC accounts were only permitted to be opened and maintained in the form of non-interest bearing current accounts.

Capital Account Measures

Liberalised Remittance Scheme

V.22 With a view to imparting greater flexibility in foreign exchange transactions and simplifying procedures, the limit for remittances under the Liberalised Remittance Scheme (LRS) for resident individuals was enhanced from US$ 50,000 to US$ 100,000 in May 2007 and further to US$ 200,000 per financial year in September 2007. It was also stipulated that banks should not extend any credit facilities to resident individuals to facilitate remittances under the LRS and resist transactions in the nature of margins or margin calls to overseas exchanges/overseas counterparty.

Employees Stock Option Plan

V.23 AD category–I banks[1] were allowed to grant rupee loans to non-resident Indians (NRIs) employees of Indian companies for acquiring shares of the companies under the Employees Stock Option Plan (ESOP) Scheme, subject to certain conditions.

External Commercial Borrowings

V.24 With a view to providing greater flexibility to the corporates in managing their liquidity and interest costs, the limit for prepayment of external commercial borrowings (ECB) was enhanced from US$ 300 million in December 2006 to US$ 400 million in April 2007 and further to US$ 500 million in September 2007, without prior approval of the Reserve Bank, subject to compliance with the minimum average maturity period as applicable to the loan.

V.25 The ECB policy was reviewed in May 2007. It was decided to withdraw the exemption accorded for the 'development of integrated township' as a permissible end-use of ECB. Earlier, the ECB proceeds were allowed to be utilised for the development of integrated township. Furthermore, with the enhancement of sovereign credit ratings of India to investment grade, the all-in-cost ceilings for ECBs were revised downwards from 200 basis points (bps) to 150 bps over 6-month LIBOR for ECBs with an average maturity between three years and up to five years, and from 350 bps to 250 bps for ECBs with average maturity of more than five years.

V.26 Based on a review, the ECB policy was modified in August 2007. According to the revised policy, ECB more than US$ 20 million per borrower company per financial year was permitted only for foreign currency expenditure for permissible end-uses of ECBs. Accordingly, borrowers raising ECB more than US$ 20 million were required to park the ECB proceeds overseas for use as foreign currency expenditures for permissible end uses and were not allowed to remit the funds to India both under the automatic route and the approval route. ECB up to US$ 20 million per borrowing company per financial year was permitted for foreign currency expenditures for permissible end-uses under the automatic route and these funds were required to be parked overseas and not remitted to India. Borrowers proposing to avail ECBs up to US$ 20 million for rupee expenditure for permissible end uses were required to obtain prior approval of the Reserve Bank under the approval route. All other aspects of ECB policy such as eligible borrower, US$ 500 million limit per borrower company per financial year under the automatic route, recognised lender, average maturity period, all-in-cost-ceiling, prepayment, refinancing of existing ECB and reporting arrangements were left unchanged.

V.27 In May 2008, the ECB policy was further reviewed, wherein it was decided to allow borrowers in the infrastructure sector to avail ECBs up to US$ 100 million for rupee expenditure for permissible end-uses under the approval route. In the case of other

[1] Banks currently authorised to deal in foreign exchange (*viz.*, scheduled commercial banks, State cooperative banks, and urban cooperative banks) are categorised as AD Category-I banks. They are authorised to deal in all current and capital account transactions, according to the Reserve Bank's directions issued from time to time.

borrowers, the existing limit of US$ 20 million for rupee expenditure for permissible end-uses under the Approval Route was enhanced to US$ 50 million. The all-in-cost ceilings were revised upwards from 150 bps to 200 bps over 6-month LIBOR for ECBs with an average maturity between three years and up to five years, and from 250 bps to 350 bps for ECBs with average maturity of more than five years.

V.28 In June 2008, it was decided to allow entities in the service sector, *viz.* hotels, hospitals and software companies to avail ECBs up to US$ 100 million per financial year, for the purpose of import of capital goods under the approval route.

V.29 The all-in-cost ceilings for trade credit up to one year were revised upwards from 50 basis points over six month LIBOR to 75 basis points over six month LIBOR for the respective currency of credit or applicable benchmark.

V.30 With effect from July 11, 2008, prior approval from the Reserve Bank was dispensed with and AD Category-I banks were permitted to convey 'no objection' under the Foreign Exchange Management Act (FEMA), 1999 for creation of charge on immovable assets, financial securities and issue of corporate or personal guarantees in favour of overseas lender / security trustee, to secure the ECB to be raised by the borrower, subject to certain specified conditions.

Overseas Direct Investments

V.31 Corporates were provided greater operational flexibility with regard to their overseas investment. This comprised the following elements.

(i) The overseas investment limit (total financial commitments) for Indian entities (companies incorporated in India under an Act of Parliament) was enhanced from 200 per cent of their net worth to 300 per cent in June 2007 (the limit continued to be 200 per cent for registered partnership firms) and further to 400 per cent, including registered partnership firms, in September 2007 as per the last audited balance sheet. The amount of guarantee was reckoned at 100 per cent of the amount instead of the conversion factor of 50 per cent for determining the total financial commitments. A revised reporting framework on overseas investments was also put in place to capture data on costs and means of funding overseas acquisitions and performance indicators.

(ii) The existing limit of 25 per cent of net worth for portfolio investments in the equities of foreign companies listed on recognised stock exchange overseas and having a share holding of at least 10 per cent in Indian companies listed on recognised stock exchanges in India and rated bond/fixed income securities issued by overseas companies was enhanced to 35 per cent (June 2007) of the net worth of the investing company and further to 50 per cent (September 2007). Furthermore, the requirement of reciprocal 10 per cent holding in Indian companies was dispensed with.

(iii) Acquisition of shares by an Indian entity, of a foreign company engaged in bonafide business activity in exchange of ADRs/GDRs issued to the latter was considered as an accepted mode of overseas direct investment, subject to certain terms and conditions.

(iv) In order to provide operational flexibility to Indian entities for availing fund-based and non-fund based facilities overseas, they were permitted to transfer by way of pledge, the shares held in overseas joint ventures (JV)/ wholly owned subsidiaries (WOS) to an overseas lender, provided the lender is regulated and supervised as a bank and the total financial commitments of the Indian party conform to the limits stipulated by the Reserve Bank.

(v) Navratna Public Sector Undertakings (PSUs) were allowed remittances, without any limit, towards investment in the oil sector (*i.e.,* for exploration and drilling for oil and natural gas) in an unincorporated entity overseas.

This facility was extended to ONGC Videsh Ltd. and Oil India Ltd. Other Indian entities were allowed this facility up to 400 per cent of their net worth as on the date of their last audited balance sheet. Investment in excess of 400 per cent would require prior approval of the Reserve Bank.

(vi) Indian companies were allowed, with the prior approval of the Reserve Bank, to invest in excess of 400 per cent of their net worth as on the date of the last audited balance sheet, in the energy and natural resources sectors such as oil, gas, coal and mineral ores.

(vii) With a view to improving the coverage and to ensure monitoring of flows in a dynamic environment, the reporting system for overseas direct investment (ODI) was rationalised and a single form ODI was prescribed.

(viii) Resident entities having overseas direct investments (in equity and loan) were permitted to hedge the exchange risk arising out of such investments by entering into forward/option contracts. Such contracts were required to be completed by delivery or rolled over on due date and not cancelled. With a view to providing greater flexibility to residents, AD banks were permitted to allow cancellation of such forward contracts. Furthermore, 50 per cent of the cancelled contracts were allowed to be rebooked.

V.32 The provisions for overseas investments by mutual funds registered with Securities and Exchange Board of India (SEBI) were further liberalised:

(i) The aggregate ceiling for overseas investments by mutual funds registered with the SEBI was enhanced from US$ 4 billion in May 2007 to US$ 5 billion in September 2007 and further to US$ 7 billion in April 2008. The existing facility to allow a limited number of qualified Indian mutual funds to invest cumulatively up to US$ 1 billion in overseas Exchange Traded Funds as may be permitted by the SEBI continued.

(ii) Indian mutual funds registered with the SEBI were permitted (June 2007) to invest in (a) overseas mutual funds making nominal investments in unlisted overseas securities not exceeding 10 per cent of their net assets; (b) overseas exchange traded funds that invest in securities; and (c) ADRs/GDRs of foreign companies, subject to guidelines issued by the SEBI.

V.33 With a view to further liberalising the policy on overseas investments, it was decided (June 2008) to allow Registered Trusts and Societies engaged in manufacturing/educational sector to make investment in the same sector(s) in a JV/WOS outside India, with the prior approval of the Reserve Bank.

Foreign Direct Investment

V.34 In view of the quality of inflows and in order to capture the details of foreign direct investment (FDI) in a comprehensive manner, the reporting form (FC-GPR) was revised in consultation with the Central Government. In order to provide operational flexibility to non-resident acquirers, AD banks were permitted to open Escrow account and Special account on behalf of non-resident corporates for acquisition/ transfer of shares/debentures through open offers/ delisting/exit offers, subject to the SEBI regulations and directions issued by the Reserve Bank.

V.35 The guidelines on foreign investments in preference shares were revised and it was stipulated that only preference shares coming in as fully and mandatorily convertible into equity within a specified time would be treated as part of share capital. Any other type of preference shares would be considered as debt and shall conform to the ECB norms. The guidelines on foreign investments in debentures were also revised and it was prescribed that only instruments which are fully and mandatorily convertible into equity within a specified time would be treated as part of equity.

V.36 In consultation with the Central Government, a time limit of 180 days from the date of receipt of advance remittance was stipulated for issue of shares to the non-resident investor. In case, equity shares were not issued within 180 days, the advance so received was to be refunded immediately through normal banking channels or by credit to the NRE/FCNR(B) account of the investor. In exceptional cases, refund of amount was to be considered by the Reserve Bank on a case to case basis. Citizens/entities incorporated in Bangladesh were permitted to purchase shares and convertible debentures of an Indian company under the FDI scheme with prior approval of Foreign Investment Promotion Board (FIPB).

V.37 In consultation with the Central Government and the SEBI, FIIs registered with the SEBI and sub-accounts of FIIs were allowed to short sell, lend and borrow equity shares of Indian companies, subject to certain conditions.

V.38 FDI was permitted in credit information companies up to an aggregate limit of 49 per cent subject to certain conditions. FDI was also permitted in commodity exchange up to composite limit of 49 per cent with FDI limit of 26 per cent and FII limit of 23 per cent, subject to the regulations issued by Forward Markets Commission.

Foreign Exchange Hedging

V.39 For further deepening the foreign exchange market the following measures were initiated to facilitate foreign exchange hedging:

(i) The eligible limit for booking of forward contracts on the basis of declaration of an exposure by importers/exporters and based on the past performance was raised from 50 per cent to 75 per cent. Contracts booked in excess of the eligible limit are on a deliverable basis and cannot be cancelled.

(ii) AD banks, especially authorised by the Reserve Bank were allowed to permit domestic producers/users to hedge their price risk on aluminium, copper, lead, nickel and zinc in international commodity exchanges, based on their underlying economic exposures. Furthermore, AD banks especially authorised by the Reserve Bank in this regard, were allowed the discretion to permit actual users of aviation turbine fuel to hedge their economic exposures in the international commodity exchanges based on their domestic purchases.

(iii) SMEs were permitted to hedge their indirect and direct currency exposures using forwards and options.

(iv) Resident individuals were permitted to hedge their currency exposures in respect of inward/outward remittances using forward contracts up to US$ 100,000 per financial year.

(v) Domestic oil marketing and refining companies were permitted to hedge their commodity price risk to the extent of 50 per cent of their inventory based on their volumes in the quarter preceding the previous quarter. The hedge to be undertaken using OTC/exchange traded derivatives overseas with the tenor was restricted to a maximum of one-year forward.

(vi) Domestic crude oil refining companies were permitted to hedge their commodity price risk on domestic purchase of crude oil and sale of petroleum products on the basis of underlying contracts linked to international prices on overseas exchanges/markets.

(vii) Domestic crude oil refining companies were permitted to hedge their commodity price risk on crude oil imports in overseas exchanges/markets on the basis of their past performance up to 50 per cent of their volume of actual imports during the previous year or 50 per cent of the average volume of imports during the previous three financial years, whichever is higher.

Currency Futures

V.40 In pursuance to the announcement made in the Annual Policy Statement for the year 2007-08, an Internal Working Group on Currency Futures was set up to study the international experiences and suggest a suitable framework to operationalise the proposal within the existing legal and regulatory framework. Accordingly, the Internal Working Group (Chairman: Shri Salim Gangadharan) studied, *inter alia*, the experiences of some emerging market economies where currency futures exchanges were functioning within an environment of capital controls (Box V.4). A Reserve Bank-SEBI Standing Technical

Box V.4
Working Group on Currency Futures

In the context of growing integration of the Indian economy with the rest of the world and gradual deepening of financial markets, the Committee on Fuller Capital Account Convertibility (Chairman: Shri S. S. Tarapore) had recommended that currency futures be introduced, subject to the risks being contained through proper trading mechanism, structure of contracts and regulatory environment. The amendment to the RBI Act, 1934 through the RBI (Amendment) Act 2006, empowers the Reserve Bank to regulate interest rate, foreign currency and credit derivatives. An Internal Working Group on Currency Futures (Chariman: Shri Salim Gangadharan) was set up to study the international experience and suggest a suitable framework to operationalise the proposal, in line with the current legal and regulatory framework.

The Working Group had extensive consultations with a cross section of market participants, including bankers' associations, banks and brokers in both Indian and international exchanges. Based on the discussions with market participants and the experiences drawn from international exchanges, the Group listed out various alternatives for introduction of currency futures, analysing the pros and cons of each option in the Indian context. The analysis was then presented to the Technical Advisory Committee (TAC) for Money, Foreign Exchange and Government Securities Markets. The draft Report of the Group reflecting the views expressed by the TAC was placed on the Reserve Bank's website in November 2007 for wider dissemination and feedback. The feedback/comments received from the public, banks, market participants, academicians and the Government of India were discussed in the meetings of the TAC and the final Report was posted on the Reserve Bank's website on April 28, 2008. The important recommendations of the Working Group were:

- A standardised US Dollar–Indian Rupee (USD-INR) contract be introduced; Euro-INR contract be introduced after a period of six months.
- A single contract of notional value US$ 1,000 be introduced with tenors for the first 12 calendar months replicating the forward markets, and the contracts would be cash settled.
- Initially, participation in the currency futures market be restricted to residents with allotment of unique client identification numbers to distinguish various classes of participants in the futures exchanges.
- Banks be allowed to become direct members of the futures exchanges, both as trading-cum-clearing members in respect of own account and clients account and also as professional clearing members.
- Brokers may be permitted in the currency futures market provided they meet "fit and proper" criteria as well as other eligibility norms.
- Exchange-specific clearing corporation be preferred over centralised clearing approach to encourage competitive pricing and services.
- The right to stipulate or modify the participants and/or fixing participant-wise position limits or any other prudential limits in the interest of financial stability be retained with the Reserve Bank.
- For introduction of currency futures, existing exchanges, which meet the eligibility criteria as also new entities set up for the purpose of trading currency futures, with the basic criteria being net worth and capital adequacy, be considered.

As announced in the Annual Policy Statement for the Year 2008-09, a Reserve Bank-SEBI Standing Technical Committee was set up to advise on operational aspects with regard to trading of currency futures on exchanges. The Report of the Technical Committee was also posted on the websites of the Reserve Bank and the SEBI. The important recommendations of the Committee were:

- A recognised stock exchange having nationwide terminals or a new exchange recognised by the SEBI may be set up for trading currency futures after obtaining the SEBI's approval. The exchange shall have a balance sheet net worth of at least Rs. 100 crore.
- The membership of the currency futures segment be separated from the membership of the equity derivative segment or the cash segment of a recognised stock exchange. The trading member be subject to a balance sheet net worth requirement of Rs. 1 crore, while the clearing member be subject to a balance sheet net worth requirement of Rs. 10 crore.
- Currency futures contracts on USD-INR be permitted at the initial stage with a minimum contract size of US$ 1,000 and a maximum maturity of 12 months with monthly maturities. The currency futures contract be settled in cash in Indian Rupees with settlement on the last working day of the month.
- Only residents be allowed to participate in the currency futures market to begin with.
- Initial margin be stipulated on the first day of trading at a minimum of 1.75 per cent and one per cent thereafter. Furthermore, an extreme loss margin of one per cent on the mark-to-mark value be enforced on a real time basis. The calendar spread margin should be at a value of Rs. 250 for all months of spread.
- The gross open position limits should not exceed six per cent of the total open interest or US$ 5 million, whichever is higher and 15 per cent or US$ 25 million, whichever is higher, for clients and trading members, respectively. No separate position limits be prescribed at the clearing member level.
- Periodical meeting of the Reserve Bank-SEBI Committee be held to sort out issues, if any, arising out of overlapping jurisdiction of the currency futures market.

Guidelines on trading of currency futures in recognised stock/new exchanges were issued on August 6, 2008.

Committee was also constituted to advise on operational aspects with regard to trading of currency futures on exchanges. In August 2008, persons resident in India were permitted to participate in the currency futures market in India. Accordingly, guidelines on trading of currency futures in recognised stock/new exchanges were issued.

Other Capital Account Measures

V.41 AD banks were permitted to allow remittance of maturity proceeds of FCNR(B) deposits to third parties outside India provided the transaction was specifically authorised by the account holder and the AD was satisfied about the bonafides of the transaction. A uniform period of 180 days was prescribed for surrender of received/realised/unspent/unused foreign exchange by resident individuals from the date of receipt/realisation/purchase/acquisition/date of return of the traveller, as the case may be. In all other cases, the regulations/directions on surrender requirement remained unchanged. The facility of operation of NRO account was extended to the Power of Attorney, subject to certain terms and conditions. AD banks were permitted to allow remittances, out of assets on Indian companies under liquidation under the provisions of the Companies Act, 1956 and subject to certain terms and conditions.

Anti-Money Laundering (AML) Guidelines for Authorised Money Changers (AMCs)

V.42 The AML guidelines were amended time to time in view of the difficulties expressed by authorised money changers (AMCs) in implementing some of them. The limit for payment of cash towards encashment by foreign visitors/non-resident Indians was raised from US$ 2,000 to US$ 3,000 in October 2007. It was decided that in addition to the documents in support of the name, address and business activity, certificate of incorporation under the Companies Act 1956, Memorandum of Association, Articles of Association, registration certificate of a firm (if registered), partnership deed, *etc.*, PAN card may also be accepted as a suitable document for establishing the relationship with the company/firm.

Outlook

V.43 Although the domestic financial markets have not been seriously impacted by the turbulence overseas, the impact through the financial flows, in particular, on the equity market and, consequently, on the foreign exchange market in India cannot be ruled out. In view of the uncertainty surrounding global financial markets and the risks emanating therefrom, the Reserve Bank would continue to closely monitor the developments in the various segments of the financial market. It would also be the endeavour of the Reserve Bank to further deepen and widen the various segments of the financial market by improving market infrastructure, increasing the number of participants and introducing new instruments especially, those for hedging market risks. Going ahead, some segments of the financial market such as term money market, derivatives market, and corporate bond market and creation of secondary markets in certificates of deposit and commercial paper may require greater attention of the Reserve Bank. Efforts would also be made to facilitate further integration of the markets so as to strengthen the monetary transmission mechanism and ensure efficient dispersal of risk amongst various market participants, especially in the context of the envisaged move towards fuller capital account convertibility. Furthermore, with increasing liberalisation and integration with global financial markets, the focus would be on ensuring that domestic financial market participants are in a position to absorb unanticipated and large shocks should they arise, so that financial stability is maintained.

VI FINANCIAL REGULATION AND SUPERVISION

VI.1 The Reserve Bank continued to build a regulatory and supervisory architecture in line with the international best standards, adapted to suit the domestic conditions. The objective has been to make the Indian banking sector more competitive, efficient, sound and dynamic. Foreign banks and domestic banks with overseas presence successfully migrated to Basel II on March 31, 2008. The focus of the Reserve Bank's policy initiatives during the year was on strengthening corporate governance practices in banks and improving customer service. Events unfolding in the global financial markets were carefully monitored with a view to drawing appropriate lessons. The Reserve Bank continued to strengthen the urban co-operative banks treading on the path laid down in the Vision Document. The efforts to strengthen the non-banking financial companies (NBFCs) continued with a focus on systemically important financial institutions within the sector.

VI.2 This Chapter details the various regulatory and supervisory measures initiated by the Reserve Bank relating to banks and other financial institutions during 2007-08. The year witnessed major progress in implementation of the New Capital Adequacy Framework (Basel II). The Pillar II guidelines were issued during the year. Certain amendments were also carried out in the framework issued earlier. Newer avenues of raising capital were provided to banks to accord them with greater flexibility in meeting the Basel II requirement. Special emphasis was laid upon liquidity and asset liability management. Important initiatives in the area of corporate governance included guidelines on corporate social responsibility, sustainable development and non-financial reporting and guidelines on 'fit and proper' criteria for elected directors on the boards of public sector banks. Significant measures were also undertaken in the areas of anti-money laundering (AML) and know your customer (KYC) guidelines. Policy initiatives relating to customer service included guidelines for recovery agents and grievance redressal mechanism.

VI.3 The regulatory measures relating to urban co-operative banks (UCBs) were aimed at consolidating the gains of the memoranda of understanding (MoUs) and Task Force for Urban Co-operative Banks (TAFCUB) arrangement. UCBs were provided with greater business opportunities and capital raising options. Of the financial institutions supervised by the Reserve Bank, IFCI and TFCI were given the NBFC status during the year. IIBI is in the process of being wound up. Important developments relating to NBFCs included formulation of regulatory framework for mortgage guarantee companies and various measures in the area of prudential guidelines and customer service.

REGULATORY FRAMEWORK FOR THE INDIAN FINANCIAL SYSTEM

VI.4 The regulatory purview of the Reserve Bank extends to a large segment of financial institutions, including commercial banks, co-operative banks, non-banking financial institutions and various financial markets. At end-March 2008, there were 79 commercial banks [excluding regional rural banks (RRBs)], 91 RRBs, 1,770 urban co-operative banks (UCBs), 4 development finance institutions (DFIs), 12,834 non-banking financial companies (NBFCs) (of which 376 NBFCs are permitted to accept/hold public deposits) and 19 primary dealers (PDs) (of which 10 are banks undertaking PD business as a departmental activity and nine are non-bank entities, also referred to as stand-alone PDs). The Board for Financial Supervision (BFS) continued to exercise its supervisory role over those segments of the financial institutions that are under the purview of the Reserve Bank.

Board for Financial Supervision

VI.5 The Board for Financial Supervision (BFS), which was constituted on November 16, 1994 by the Central Board of Directors of the Reserve Bank under the Reserve Bank (BFS) Regulations, 1994, continued to exercise its oversight over commercial banks, financial institutions, urban co-operative banks (UCBs), regional rural banks (RRBs), non-banking financial companies (NBFCs) and primary dealers (PDs). The BFS in its 11 meetings held during the period January 2007 to December 2007 and five meetings in 2008 (till June 4, 2008) considered various memoranda on the performance of various segments of the financial sector. The BFS remained the chief guiding force behind the effective handling of supervisory and regulatory issues by the Reserve Bank. The BFS reviewed the inspection findings in respect of commercial banks/urban cooperative banks, periodical reports on critical areas of functioning of banks such as reconciliation of accounts, frauds monitoring, overseas operations, financial position of banks under monthly monitoring and issued a number of directions with a view to strengthening the functioning of banks. Some of the important issues deliberated by the BFS are set out in this section.

VI.6 During 2007-08, 98 annual financial inspection (AFI) reports in respect of 28 public sector banks, 26 private sector banks, 34 foreign banks, four local area banks and six all-India financial institutions (AIFIs) were brought before BFS for review. BFS reviewed the inspection reports of 12 scheduled UCBs classified in Grades III and IV besides reviewing the financial highlights of 41 scheduled UCBs classified in Grades I and II. Considering the common and recurring concerns observed in the functioning of banks, the Board felt that the issues brought out had a bearing on the level of corporate governance in banks. Accordingly, separate formats for public sector and private sector banks have been devised. These formats touch upon all the governance issues (including the 'fit and proper' criteria) as covered under the Banking Regulations Act 1949, Clause 49 of the Listing Agreement of the stock exchanges, guidelines issued from time to time and those raised by the Consultative Group to look into the Role of Bank/FI Boards (Chairman: Dr. A.S. Ganguly). The objective behind the design of these formats is to assess the banks' performance on corporate governance in a systematic and comprehensive manner and to make an attempt to classify the banks into different categories based on their performance. A copy each of the formats was forwarded to the Indian Banks Association (IBA) also for their comments and suggestions.

VI.7 The BFS reviewed the extant regulatory guidelines and supervisory processes and issued directions with a view to ensuring their robustness and effectiveness in an extremely dynamic and fast evolving banking environment. Some of the measures undertaken during the year under the aegis of the BFS included; (i) guidelines on engagement of recovery agents in view of the rise in the number of litigations against banks in the recent past relating to recovery agents and the serious reputation risk for the bank and the banking sector as a whole; (ii) guidelines on assessment of financial impact of letters of comfort (LOCs) issued by banks by ascertaining the exact liability/obligations embedded in LOCs and adequate disclosure; (iii) norms relating to consolidation that mandated recording of ‘intent’ by the Board of respective bank at the time of acquisition regarding holding of the investment for a temporary period or otherwise. An approach paper on the regulatory and supervisory process in respect of ‘Financial Conglomerates’ was also under preparation as per the directions of BFS. Other important issues considered by the BFS included future set up of local area banks, disclosure of supervisory ratings of banks and banks’ exposure to the real estate sector.

VI.8 During the year, the BFS reviewed the roles and set up of the financial institutions with a view to providing clarity on their regulatory and supervisory architecture and their emerging role in the financial sector. The role of Small Industries Development Bank of India (SIDBI) *vis-à-vis* its exposure to the State Financial Corporations (SFCs) continued to engage the attention of the BFS and was discussed at length. On the directions of the BFS, SIDBI was advised to increase the risk weights on its exposure to SFCs, make full provisioning in respect of SFCs which had defaulted even after extension of restructuring/one-time settlement (OTS) packages and revise the norms for asset classification to ‘borrower wise’ instead of ‘facility wise’ in respect of its exposures to SFCs. With regard to the transfer of the holdings of the erstwhile IDBI in SFCs to SIDBI and valuation thereof, the BFS directed that a view on the valuation of the holdings by IDBI Ltd. at fair value (instead of the face value) needs to be taken before finalisation of the accounts of IDBI Ltd. as on March 31, 2007. The Government issued a notification dated January

17, 2008 notifying January 31, 2008 as the appointed date for the transfer of all the shares of every SFC subscribed to by IDBI and amount outstanding in respect of loans in lieu of capital provided by IDBI as on date immediately preceding the notified date to SIDBI.

VI.9 The Board also initiated several measures relating to the co-operative banking and non-banking sector. Pursuant to the directions of the BFS, an inter-departmental group was constituted in the Reserve Bank to examine the issue of applicability of Basel norms to the Reserve Bank regulated entities other than the commercial banks, *i.e.*, urban co-operative banks, state co-operative banks, district central co-operative banks and Regional Rural Banks. Other measures for UCBs included: (i) policy framework for UCBs defaulting in maintaining prescribed CRR/SLR; (ii) measures for UCBs under directions; (iii) supervisory action framework on the basis of TAFCUB's recommendations; and (iv) laying down principles for considering proposals for restructuring UCBs. Besides undertaking an evaluation of systemic risks arising out of the NBFCs sector, the BFS also deliberated upon the areas of (i) protecting consumers against opportunistic behaviour by suppliers of financial services by putting in place a fair practice code; (ii) re-classification of NBFCs to create a new class of NBFC, *viz*., asset finance company (AFC); (iii) future set up of SIDBI; and (iv) future framework of NHB.

VI.10 On the directions of the BFS, a number of studies of important areas of functioning of banks having implication for financial soundness were carried out by the Reserve Bank. The studies related to NPA management, vulnerability assessment, exposure to group and large borrowal accounts, interest rate risk, investment portfolio and exposure to the real estate sector.

REGULATORY INITIATIVES

Commercial Banks

VI.11 Policy measures initiated by the Reserve Bank during 2007-08 were aimed at enhancing the prudential standards of the banking system in order to make it more resilient and align these with the international best practices while ensuring customer protection.

Prudential norms

VI.12 In January 2008, on a review of the risk weight for the educational loans, it was decided that the 'educational loans' need not be classified as part of consumer credit for the purpose of capital adequacy. Accordingly, the risk weight applicable to educational loans was stipulated at 100 per cent in respect of banks under Basel I framework; under Basel II framework, such loans are treated as a component of the 'regulatory retail' portfolio and attract a risk weight of 75 per cent.

VI.13 In May 2008, the limit of bank loans for housing was enhanced to Rs.30 lakh from Rs.20 lakh for the purpose of applying concessional risk weights for capital adequacy purposes under both Basel I and Basel II framework. Accordingly, where the loan-to-value (LTV) ratio was equal to or less than 75 per cent, the loans up to Rs.30 lakh would carry a risk weight of 50 per cent, whereas loans of higher amount would attract a risk weight of 75 per cent. The risk weight in the case of other loans, *i.e.*, loans with LTV ratio of above 75 per cent, irrespective of the size, continue to attract 100 per cent risk weight.

VI.14 With a view to encouraging the flow of credit to the infrastructure sector, banks were advised in December 2007 that they may invest in unrated bonds of companies engaged in infrastructure activities within the ceiling of 10 per cent for unlisted non-SLR securities. In May 2008, the Reserve Bank modified the prudential norms on asset classification pertaining to infrastructure projects with regard to delays in completion of infrastructure projects for legal and other extraneous reasons. Accordingly, it was decided that in the case of infrastructure projects financed by the bank after May 28, 2002, the date of completion of the project should be clearly spelt out at the time of financial closure of the project and if the date of commencement of commercial production extends beyond a period of two years after the date of completion of the project, as originally envisaged, the account should be treated as sub-standard.

VI.15 The norms relating to issuance of letter of comforts (LoCs) on behalf of a bank's subsidiary and in favour of overseas regulators were tightened in

March 2008 in view of the possible liabilities/ obligations that may have to be met by the issuing banks in future. In this context, following prudential norms were laid down: (i) the bank should lay down a well-defined policy for issuance of LoCs and every issuance of LoC should be subject to the prior approval by the Board of Directors of the bank; (ii) the bank should make an assessment, at least once a year, of the likely financial impact that might arise from the LoCs issued by it and outstanding, in case it is called upon to support its subsidiary in India or abroad, as per the obligations assumed under the LoCs issued; (iii) any LoC that is assessed to be a contingent liability of the bank by a rating agency/internal or external auditors/internal inspectors or the Reserve Bank inspection team, is treated, for all prudential regulatory purposes, on the same footing as a financial guarantee issued by the bank; and (iv) the banks should disclose full particulars of all the LoCs issued by them during the year, including their assessed financial impact, as also their assessed cumulative financial obligations under the LoCs issued by them in the past and outstanding, in its published financial statements, as part of the 'notes to accounts".

VI.16 The annual financial inspection (AFI) reports and consolidated prudential return (CPR) revealed that some of the banks had extended large loans to various mutual funds (MFs) and also issued irrevocable payment commitments (IPCs) to stock exchanges (BSE & NSE) on behalf of MFs/foreign institutional investors (FIIs). However, the banks had not included these exposures for computation of their capital market exposure (CME). Accordingly, in December 2007, banks were advised to be judicious in extending finance to mutual funds and grant loans and advances to MFs only to meet their temporary liquidity needs for the purpose of repurchase/ redemption of units within the ceiling of 20 per cent of the net asset of the scheme and for a period not exceeding six months. Such finance, if extended to equity-oriented MFs is to form part of banks' capital market exposure. It was also clarified that since IPCs are in the nature of non-fund based credit facility for purchase of shares, such exposure of banks will form part of their CME. Furthermore, entities such as FIIs are not permitted to avail of fund or non-fund based facilities like the IPCs from banks. A transition period of nine months upto September 13, 2008 has been allowed to enable banks to comply with the above requirements.

VI.17 In view of instances of some of the banks selling NPAs for much less than the value of available securities without any justification, the Reserve Bank, in October 2007, modified the existing guidelines on purchase/sale of NPAs among banks. Accordingly, while selling NPAs banks are required to work out the net value of the estimated cash flow associated with the realisable value of the available securities, net of the cost of realisation. The sale price should generally not be lower than the net present value arrived at in the manner described above. The same principle should be used in compromise settlements. As the payment of the compromise amount may be in installments, the net present value of the settlement amount should be calculated and this amount should generally not be less than the net present value of securities.

Basel II Implementations

VI.18 During 2007-08, significant progress was made towards implementation of the 'New Capital Adequacy Framework (Basel II) framework evolved by the Basel Committee on Banking Supervision (BCBS). Foreign banks operating in India and Indian banks having operational presence outside India migrated to the revised framework from March 31, 2008. The major regulatory developments during the year included amendment to NCAF guidelines (Box VI.1), guidelines on supervisory review process (Pillar 2) and issuance of preference shares as part of regulatory capital.

Pillar II Guidelines

VI.19 The Basel II Framework has three Pillars. The Pillar 1 is the minimum capital requirements while the Pillar 2 and Pillar 3 relate to the supervisory review process (SRP) and market discipline, respectively. The Pillar 2 of the framework makes the Basel II much more comprehensive in its coverage of the universe of various risks to which the banks are exposed *vis-à-vis* the Basel I Framework of 1988, which addressed only the credit

Box VI.1
Amendments to the New Capital Adequacy Framework

A review of the April 2007 guidelines on 'Implementation of the New Capital Adequacy Framework' was undertaken in March 2008, and certain clarifications/amendments were issued. The amendments, *inter alia,* included the following:

(i) Investment in State Government securities, other direct loan/credit/overdraft exposures, if any, by banks to the State Governments would attract zero risk weight.

(ii) The counterparty exposure in respect of the personal loans secured by gold and gold jewellery could be worked out under the comprehensive approach treating the gold as the risk mitigant.

(iii) In respect of application of haircut on the exposure, it was clarified that since the purpose was to capture market volatility inherent in the value of exposures, and the exposures acquired by way of loan disbursal/ investment would be a 'cash transaction', the haircut need not be applied on the same. The banks were, however, advised that they need to make upward adjustment in respect of exposures arising out of repo-style transactions, as the value of the securities sold/ lent/pledged in the repo transactions would be subject to market volatility and attract the haircut.

(iv) Banks could recognise the collaterals by way of deposits held with them, even if the tenor of such deposits was less than three months or there was a maturity mismatch of deposits *vis-à-vis* the exposures, provided explicit consent of the depositor was obtained for adjusting the maturity proceeds of such deposits against the outstanding loan or for renewal of such deposits till the full repayment of the underlying loan.

(v) Banks were advised to calculate the capital charge for equities based on their current market value in bank's trading book.

(vi) In respect of exposures against non-scheduled banks, risk weights ranging from 100 per cent to 625 per cent, linked to their level of CRAR were prescribed. In case of banks where no capital adequacy norms were prescribed by the Reserve Bank, the banks were advised to calculate the CRAR notionally, by obtaining the necessary information from the investee banks, using the capital adequacy norms as applicable to the commercial banks.

(vii) In view of the excessive volatility in the stock market across the world, the equities were removed from the list of eligible financial collaterals.

(viii) Standard supervisory haircut for exposures and collaterals, which are obligations of foreign central sovereigns/corporates were provided.

(ix) Banks were also advised of the capital adequacy framework applicable for repo/reverse-repo style transaction.

(x) Detailed guidelines were incorporated for measuring the capital charge for interest rate risk (specific risk) in debt securities and other interest rate related instruments in the available for sale (AFS) and held for trading (HFT) categories.

risk and market risk. While the guidelines on Pillar 1 and Pillar 3 were issued by the Reserve Bank in April 2007, the guidelines regarding the Pillar 2, comprising the SRP and internal capital adequacy assessment process (ICAAP), were issued in March 2008 (Box VI.2).

VI.20 While the basic elements of Basel II framework have been put in place, the banks and the supervisors need to build in capabilities for adoption of advanced approaches under Basel II (Box VI.3).

VI.21 With a view to providing a wider choice of instruments to Indian banks for raising Tier I and Upper Tier II capital, banks were allowed in October 2007 to issue preference shares in Indian Rupees, subject to extant legal provisions through issuance of perpetual non-cumulative preference shares (PNCPS) as Tier I capital. Furthermore, the perpetual cumulative preference shares (PCPS), redeemable non-cumulative preference shares (RNCPS) and redeemable cumulative preference shares (RCPS) were allowed as Upper Tier II capital. The perpetual non-cumulative preference shares are treated on par with equity, and hence, the coupon payable on these instruments is treated as dividend. The Upper Tier II preference shares are treated as liabilities and the coupon payable thereon is treated as interest. The total amount raised by the bank by issue of PNCPS is not reckoned as liability for calculation of net demand and time liabilities for the purpose of reserve requirements and, as such, does not attract CRR/SLR requirements. The total amount raised by a bank through the issue of Upper Tier II instruments is reckoned as liability for the calculation of net demand and time liabilities for the purpose of reserve requirements and, as such, attracts CRR/SLR requirements.

Box VI.2
Guidelines on Internal Capital Adequacy Assessment Process (ICAAP) and Supervisory Review Process (SRP)

The objective of the SRP is to ensure that the banks have adequate capital to support all the risks in their business as also to encourage them to develop and use better risk management techniques for monitoring and managing their risks. This, in turn, requires a well-defined internal assessment process within the banks through which they assure the Reserve Bank that adequate capital is indeed held towards the various risks to which they are exposed. The process of assurance could also involve an active dialogue between the bank and the Reserve Bank so that, when warranted, appropriate intervention could be made to either reduce the risk exposure of the bank or augment/ restore its capital.

In terms of the guidelines on Basel II, the banks are required to have a board-approved policy on internal capital adequacy assessment process (ICAAP) and to assess the capital requirement as per ICAAP at the solo as well as consolidated level. The ICAAP is required to form an integral part of the management and decision-making culture of a bank. The implementation of ICAAP is to be guided by *the principle of proportionality* and the degree of sophistication adopted in the ICAAP with regard to risk measurement and management is to be commensurate with the nature, scope, scale and the degree of complexity in the bank's business operations. The ICAAP is required to be subject to regular and independent review through an internal or external audit process, separately from the review conducted by the Reserve Bank, to ensure that the ICAAP is comprehensive and proportionate. Reckoning that some of the risks are less readily quantifiable, the banks' ICAAP document is required to clearly demarcate the quantifiable and qualitatively assessed risks. The ICAAP is also required to include stress tests and scenario analyses, to be conducted periodically, particularly in respect of the bank's material risk exposures, in order to evaluate the potential vulnerability of the bank to some unlikely but plausible events or movements in the market conditions that could have an adverse impact on the bank's capital. However, there is no mandated requirement by the Reserve Bank for adoption of complex and sophisticated econometric models for internal assessment of their capital requirements.

Liquidity Management

VI.22 As per the asset liability management guidelines prescribed in 1999, liquidity is tracked through traditional maturity or cash flow mismatches. It was felt that for better liquidity management, the time interval of the first bucket in the structural liquidity statement, *viz*., 1-14 days was too broad a time span. In due consideration of the international practices in this regard, the level of sophistication of banks and the need for a sharper assessment and better liquidity management, it was decided that this 1-14 days time bucket be made more granular by splitting into three time bands, *viz.*, *day* 1 (*i.e.*, next day), 2-7 days and 8-14 days. Further, banks were advised that the net cumulative negative mismatches during the next day, 2-7 days, 8-14 days and 15-28 days should not exceed 5 per cent, 10 per cent, 15 per cent and 20 per cent of the cumulative outflows in order to recognize the cumulative impact on liquidity. Banks were advised that they may undertake dynamic liquidity management and should prepare the structural liquidity statement on a daily basis. Guidelines in this regard were issued in October 2007. In the absence of a fully networked environment, banks were allowed to compile the statement on best available data coverage initially but were advised to make conscious efforts to attain 100 per cent data coverage in a timely manner. The frequency of supervisory reporting of the structural liquidity position was also increased to fortnightly, with effect from April 1, 2008.

Anti-Money Laundering

VI.23 The extant know your customer (KYC) regime was supplemented by putting in place on February 15, 2006 the requirement of reporting of cash transaction report (CTR)/suspicious transaction report (STR) by banks to Financial Intelligence Unit –India (FIU-IND) under the Prevention of Money Laundering Act, 2002. Banks were also advised on April 13, 2007 to incorporate complete originator information (names, address and account number) in wire transfer transactions. Based on the feedback received on the extant KYC/AML/CFT regime, the relevant guidelines were revised on February 18, 2008 (Box VI.4).

Consolidation and Diversification

VI.24 The process of consolidation and diversification continued during the year. Under sub-section (4) of Section 44A of the Banking Regulation Act, 1949, the Reserve Bank sanctioned on August 27, 2007 the Scheme of Amalgamation of the Lord

Box VI.3
Advanced Approaches under Basel II

The Basel II framework is highly complex on account of the several factors such as: (i) variety of available options; (ii) diversity in exercise of national discretions and their likely impact; (iii) lack of clarity on regulatory approach to various implementation issues, especially in a cross border situation; and (iv) likely unintended scope for regulatory arbitrage. Under the Basel II framework, in addition to maintaining capital for credit and market risks, banks are required to maintain capital for operational risk also.

Credit Risk

The two options under credit risk are standardised approach (SA) and internal rating based approach (IRB). Under the SA, the banks use a risk-weighting schedule for measuring the credit risk of banks' assets by suitably classifying assets and assigning risk weights based on the evaluation by the external credit rating agencies taking due cognisance of other factors such as risk mitigants, instrument type and asset quality, among others. The IRB approach, on the other hand, allows banks to use their own internal ratings of counterparties and exposures, which permit a finer differentiation of risk for various exposures and hence delivers capital requirements that are better aligned to the degree of risks. The IRB approach hinges on a formula provided by Basel Committee which has four major variables, *viz*., probability of default (PD), loss given default (LGD), exposure at default (EAD) and effective maturity (M). While PD of a borrower or group of borrowers is the central measureable concept on which the IRB approach is built, banks need to estimate LGD and EAD to arrive at a combined measure of expected intrinsic or economic loss. The IRB approaches are of two types:

- Foundation IRB (FIRB): the bank estimates the PD associated with each borrower, and the supervisor supplies other inputs such as LGD and EAD.
- Advanced IRB (AIRB): in addition to PD, the bank adds other inputs such as EAD, LGD, and M. The requirements for this approach are more exacting.

The adoption of advanced approaches would require the banks to meet minimum requirements relating to internal ratings at the outset and on an ongoing basis such as those relating to the design of the rating system, operations, controls, corporate governance, and estimation and validation of credit risk components, *viz.*, PD for both FIRB and AIRB and LGD and EAD for AIRB. The banks should have, at the minimum, PD data for five years and LGD and EAD data for seven years. The manpower skills, the IT infrastructure and MIS at the banks would have to be upgraded substantially. The supervisors would need to develop skills in validation and back testing of models.

In India, banks were advised to compute capital requirements for credit risk adopting the SA. As building up of required data, developing credit risk models and their back testing pose considerable challenges to the banks in terms of huge skilled manpower requirements and upgradation of IT infrastructure, as also on the part of the supervisors to validate the models and undertake approval process, the Reserve Bank preferred to implement the simpler approaches by banks in India, to begin with. A decision to offer choice of adopting advanced approaches will be taken by the Reserve Bank in due course.

Market risk

The capital charge for market risk was introduced by the Basel Committee on Banking Supervision through the Market Risk Amendment of January 1996 to the capital accord of 1988 (Basel I Framework). There are two methodologies available to estimate the capital requirement to cover market risks:

- The Standardised Measurement Method: This method, currently implemented by the Reserve Bank, adopts a 'building block' approach for interest-rate related and equity instruments which differentiate capital requirements for 'specific risk' from those of 'general market risk'. The 'specific risk charge' is designed to protect against an adverse movement in the price of an individual security due to factors related to the individual issuer. The 'general market risk charge' is designed to protect the interest rate risk in the portfolio.
- The Internal Models Approach (IMA): This method enables banks to use its proprietary in-house method which must meet the qualitative and quantitative criteria set out by the BCBS and is subject to the explicit approval of a bank's supervisory authority.

Recognising that banks in India are still at nascent stage of developing their internal risk management models, it was decided that, to start with, banks may adopt the Standardised Measurement Method. The internal model framework of the capital regulations offer banks an incentive to improve the accuracy of their internal model estimates of market risk. Based on the progress made by the banks, they could be permitted to adopt advanced approaches.

Operational Risk

The revised framework offers the following three approaches for estimating capital charges for operational risk:

- The Basic Indicator Approach (BIA): This approach sets a charge for operational risk as a fixed percentage of 'gross income', which serves as a proxy for the bank's risk exposure.
- The Standardised Approach (SA): This approach requires that the institution separate its operations into eight standard business lines, and the capital charge for each business line is calculated by multiplying gross income for that business line by a factor (denoted beta) assigned to that business line.
- Advanced Measurement Approach (AMA): Under this approach, the regulatory capital requirement will equal the risk measure generated by the banks' internal operational risk measurement system.

In India, the banks have been advised to adopt the BIA to estimate the capital charge for operational risk. They are encouraged to move along the spectrum of available approaches as they develop more sophisticated operational risk measurement systems and practices.

Box VI.4
The Revised Guidelines on Know Your Customer and Anti-Money Laundering – Salient Features

- In case of close relatives who find it difficult to furnish documents relating to place of residence while opening accounts, banks can obtain an identity document and a utility bill of the relative with whom the prospective customer is living, along with a declaration from the relative that the said person (prospective customer) wanting to open an account is a relative and is staying with him/her. Banks can also use any other supplementary evidence such as a letter received through post for further verification of the address.
- Banks were advised to keep in mind the spirit of the instructions and avoid undue hardships to individuals who were otherwise classified as low risk customers.
- Banks were required to review the risk categorisation of customers at a periodicity of not less than once in six months.
- Banks were also required to introduce a system of periodic updation of customer identification data (including photograph/s) after the account is opened, which should be not less than once in five years in the case of low risk category customers and not less than two years in the case of high/medium risk customers.
- In cases of variance in home and host country KYC/AML regulation, the overseas branches/subsidiaries were required to adopt the more stringent regulation of the two.
- While opening accounts, banks should ensure that the name/s of the customer does/do not appear in the United Nations' Security Council Resolutions (UNSCRs) list. Furthermore, banks should scan all existing accounts to ensure that no account is held by or linked to any of the entities or individuals included in the list. Full details of accounts bearing resemblance with any of the individuals/entities in the list should immediately be intimated to the Reserve Bank and FIU-IND.
- Banks were required to put in place adequate screening mechanism as an integral part of their recruitment/hiring process of their personnel.

Krishna Bank Ltd. (LKB) with the Centurion Bank of Punjab Ltd. (CBOP). The scheme came into force with effect from the commencement of business on August 29, 2007. Under the same statutory provisions, the Scheme of Amalgamation of Centurion Bank of Punjab Ltd. with HDFC Bank Ltd. was sanctioned by the Reserve Bank on May 20, 2008 and the Scheme came into force with effect from the commencement of business on May 23, 2008.

VI.25 Consequent to the global acquisition of banking business (excluding its credit card and travel related business) of American Express Bank Ltd. (AEBL) by Standard Chartered Bank as a stock sale, the Reserve Bank sanctioned amalgamation of the Indian branches of AEBL with the Indian branches of Standard Chartered Bank on March 5, 2008. Furthermore, American Express Banking Corporation (AEBC), the parent bank of AEBL was issued a limited banking licence on 'stand still basis' under Section 22 of BR Act, 1949 to open its maiden branch in New Delhi for conducting the business relating to credit cards, travel related services and institutional deposits of AEBL which was transferred to it prior to the sale of AEBL's banking business to Standard Chartered Bank. Authorisation for four credit card centres was given to AEBC, in lieu of earlier authorisation issued to erstwhile AEBL.

VI.26 Notifications dated February 7, 2008 and April 9, 2008 were issued relating to change of name of "Sonali Bank" to "Sonali Bank Limited" and Arab Bangladesh Bank Limited" to "AB Bank Limited", respectively, in terms of clause (c) of sub-section (6) of Section 42 of the Reserve Bank of India Act, 1934 (2 of 1934).

VI.27 No fresh opening of off-shore banking units (OBUs) was reported during the year. Seven OBUs of six banks, *viz*., State Bank of India, Bank of Baroda, Union Bank of India, Punjab National Bank, ICICI Bank Ltd. and Canara Bank continued to operate from three special economic zones (SEZs), *viz*., SEEPZ (Mumbai), Noida and Kochi.

VI.28 State Bank of India was granted an in-principle approval for setting up a subsidiary to act as pension fund manager, subsequent to issue of guidelines by the Reserve Bank on pension fund management by banks on June 28, 2007.

VI.29 At end-June 2008, 74 banks were under liquidation all over India. The matter regarding early completion of liquidation proceedings is being followed up with official/court liquidators.

VI.30 Indian banks continued to expand their presence overseas. Between July 2007 and June 2008, Indian banks opened 17 branches/

subsidiaries/representative offices overseas (Table 6.1). At end-June 2008, 18 Indian banks (13 public sector banks and five private sector banks had presence abroad with a network of 203 offices (131 branches, 43 representative offices, seven joint ventures and 22 subsidiaries) in 51 countries.

VI.31 During the calendar year 2007, the Reserve Bank issued 19 approvals for opening branches by foreign banks in India. Several foreign banks opened branches and representative offices in India during the year (Table 6.2). Since July 2007, permission has been granted to the three existing banks to open 18 branches and to five new foreign banks, (*viz*., JSC VTB Bank, UBS AG, Dresdner Bank AG, American Express Banking Corporation and United Overseas Bank Ltd.) to open one branch each in India. At end-June 2008, 30 foreign banks were operating in India with 279 branches. Besides, 41 foreign banks were also operating in India through representative offices.

NPA Management

VI.32 Banks in India have several mechanisms for resolution of their NPAs. The legal forums available to banks include: the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act, 2002), the Recovery of Debts due to Banks and Financial Institutions Act, 1993 (RDDB Act) and the forum of *Lok Adalats* (People's court). Among the three routes, the mechanism through Debt Recovery Tribunals has been the most successful, closely followed by the SARFAESI Act. The mechanism of Lok Adalats has also been successfully used in resolving a large number cases involving smaller amount (Table 6.3).

Table 6.1: Offices of Indian Banks Opened Abroad – July 2007 to June 2008

Name of the Bank	Type of presence	Country	Place
1	2	3	4
Bank of Baroda	Branch	South Africa	Johannesburg
	Branch	United Kingdom	London
	Branch	Bahrain	Manama
	RO	Australia	Sydney
Bank of Baroda (Ghana) Ltd.	Subsidiary	Ghana	Accra
Bank of Baroda (Trinidad and Tobago) Ltd.	Subsidiary	Trinidad & Tobago	Port of Spain
Bank of India	RO	South Africa	Johannesburg
Federal Bank Ltd.	RO	UAE	Abu Dhabi
ICICI Bank Ltd.	Branch	Qatar	Doha (QFC)
	Branch	USA	New York
Indian Overseas Bank	RO	Vietnam	Ho Chi Minh City
Punjab National Bank	Branch	Hong Kong	Hong Kong
Union Bank of India	RO	UAE	Abu Dhabi
Bank of India	Branch	United Kingdom	Glasgow
Union Bank of India	Branch	Hong Kong	Central Hong Kong
Bank of India	Subsidiary	Tanzania	Dar-E-Salaam
Axis Bank Ltd.	RO	UAE	Dubai

RO: Representative Office.

Table 6.2: Offices of Foreign Banks Opened in India – July 2007 to June 2008

Name of the Bank	Type of presence	Place
1	2	3
Deutsche Bank AG	Branch	Kolhapur, Aurangabad
Standard Chartered Bank	Branch	Silguri, Jalgaon
Barclays Bank PLC	Branch	Junagarh
HSH Nordbank AG (Germany)	RO	Mumbai
Woori Bank (South Korea)	RO	New Delhi
Westpac Banking Corporation, (Australia)	RO	Mumbai
Royal Bank of Canada (Canada)	RO	Mumbai
FirstRand Bank Ltd. (South Africa)	RO	Mumbai
Skandinaviska Enskilda Banken AB (Sweden)	RO	New Delhi
Bayerische Landesbank (Germany)	RO	Mumbai
Citibank N.A.	Branch	Akola
JSC VTB Bank (Russia)	Maiden Branch	New Delhi

RO: Representative Office.
Note: Data are provisional.

Corporate Governance and Corporate Social Responsibility

VI.33 In order to highlight the developments that are taking place worldwide regarding sustainable development as also to raise the level of awareness, the Reserve Bank issued guidelines introducing the concepts of corporate social responsibility (CSR), sustainable development (SD) and non-financial reporting (NFR). CSR entails the integration of social and environmental concerns by companies in their business operations as also in interactions with their stakeholders. SD essentially refers to the process of maintenance of the quality of environmental and social systems in the pursuit of economic development. NFR is basically a system of reporting by organisations on their activities especially with regard to the triple bottomline, *i.e.*, the environmental, social and economic accounting. Global warming and climate change are particularly important in the context of sustainable development.

Table 6.3: Resolution of NPAs
(Cumulative as at end-March 2008)

(Amount in Rs. crore)

Resolution Mechanism	No.	Amount	No.	Amount	No.	Amount
1	2	3	4	5	6	7
SARFAESI	Notices Issued		Recovery		Compromise Proposals	
	279,996	56,060	172,809	15,415	62,432	9,043
Debt Recovery Tribunals*	Cases Filed		Adjudicated Cases		Recovery	
	79,169	1,26,378	45,088	58,719	N.A.	21,541
Lok Adalats	Cases Filed		Cases Decided		Recovery	
	1,164,650	7,740	404,378	2,009	322,732	885

* : No. of DRTs/DRATs was at 29 and 5, respectively, at end-September 2007.
N.A. : Not available.

VI.34 The Banking Companies (Acquisition and Transfer of Undertakings) and Financial Institutions Laws (Amendment) Act, 2006 came into force from October 16, 2006 which required the Central Government to nominate, on the recommendation of the Reserve Bank, a person possessing necessary experience and expertise in matters relating to regulation or supervision of commercial banks instead of nominating an officer of the Reserve Bank. Effectively, all the then existing directors on boards of nationalised banks were replaced with retired officials with effect from February 27, 2007. The amendment to the above Act also introduced a new Section 9(A) and empowered the Reserve Bank to appoint one or more additional directors, if found necessary, in the interest of banking policy/public interest/interest of the bank or the depositors. In terms of the above Section, the Reserve Bank appointed an additional director on the Board of Punjab and Sind Bank. Similarly, the State Bank of India (Subsidiary Banks Laws) Amendment Act, 2007, came into force from July 9, 2007, which required the Reserve Bank to nominate a person possessing necessary experience and expertise in matters relating to regulation or supervision of commercial banks instead of nominating an officer of the Reserve Bank. Accordingly, all the then existing directors on boards of subsidiary banks of State Bank of India were replaced with retired officials.

VI.35 The Reserve Bank also laid down the ‘fit and proper’ criteria for the elected directors on the Boards of nationalised banks and associate banks of State Bank of India (Box VI.5).

VI.36 With a view to reducing the burden on boards of banks on account of the calendar of reviews to be undertaken by them and to ensure that the calendar of reviews reflects the present day concerns, the calendar items were revised in April 2008. The above calendar outlines the critical minimum requirements of review and the bank boards will have the discretion to prescribe additional reviews to suit their requirements. The revised schedule, which is required to be in force with effect from June 2008, would be under the two heads, *viz.*, ‘review of operations’ and ‘review of strategy’. Banks were also advised that in every board meeting a separate time slot should be allocated for taking up strategy review for business plan – targets and achievement, review of non-fund business, human resources management, training and industrial relations, new prospective business/products lines and closure of existing business/products lines.

Supervisory Initiatives

VI.37 The scope and coverage of off-site returns submitted by banks to the Reserve Bank under off-site monitoring and surveillance (OSMOS) system is periodically revised to incorporate new regulatory

Box VI.5
Fit and Proper Criteria for Elected Directors of Nationalised Banks and Associate Banks of State Bank of India

The Reserve Bank had issued 'fit and proper' criteria for directors on the boards of private sector banks in June 2004 based on the Report of the Consultative Group of Directors of Banks/Financial Institutions (Chairman: Shri A.S. Ganguly). Extending this further, the Reserve Bank notified in November 2007 'fit and proper' criteria for elected directors on the boards of nationalised banks and associate banks of State Bank of India as detailed below:

a) Nationalised banks and associate banks of SBI are required to constitute a 'nomination committee' consisting of a minimum of three directors (all independent directors/non-executive directors) from amongst the board of directors. The board of directors should also nominate one among them as Chairman of the nomination committee. The quorum required is three, including the chairman. At the time of constituting the nomination committee, the board can decide on its tenure.

b) The nomination committee is required to undertake a process of due diligence to determine the 'fit and Proper' status of the existing elected directors/person to be elected as a director under Sec.9(3)(i) of the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970/80 (as amended in 2006) in the case of nationalised banks and under Sec.25 (1)(d) of the State Bank of India (Subsidiary Banks) Act, 1959 (as amended in 2007) in the case of associate banks of SBI. For this purpose, banks have to obtain necessary information and declaration from the existing elected directors/ persons, who file their nominations for election. The nomination committee is required to meet before the last date of acceptance of nominations in case of candidates to be elected and decide whether or not the person's candidature should be accepted based on certain criteria.

The nomination committee is required to determine the 'fit and proper' status of the existing elected directors/ proposed candidates based on the broad criteria such as: educational qualification; experience and field of expertise; and track record and integrity.

The nomination committee should see whether non-adherence to any of the above criteria would hamper the existing elected director/proposed candidate from discharging the duties as a director on the board of the bank. Furthermore, the candidate coming to the adverse notice of any authority/regulatory agency or insolvency or default of any loan from any bank or financial institution would make the candidate unfit and improper to be a director on the board of a bank.

c) It is desirable that the board ensures, in the public interest, that the elected directors execute the deed of covenants as recommended by the Ganguly Group after the election and also every year as on March 31. The deed of covenants contain, *inter alia*, the responsibilities, ethical values and disclosure standards from the directors and role of expectations of directors and banks.

The nomination committee was also required to complete the process of determining the 'fit and proper' status of the existing elected directors on the board of the bank. Further, it is mandatory for all the elected directors to furnish a simple declaration every year as on March 31 that the information already provided by them has not undergone any change and where there is any change, requisite details are furnished by the directors forthwith. If there are any significant changes, the nomination committee is required to undertake the due diligence exercise afresh and examine the 'fit and proper' status of the director.

changes and other data requirements. The last revision of the off-site returns was done in December 2004. A revision of the off-site returns was necessitated on account of new regulatory prescriptions, changes in supervisory focus, other additional reporting requirements and improvements in existing reporting/data processing. Accordingly, a comprehensive review of the coverage and scope of the off-site returns is currently underway.

VI.38 In view of the implementation of New Capital Adequacy Framework in phases with effect from March 31, 2008, it was felt necessary to devise a new capital adequacy return under the off-site reporting framework. Accordingly, an internal group suggested revision in the reporting format.

VI.39 Banks have so far been submitting off-site returns to the Reserve Bank through e-mail using stand alone software. It was decided that online returns filing system (ORFS) of the Reserve Bank should be the single window data receptacle for receiving all the data from external entities. Consequently, it was decided to migrate all the returns to the ORFS. The system requirement specification (SRS) has been completed for all the 22 existing returns and is in different stages of implementation. The new Basel II return would also be implemented on ORFS. The structural liquidity statement (STL) as per revised asset liability management guidelines, has already been made operational from February 2008. Furthermore, to obviate the problem of distribution of modified/new reports to the regional offices, it is envisaged that all the reporting tools would also be web-enabled so that regional offices would immediately get the latest modified reports.

Monitoring of frauds

VI.40 While introduction of new products and innovations in banking has resulted in greater efficiency and quicker delivery of services, it has also exposed banks to greater operational risks. This is observed in the increase in number of frauds reported by banks to the Reserve Bank (Table 6.4).

VI.41 The Reserve Bank as a part of its supervisory process has been sensitising banks from time to time about common fraud prone areas, *modus operandi* of frauds and the measures to be taken by them to prevent/reduce the incidence of frauds. Banks were directed to report fraud cases involving Rs.1 lakh and above to the Reserve Bank. On receipt of fraud report from banks, the Reserve Bank advises the concerned banks (i) to file a complaint with police/ CBI; (ii) examine staff accountability and complete proceedings against the erring staff expeditiously; (iii) take steps to recover the amount involved in the fraud; (iv) claim insurance wherever applicable; (v) streamline the system and procedures; and (vi) plug loopholes in the system so that similar frauds do not recur. Public sector banks are required to report frauds involving Rs.1 crore and above to the Economic Offences Wing of Central Bureau of Investigation and those below Rs.1 crore to local police. Private sector banks are required to report fraud cases involving Rs.10,000 and above to local police. Private sector and foreign banks are required to report frauds involving Rs.1 crore and above to Serious Frauds Investigation Office (SFIO).

Table 6.4: Frauds in the Banking Sector

(Amount in Rs. crore)

Year	All frauds		Large Value frauds	
	No.	Amount	No.	Amount
1	2	3	4	5
2001-02	2,035	556	76	486
2002-03	4,056	502	82	375
2003-04	6,853	776	76	421
2004-05	10,450	779	96	461
2005-06	13,914	1,381	194	1094
2006-07	23,618	1,194	150	840
2007-08	21,247	1,059	177	659

VI.42 Caution Advices were issued in confidence to banks by the Reserve Bank containing the details of borrowers involved in frauds of Rs.25 lakh and above so that banks could exercise due care while considering sanction of credit facilities to the concerned entities.

Customer Service

VI.43 The Banking Codes and Standards Board of India (BCSBI), set up in 2006, continued its efforts to improve customer service in banks by way of active dialogue with member banks to translate the promises made by them in the Code of Bank's Commitment to Customers (Code) into tangible performance. Seventy scheduled commercial banks are members of BCSBI at present. In order to ascertain the actual position of implementation of the Code, the BCSBI commissioned a survey of 700 branches of member banks in five cities, Chennai, Kolkata, Mumbai, New Delhi and Hyderabad to ascertain systems in vogue for distribution of copies of the Code, transparency in various banking services offered, tariff schedule, interest rates, KYC procedures, status of opening of 'no-frills accounts' grievance redressal systems *etc*. The survey findings revealed that banks need to gear up their machinery in disseminating the contents of the Code to all their customers, reaching out to customers with information on terms and conditions of their deposits and their implications, bringing out transparency in their tariff Schedule, educating their customers on the availability of a system for redressal of their grievances and in fulfilling certain basic obligations to borrowers *etc*. The survey findings were discussed with the banks concerned and CEOs of banks agreed to set right the deficiencies.

VI.44 The Working Group on Reasonableness of Bank Charges (Chairman: Shri N. Sadasivan) that submitted its report in September 2006 suggested that BCSBI may track from time to time, the changes in the levels of the service charges and on a comparative basis, to identify any abnormal increases. Accordingly, BCSBI made a preliminary sample study of a few select member banks' charges on most commonly availed banking services, namely, penalty for non-maintenance of minimum balance, charges for collection of outstation cheques, for issue of demand drafts and cheque books and for closure of savings bank accounts. Prima-facie, the study revealed that over and above the high minimum balance prescription by foreign and new private sector banks, the penalty charged by them for non-maintenance of the minimum balance is also on the higher side as compared with public sector and old private sector banks. The other four charges in the sample study are not totally out of alignment across banks. The status reported in the prescribed format of annual statement of compliance as on December 31, 2007 was discussed with the chief executive officers/executive directors of each bank, against the backdrop of the sample survey findings and mutually agreed time frames were fixed for implementation of the various Code provisions. Barring a few, member banks have adopted model policies brought out by IBA on cheque collection, grievance redressal, security repossession and compensation after incorporating certain suggestions made by BCSBI. The review also showed that banks are taking active steps to improve dissemination of information and to enhance transparency in their day to day dealings with customers. While 15 member banks have completed the task of distribution of copies of the Code to all their existing customers, remaining banks are expected to complete the task shortly. The recent spate of cases by customers alleging selling of products by banks without giving full details of the products highlights the importance of implementing the Code provisions not only in letter but also in spirit.

VI.45 In terms of the fair practices code for lenders guidelines issued in May 2003, the banks/FIs were required to furnish a copy of the loan agreement along with a copy each of all enclosures quoted in the loan agreement to all the borrowers at the time of sanction/disbursement of loans. The instructions were reiterated in August 2007, as it was observed that some banks were furnishing a copy of the loan agreement only on request made by the borrowers. Similar guidelines were also issued for NBFCs.

VI.46 Banks were advised from time to time to constitute the branch level customer service committees. It was, however, understood that such Committees were either non-existent or in a dormant state. In order to encourage a formal channel of communication between the customers and the bank at the branch level, banks were advised in September 2007 to take necessary steps to strengthen the branch level committees with greater involvement of customers. Banks were advised that it was desirable that branch level committees included their customers too, including senior citizens. The guidelines also specified reporting requirements for the branch level committees to the Standing Committee on Customer Service and conduct of regular meeting.

VI.47 Some banks were offering special term deposit products to customers, in addition to regular term deposits, ranging from 300 days to five years, with lock-in periods ranging from 6 to 12 months and prohibiting premature withdrawal during the lock-in period. In case of premature withdrawal during the lock-in period, no interest was paid. Furthermore, rates of interest offered on these deposits were not in tune with the rates of interest on normal deposits. However, part pre-payment was allowed by some banks, subject to certain conditions. In this connection, the Reserve Bank advised the banks that they should not discriminate in the matter of interest paid on deposits, between one deposit and another, accepted on the same date and for the same maturity, whether such deposits are accepted at the same office or at different offices of the bank. The only exceptions were allowed in respect of fixed deposit schemes specifically for resident Indian senior citizens under which banks could offer higher and fixed rates of interest as compared to normal deposits of any size and single term deposits of Rs.15 lakh and above on which banks could offer varying rates of interest on the basis of size of the deposits. Banks were advised in October 2007 that the special schemes, with lock-in periods and other features referred to above, were not in conformity with the instructions contained in the Master Circular on

'Interest Rates on Rupee Deposits held in Domestic Deposits, *etc*.' and that it should be discontinued and compliance reported.

VI.48 It was felt that adverse publicity in view of the rise in the number of disputes and litigations against banks for engaging recovery agents in the recent past would result in serious reputational risk for the banking sector as a whole. The Reserve Bank, in April 2008 therefore, issued detailed guidelines on the policy, practice and procedure involved in the engagement of recovery agents by banks in India (Box VI.6).

VI.49 In May 2008, banks were directed to ensure that a suitable mechanism exists for receiving and addressing complaints from customers/constituents with specific emphasis on resolving them fairly and expeditiously regardless of the source of the complaints. In this regard, banks were also advised to: (i) ensure that the complaint registers are kept at prominent place in their branches which would make it possible for the customers to enter their complaints; (ii) have a system of acknowledging the complaints, where the complaints are received through letters/ forms; (iii) fix a time frame for resolving the complaints received at different levels; (iv) ensure that redressal of complaints emanating from rural areas and those relating to financial assistance to priority sector and Government's poverty alleviation programmes also forms part of the above process; (v) prominently display at the branches, the names of the officials who can be contacted for redressal of complaints, together with their direct telephone number, fax number, complete address (not Post Box No.) and e-mail address.

VI.50 Banks were also advised that where the complaints are resolved within the next working day, they need not include the same in the statement of complaints required to be disclosed along with financial results. This is expected to serve as an incentive to the banks and their branches to resolve the complaints within the next working day. Furthermore, banks were also advised that where the complaints were not redressed within one month, the concerned branch/controlling office should forward a copy of the same to the concerned nodal officer under the banking ombudsman scheme and keep him updated regarding the status of the complaint. Furthermore, to ensure that the customer is made aware of his rights to approach the concerned banking ombudsman in case he is not satisfied with the bank's response, banks were advised to indicate in the final letter sent to the customer regarding redressal of the complaint that the complainant can also approach the concerned Banking Ombudsman. Banks were also advised to give wide publicity to the grievance redressal machinery through advertisements and also by placing them on their websites.

VI.51 Banks were advised that all telemarketers, *viz.,* direct selling agents/direct marketing agents (DSAs/DMAs) engaged by them register themselves with Department of Telecommunications (DoT) as telemarketers. Further, they were also advised to instruct DSAs/DMAs/telemarketers to scrub the calling list and not to make any telemarketing calls without scrubbing their calling lists with national do not call registry (NDNC) as envisaged in the provisions of the Unsolicited Commercial Communications Regulations, 2007 (Box VI.7).

VI.52 In the area of customer service, the cherished principles in treating customers fairly are transparency, reasonableness, truth in selling, confidentiality and assistance when needed, apart from effective grievance redressal mechanism. The Reserve Bank is continuously taking steps to ensure that customers are treated fairly. Banking Ombudsman offices continue to receive the complaints relating to grievances against commercial banks, regional rural banks and scheduled primary co-operative banks. Complainants have the facility to send the complaints by email, online or by post. The complaints are tracked by Banking Ombudsman offices by means of a complaint tracking software. During 2007-08, 47,887 complaints were received by 15 Banking Ombudsman offices as against 38,638 complaints received during 2006-07. In terms of the Banking Ombudsman Scheme 2006 (as amended

Box VI.6
Guidelines on Recovery Agents

The guidelines on recovery agents, *inter alia*, covered various aspects of engagement, incentives, methods, training, complaints redressal and penalty.

Engagement of Recovery Agents

- Recovery agent was defined to cover agencies engaged by the bank and the agents/employees of the concerned agencies.
- Banks are required to follow a due diligence process for engagement of recovery agents. Furthermore, banks need to ensure that the agents engaged by them in the recovery process carry out verification of the antecedents of their employees, which may include pre-employment police verification, as a matter of abundant caution.
- To ensure due notice and appropriate authorisation, banks should inform the borrower the details of recovery agency firms/companies while forwarding default cases to the recovery agency. Furthermore, the agent should also carry a copy of the notice and the authorisation letter from the bank along with the identity card issued to him by the bank or the agency firm/company.
- The notice and the authorisation letter should, among other details, also include the telephone numbers of the relevant recovery agency. Banks were advised to ensure that there was a tape recording of the content/text of the calls made by recovery agents to the customers, and *vice-versa*. Banks need to take reasonable precaution such as intimating the customer that the conversation is being recorded.
- The up-to-date details of the recovery agency firms/companies engaged by banks may also be posted on the bank's website.
- Where a grievance/complaint has been lodged, banks should not forward cases to recovery agencies till it has been finally disposed of. However, where the borrower is continuously making frivolous/vexatious complaints, it may continue with the recovery proceedings even if a grievance/complaint is pending with them.
- Each bank should have a mechanism whereby the borrowers' grievances with regard to the recovery process can be addressed.

Incentives to Recovery Agents

- It was understood that some banks set very stiff recovery targets or offer high incentives to recovery agents. Banks were, therefore, advised to ensure that the contracts with the recovery agents did not induce adoption of uncivilised, unlawful and questionable behaviour or recovery process.

Methods followed by Recovery Agents

- Banks were advised to strictly adhere to the various guidelines issued by the Reserve Bank such as fair practices code for lenders, guidelines on credit card operations and also the code of banks' commitment to customers formulated by BCSBI during the loan recovery process.

Training for Recovery Agents

- Banks should ensure that the recovery agents are properly trained to handle with care and sensitivity, their responsibilities, in particular aspects such as hours of calling, privacy of customer information, *etc*.
- The Reserve Bank requested the Indian Banks' Association to formulate, in consultation with Indian Institute of Banking and Finance (IIBF), a certificate course for direct recovery agents with minimum 100 hours of training. Once the above course is introduced by IIBF, banks should ensure that over a period of one year, all their recovery agents undergo the above training and obtain the certificate from the above institute.

Taking possession of property mortgaged/hypothecated to banks

- Banks were advised that it was desirable that they rely only on legal remedies available under the relevant statutes such as the SARFAESI Act while enforcing security interest without intervention of the courts.
- Where banks have incorporated a re-possession clause in the contract with the borrower and rely on such re-possession clause for enforcing their rights, they were advised to ensure that the re-possession clause was legally valid, complies with the provisions of the Indian Contract Act in letter and spirit, and that such repossession clause was clearly brought to the notice of the borrower at the time of execution of the contract. The terms and conditions of the contract should be strictly in terms of the recovery policy.

Use of forum of Lok Adalats

- Banks were encouraged to use the forum of Lok Adalats for recovery of personal loans, credit card loans or housing loans with less than Rs.10 lakh as suggested by the Supreme Court.

Utilisation of credit counsellors

- Banks were encouraged to have in place an appropriate mechanism to utilise the services of the credit counsellors for providing suitable counselling to the borrowers where it became aware that the case of a particular borrower deserved sympathetic consideration.

Complaints against the bank/its recovery agents

- Banks were advised that complaints received by the Reserve Bank regarding violation of the above guidelines and adoption of abusive practices followed by banks' recovery agents would be viewed seriously.
- The Reserve Bank may consider imposing a ban on a bank from engaging recovery agents in a particular area, either jurisdictional or functional, for a limited period. Similar supervisory action could be attracted when the High Courts or the Supreme Court pass strictures or impose penalties against any bank or its directors/officers/agents with regard to policy, practice and procedure related to the recovery process.
- It is expected that banks would, in the normal course ensure that their employees also adhere to the above guidelines during the loan recovery process.

Periodical Review

- Banks engaging recovery agents were advised to undertake a periodical review of the mechanism to learn from experience, to effect improvements, and to bring to the notice of the Reserve Bank suggestions for improvement in the guidelines.

Box VI.7
Unsolicited Commercial Communications – National Do Not Call Registry

In view of the continuous complaints from credit card subscribers and the observations of the High Court of Delhi in the context of public interest litigation in this regard, the Telecom Regulatory Authority of India (TRAI) framed the Telecom Unsolicited Commercial Communications Regulations 2007 for curbing unsolicited commercial communications (UCC). Furthermore, the Department of Telecommunications (DoT) issued relevant guidelines for telemarketers along with the registration procedure on June 6, 2007. These regulations envisaged that all the telecom service providers would set up a mechanism to receive requests from subscribers who do not want to receive UCC and for this purpose they will maintain and operate a 'private do not call' list. The list will include telephone numbers and other details of all such subscribers who do not wish to be called. The telephone numbers and area code from this list will be updated online by the operators to a national do not call registry (NDNC) which will be maintained by National Informatics Centre (NIC). Telemarketers will have to register in the NDNC Registry. They would submit online the calling list to the NDNC Registry where the list will be modified/scrubbed by excluding the numbers listed in the registry and the modified/scrubbed list will be online transferred back to the telemarketers for making calls. For the effective implementation of the UCC Regulations, TRAI has mandated that the telemarketers have to register themselves with the Department of Telecommunications (DoT) Ministry of Communication and Information Technology, Government of India within three months of the issue of the guidelines for telemarketers by DoT, failing which their telecom services may face disconnection. The telecom service providers were directed to disconnect the telephone connections provided to the telemarketers in case of violation of the UCC Regulations by them.

In alignment with the above policy, banks were advised to implement the following instructions:

- Banks should not engage telemarketers (DSAs/DMAs) who do not have a valid registration certificate from DoT, Government of India, as telemarketers.
- Banks should furnish the list of telemarketers (DSAs/ DMAs) engaged by them along with the registered telephone numbers being used by them for making telemarketing calls to IBA to enable IBA to forward the same to TRAI.
- Banks should ensure that all telemarketers (DSAs/ DMAs) presently engaged by them register themselves with DoT as telemarketers.
- In addition to DSAs/DMAs, banks/their call centres, who make solicitation calls, are also required to be registered as telemarketers with DoT and banks/their call centres, while registering themselves as telemarketers, are required to give the details of the telephone numbers used for telemarketing.
- Banks were also advised to instruct DMAs/DSAs/ telemarketers to scrub the calling list and not to make any telemarketing calls without scrubbing their calling lists with NDNC as envisaged in the provisions of the Unsolicited Commercial Communications Regulations, 2007.

up to May 2007), bank customers and banks can appeal to the Appellate Authority against the decisions given by Banking Ombudsman. During 2007-08, 186 such appeals were received.

VI.53 The Reserve Bank institutionalised the process of examining the important feedback emanating out of the complaints received at the Banking Ombudsman Offices. Meetings, designated as 'Customer Service Meeting', are held on a quarterly basis to examine systemic issues reported by the Banking Ombudsmen. The meeting also focuses on other customer service issues, including the Code and the Banking Ombudsman (BO) Scheme. The meetings are attended by members at the senior level representing regulatory and supervisory departments of the Reserve Bank, Banking Ombudsmen, Indian Banks' Association and Banking Codes and Standards Board of India (BCSBI). It adopts an integrated approach to ensure that appropriate corrective action is taken through self-regulation or the Reserve Bank regulation in a time bound manner. The meeting also ensures that a common approach, in the interest of the customer, is adopted. The consensus/decisions/ recommendations evolved during the meeting are only advisory in nature and need to be examined by the concerned regulatory departments.

Regional Rural Banks

VI.54 Consequent upon the initiation of the process of amalgamation of Regional Rural Banks (RRBs) by the Government of India with effect from September 2005 in terms of Section 23A of the Regional Rural Banks Act, 1976, the number of RRBs declined to 91 operating in 26 States across 585 districts with a network of 14,788 branches as on March 31, 2008. With further amalgamation, and formation of a new RRB in Union Territory of Puducherry, the total number of RRBs declined to 88 as on May 30, 2008.

VI.55 The Government of India issued a notification dated May 17, 2007 specifying 'Regional Rural Bank' as 'bank' for the purpose of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002. In May 2007, RRBs were allowed to take up corporate insurance agency business without risk participation for distribution of all insurance products without prior permission from the Reserve Bank. RRBs were also permitted to take up consortium lending within the permissible exposure limits. In order to strengthen the capital structure of RRBs as also in the context of financial stability of the whole system, it was announced in the Mid-Term Review of the Annual Policy Statement for the year 2007-08 that RRBs should disclose the level of CRAR as on March 31, 2008 in their balance sheets and a road-map be evolved for achieving the desired level of CRAR by these banks.

VI.56 With a view to improving the performance of RRBs and giving more powers and flexibility to the Boards in decision making, the Reserve Bank had constituted a Task Force (Chairman: Dr. K. G. Karmakar) in September 2006 to deliberate and suggest areas where more autonomy could be given to the Boards, particularly in matters of investments, business development and staffing, *viz*., determination of staff strength, fresh recruitment and promotions, among others. Majority of recommendations made by the Task Force have been accepted/implemented.

VI.57 Consequent upon the announcement made in the Mid-Term Review of the Annual Policy Statement for the year 2007-08, and in order to prepare RRBs to adopt appropriate technology and migrate to core banking solutions for better customer services, a Working Group (Chairman: Shri G. Srinivasan) was constituted with representatives from NABARD, sponsor banks and RRBs to prepare a roadmap. The Group has since submitted its report in August 2008. The Committee (Chairman: Dr. Y.S.P. Thorat) constituted to formulate a comprehensive HR policy for RRBs submitted its report to the Government of India in October 2007 which is under examination of the Government of India.

VI.58 In order to work out the modalities of assistance to be provided to RRBs, a Working Group (Chairman: Shri G. Padmanabhan) was constituted to explore various affordable information and communication technology (ICT) based solutions suitable for RRBs and to identify the cost elements and recommend the manner and criteria for funding such ICT solutions, including installation of solar power generating devices in remote areas. The Group's report has been placed in the web-site for public comments.

VI.59 The Deposit Insurance and Credit Guarantee Corporation (DICGC) has been extending insurance cover to small depositors with the objective of maintaining the confidence of small investors in the banking system of the country and promoting financial stability. As part of public awareness program, the DICGC disseminates information about deposit insurance scheme to the public through insured banks, its website and booklet on guidelines on deposit insurance. The DICGC's website, *inter alia*, furnishes detailed information on deposit insurance system in India, answers to 'frequently asked questions' (FAQs), manner of settlement of claims, list of insured banks, details of claims settled and circulars issued to insured banks. For the convenience of the depositors, the DICGC releases information/data on claims settled with the name of the bank along with the amount on its web-site. During 2007-08, the DICGC settled aggregate claims for Rs.161 crore (22 original claims and 18 additional claims) of co-operative banks.

VI.60 The DICGC aims at ensuring prompt reimbursement to the depositors, particularly small depositors (Box VI.8).

Co-operative Banks

VI.61 The UCB sector has witnessed significant improvement in recent years. The significant growth in the number of UCBs in late 1990s and in the beginning of the current decade led to certain weaknesses in the sector that adversely affected public perception. In response to the above situation, the Reserve Bank as a first step announced in May 2004 that licenses would not be issued for setting

Box VI.8
Expeditious Settlement of Claims of Depositors of Insured Banks

The Deposit Insurance and Credit Guarantee Corporation (DICGC) has taken several initiatives to eliminate delay in settlement of claims of the depositors. The Corporation has formulated policy guidelines to mitigate hardship to the depositors of insured banks due to delay on account of liquidation order having been challenged in court of law. Further, in extraordinary situations where the DICGC does not receive the claim list from liquidators even after considerable delay and prolonged correspondence, it issues an advertisement in local newspapers informing the depositors about the non-receipt of claims at its end and requesting them to make a claim with the liquidators under intimation to DICGC. However, it has been observed that though this has yielded the desired results in some cases, in many other cases the response has been poor. The Corporation has studied the reasons for delay in settlement of claims and taken further steps to remove the impediments in the process. In a special situation where claim list has not been submitted by the liquidator even after a long period because of delay in audit of accounts, the DICGC has suggested for appointment of Chartered Accountant (CA) firm by the Registrar of Co-operative Societies (RCS) to assist the liquidator of co-operative banks in completing the audit and/or preparation of the claim list. On being satisfied about the authenticity of claims, the DICGC may waive, as a special case, the submission of audited balance sheet as on the cut-off date. It has been suggested by the Corporation that CA for the above purpose may be appointed by the RCS on the recommendation of the sub-committee of the Task Force on Urban Co-operative Bank (TAFCUB) and they should carry out audit as per the terms approved by the sub-committee. The Corporation will also consider requests in other genuine circumstances on a case-to-case basis.

The cumulative impact of the above policies relating to settlement of claims during the pendency of court cases, issue of advertisement by the Corporation regarding non receipt of claim list, among others has been encouraging and the DICGC has settled such claims in respect of 14 banks for total amount of Rs.132 crore in respect of 193,873 depositors. Further, the DICGC had revised the policy on joint deposit accounts such that joint deposits held in the names of A & B and B & A have been treated as two separate accounts, eligible for maximum claim of Rs.1 lakh each. In response to this policy change additional claims in respect of nine banks amounting to Rs.216 lakh were settled.

Though the above steps have brought about some relief to the depositors of failed banks, the corporation is concerned about the delay in receipt of claim list from liquidators of co-operative banks, which requires to be curtailed further.

up new UCBs pending a review of the legislative, regulatory and supervisory framework for UCBs. In March 2005, a draft 'Vision Document for UCBs' was prepared and placed in public domain. The Vision Document discussed the characteristics of the sector, analysed the problems afflicting these banks and proposed strategies for dealing with their problems. A significant proposal of the Vision Document related to addressing the problem of dual control of UCBs by signing of Memoranda of Understanding (MOUs) between the Reserve Bank and the respective State governments, and establishing a consultative platform for supervision of the banks. Accordingly, the Reserve Bank approached the States having large network of UCBs for signing MOUs. Since June 2005, MOUs have been signed with 19 State Governments and with the Central Government in respect of multi-State UCBs and Task Force on Urban Co-operative Banks (TAFCUB) have been formed with them. In all 1,597 UCBs (90.0 per cent) have been covered under the MoUs representing 95 per cent of deposits of the sector. The mechanism of TAFCUBs has been able to restore the confidence in the UCB sector and there has been significant improvement (Box VI.9).

VI.62 Based on the representations received from the UCB sector, the definition of Tier I UCBs was amended in March 2008. According to the revised definition tier I UCBs were defined as: (i) unit banks, *i.e.*, banks having a single branch/head office and those with deposits below Rs.100 crore, whose branches are located in a single district; (ii) banks with deposits below Rs.100 crore having branches in more than one district, provided the branches are in contiguous districts, and deposits and advances of branches in one district separately constitute at least 95 per cent of the total deposits and advances, respectively, of the bank; (iii) banks with deposits below Rs.100 crore, whose branches were originally in a single district but subsequently, became multi-district due to reorganisation of the district. The remaining UCBs are treated as Tier II UCBs. The deposit base of Rs.100 crore is determined on the basis of average of fortnightly net demand and time liabilities (NDTL) in the financial year concerned, and

Box VI.9
Impact of Vision Document on Urban Co-operative Banks

The impact of the various measures can be assessed through the changing profile of the sector. The number of Grade III and Grade IV UCBs taken together, implying weakness/sickness in UCBs, declined between March 2005 and March 2007. The number of UCBs in Grade III declined continuously after 2004. Although the UCBs in Grade IV increased at end-March 2005 and 2006, the number declined in end-March 2007 (Table A).

The overall asset quality of UCBs also improved with the gross NPAs of the UCBs declining from 23.2 per cent of total advances in 2005 to 17.0 per cent in 2007. The quality of assets and grade-wise distribution of UCBs over the last four years was also reflected in the improvement in the overall health of UCB sector.

The increased public confidence in the UCB sector is reflected in the growth in the deposits by 6.1 per cent during 2006-07 over and above the increase of 8.6 per cent during 2005-06, thereby reversing the declining trend of 2004-05. Similarly, advances increased by 9.8 per cent during 2006-07 on top of an increase of 7.1 per cent during 2005-06. The increased comfort of coordinated supervision/regulation in States that have signed MOUs enabled the Reserve Bank to expand additional business opportunities to the eligible UCBs in such States and to the multi-State UCBs. These facilities included permission to set up currency chests, sell mutual fund products, conduct insurance business on non-risk participation basis, open new ATMs, convert extension counters into branches and deal in foreign exchange as authorised dealer in category I and II. Further, as announced in the Annual Policy Statement for 2007-08, financially sound UCBs in such states were also permitted to open new branches, a facility which was discontinued in 2004.

Table A: Improvement in Financial Position of UCBs- 2004-2007

Year	No of UCBs	Gross NPAs (Rs. crore)	Gross NPA as a percentage of total advances	Migration of UCBs in different Grades				Percentage of UCBs in Grade III and IV
				I	II	III	IV	
1	2	3	4	5	6	7	8	9
2004	1,919	15,406	22.7	880	307	529	203	38.1
2005	1,872	15,486	23.2	807	340	497	228	38.7
2006	1,853	13,506	18.9	716	460	407	270	36.5
2007	1,813	13,363	17.0	652	598	295	268	31.1

that of advances on the basis of fortnightly average in the financial year concerned.

Prudential guidelines

VI.63 It was clarified in July 2007 that UCBs would be prohibited from extending any fund based or non-fund based credit facilities whether secured or unsecured to stockbrokers (against shares and debentures and against other securities such as fixed deposits, and LIC policies, among others) and extending any facility to commodity brokers (including issue of guarantees on their behalf). However, they were permitted to extend advances against units of mutual funds only to individuals as in the case of advances against the security of shares, debentures and bonds. Any credit facility in force, but not in consonance with the above instructions was required to be withdrawn/closed without any delay.

VI.64 The norms relating to amortisation of goodwill on merger in case of mergers of UCBs were modified in July 2007 taking into consideration the underlying provisions of AS-14 of Accounting Standards issued by the Institute of Chartered Accountants of India. Reviewing instructions on non-SLR investments, UCBs were allowed greater flexibility to invest in 'A' or equivalent rated CPs, debentures and bonds that are redeemable in nature, units of debt mutual funds and money market mutual funds, among others. Aligning with the directions issued to scheduled commercial banks, UCBs were advised in September 2007 to ensure that loan facilities were utilised by borrowers for the purpose sanctioned and action be taken against borrowers in case there was any diversion.

VI.65 In January 2008, UCBs also were advised not to classify education loans as consumer credit for the purpose of capital adequacy norms and apply risk weight of 100 per cent as against 125 per cent earlier.

VI.66 In September 2007, the existing instructions with regard to maintenance of statutory reserves and provisioning requirements on exposure of UCBs to district central co-operative banks (DCCBs), which had financial problems were modified with differing treatment accorded to i) DCCBs which have defaulted in payment/placed under directions; and ii) deposits with DCCBs under liquidation.

Customer Service

VI.67 UCBs were advised to ensure that cheques/drafts issued by clients containing fraction of a rupee were not rejected or dishonoured by them and that the concerned staff was well versed with the instructions, so that general public did not suffer. UCBs were required to ensure that appropriate action was taken against members of their staff who were found to have refused to accept cheques/drafts containing fraction of a rupee.

VI.68 In keeping with a recent Allahabad High Court judgment, UCBs were advised to generally insist that a person opening a deposit account makes a nomination. The bank should explain the advantages of a nomination facility to the depositor and, if the person still does not want to nominate, the bank should ask him to give a specific letter to the effect that he does not want to make nomination.

VI.69 UCBs were advised to lay down appropriate internal principles and procedures, so that usurious interest, including processing and other charges, were not levied by them on loans and advances. In laying down such principles and procedures in respect of small value loans, particularly, personal loans and such other loans of similar nature, banks were advised to take into account certain broad guidelines.

VI.70 In order to facilitate raising of capital funds (Tier I and Tier II), UCBs have been permitted to issue preference shares, *viz.*, (i) perpetual non-cumulative preference shares (PNPCS), (ii) perpetual cumulative preference shares (PCPS), (iii) redeemable non-cumulative preference shares (RNCPS), and (iv) redeemable cumulative preference shares (RCPS). Further, UCBs have also been permitted to raise term deposits for a minimum period of not less than five years, which will be eligible to be treated as Tier II capital.

VI.71 Extensive guidelines were issued on extension of safe deposit locker/safe custody article facility and access to safe deposit lockers/return of safe deposit articles by UCBs.

VI. 72 Similar to the guidelines issued to the scheduled commercial banks, UCBs were advised to ensure before launching new domestic deposit mobilisation schemes, that the provisions of the Reserve Bank's directives on interest rates on deposits, premature withdrawal of term deposits, sanction of loans and advances against term deposits, among others, issued from time to time, were strictly adhered to.

VI.73 On the lines of instructions issued to commercial banks, UCBs were advised to rely upon the Guardianship Certificate issued either by the District Court under Mental Health Act or by the Local Level Committees under the said Act for the purpose of opening/operating bank accounts for persons with autism, cerebral palsy, mental retardation and multiple disabilities. UCBs were also advised to ensure that their branches give proper guidance so that the parents/relatives of the disabled persons do not face any difficulty in this regard.

Business facilitation

VI.74 UCBs registered in those States that entered into memoranda of understanding (MoUs) with the Reserve Bank or those registered under Multi-State Co-operative Societies Act, 2002, were allowed to undertake insurance agency business as corporate agents without risk participation, subject to compliance with certain eligibility norms. UCBs were permitted to lay down policies with the approval of their boards for sanction of gold loans with bullet repayment option, subject to certain guidelines. UCBs, which are authorised to install on-site/off-site ATMs, as per the policy in force, were permitted to introduce ATM-cum-debit cards with the approval of their boards keeping in view the prescribed guidelines. UCBs were advised not to issue such cards in tie up with non-bank entities. Issuance of offline debit card was, however, not permitted. Also similar to the guidelines issued to commercial banks, a framework of service charges for implementation by all UCBs was prescribed by the Reserve Bank.

VI.75 The earlier guidelines prohibiting UCBs from acting as agents/sub-agents under money transfer service schemes (MTSS) were reviewed and it was decided that UCBs holding authorised dealer category I and II licence could act as agents/sub-agents under MTSS in conformity with the guidelines issued by the Reserve Bank, subject to the certain conditions. Also, UCBs were permitted to shift their branches from one city to another in their area of operation within the same State subject to the following conditions: (i) the new centre should be of the same or lower population group as the existing centre; (ii) a branch located in under-banked district can be shifted to another centre in under-banked district only; and (iii) the shifting should be beneficial to the bank in terms of cost and business.

VI.76 In terms of the earlier guidelines, UCBs were normally required to refrain from sanctioning loans to builders/contractors. However, where contractors undertake comparatively small construction work on their own, UCBs were permitted to consider extending financial assistance to them against hypothecation of construction material, provided such loans and advances were in accordance with the bye-laws of the UCBs and instructions/directives issued by the Reserve Bank from time to time. It was clarified to UCBs in February 2008 that they should not extend fund based/non-fund based facilities to builders/contractors for acquisition of land even as a part of a housing project. Furthermore, where land was accepted as collateral, valuation of such land should be at current market price only.

VI.77 The consolidation of the UCB sector through the process of merger of weak entities with stronger ones was set in motion by providing transparent and objective guidelines for granting no-objection to merger proposals. Pursuant to the issue of guidelines on merger of UCBs in February 2005, the Reserve Bank received 104 proposals for merger in respect of 91 banks. The Reserve Bank issued no objection certificate (NOC) in 67 cases. Of these, 53 mergers became effective upon the issue of statutory orders by the Central Registrar of Co-operative Societies (CRCS)/Registrar of Co-operative Societies (RCS) concerned. Twenty proposals for merger were rejected by the Reserve Bank, while four proposals were withdrawn by the banks. The remaining 13 were under consideration. Most of the target banks were loss-making UCBs. In a few cases, mergers were permitted even of profit making banks with the aim of consolidation and in some cases mergers were permitted in respect of such banks, as they were not considered viable on a stand-alone basis in the long run.

Rural Co-operatives

VI.78 Based on the recommendations of the Task Force on Revival of Rural Co-operative Credit Institutions (Chairman: Prof. A. Vaidyanathan) and in consultation with the State Governments, the Government of India approved a package for revival of the short-term rural co-operative credit structure. So far, twenty five States (Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh and West Bengal) have executed Memoranda of Understanding (MoUs) with the Government of India and the NABARD, as envisaged under the package. Eight States carried out necessary amendments to their Co-operative Societies Acts. An aggregate amount of Rs.3,348 crore were released by the NABARD as the Government of India's share. Seven State Governments released their share to the tune of Rs.338 crore for recapitalisation assistance of Primary Agricultural Credit Societies (PACS). Implementation and monitoring of the revival package are being overseen by the National Implementing and Monitoring Committee (NIMC) set up by the Government of India. Further, a study of the long-term co-operative credit structure was also entrusted to the same Task Force by the Government of India which submitted its report in August 2006. It was announced in the Union Budget 2008-09 that the Central Government and the State Governments have reached an agreement on the content of the package for revival of the long-term co-operative credit structure. The cost of the package was estimated at Rs.3,074 crore, of which the Central Government's share was at Rs.2,642 crore.

VI.79 In order to strengthen the capital structure as also in the context of financial stability of the entire financial system, State co-operative banks (StCBs) and district central co-operative banks (DCCBs) were required to disclose the level of CRAR as on March 31, 2008 in their balance sheets and thereafter every year as 'Notes on Accounts' to their balance sheets. StCBs/DCCBs were also issued guidelines on acceptance of special deposits with restrictive provisions and excessive interest rates charged on the lines issued to scheduled commercial banks.

VI.80 As on March 31, 2008, 121 out of 371 DCCBs and six out of 31 StCBs did not comply with the provisions of Section 11 (1) of the Banking Regulation Act, 1949 (AACS). Similarly, six StCBs and 121 DCCBs did not comply with the provisions of Sections 22(3) (a) (*i.e.*, being in a position to pay its present and future depositors in full as their claims accrue) and 28 StCBs and 342 DCCBs did not comply with Section 22 (3) (b) (*i.e.*, as the affairs of these banks were not being conducted in a manner not detrimental to the interests of their depositors) of the Act *ibid*. As on March 31, 2008, two StCBs and nine DCCBs were placed under the Reserve Bank's directions prohibiting them from granting loans and advances to certain areas and/or accepting fresh deposits, among others.

Financial Institutions

VI.81 The all-India financial institutions (AIFIs) have been facing difficulties since the onset of financial reforms as their business model of cheaper and assured liabilities and assets came under stress. Two of the financial institutions have converted themselves into banks and a few others have been repositioned as NBFCs. As on March 31, 2008, there were four institutions, *viz*., Exim Bank, NABARD, NHB and SIDBI regulated by the Reserve Bank as AIFIs.

VI.82 SIDBI has a significant exposure to SFCs by way of refinancing. In view of the poor financial health of SFCs, and its likely spill-over effect on financial health of SIDBI, measures were taken to sharpen the regulatory focus of SIDBI. The risk weight to SIDBI's exposure to SFCs was raised from 100 per cent to 125 per cent. SIDBI was instructed to make full provisions in respect of those SFCs that had defaulted even after restructuring/one-time settlement (OTS) package was extended to them, and not to sanction refinance to those SFCs that continued to show negative net worth. Furthermore, SIDBI was advised to follow the norms applicable to banks in asset classification and provisioning in respect of its exposure to SFCs (it involved a change to "borrower-wise" classification from that of "facility-wise" classification applicable to FIs). SIDBI was also advised to ensure that all SFCs follow uniform accounting standards similar to those followed by banks. However, on reconsideration, based on requests from the Central Government to review the decision regarding extension of refinance by SIDBI to SFCs with negative net worth, and on the intimation from Central Government that four State Governments had committed to provide funds to their respective SFCs in a time bound manner to bring the net worth of the concerned SFCs into positive, it was decided that SIDBI could provide refinance to the four SFCs as long as the concerned State Governments kept their commitments.

VI.83 During 2007-08, two all-India financial institutions (AIFIs), *viz*., IFCI and TFCI, which are registered as NBFCs with the Reserve Bank and were earlier exempted from NBFC regulations and as such were being regulated as AIFIs, were subjected to NBFC regulations. Among others, IIBI is in the process of being voluntarily wound up in view of weak financial position.

Non-Banking Financial Companies

VI.84 NBFCs provide depth and resilience to the financial system, besides complementing banks in financial intermediation. In accordance with their significance in the financial sector, the Reserve Bank continued its efforts to strengthen the sector and make it vibrant and healthy. Apart from deposit taking NBFCs, the regulation of large non-deposit taking NBFCs has also assumed significance because of their systemic importance. Reflecting the new and emerging supervisory concerns, the Reserve Bank took several measures during 2007-08.

VI.85 In view of several complaints regarding levying of excessive interest and other charges on certain loans and advances by NBFCs, they were advised to lay down appropriate internal principles and procedures for determining interest rates and processing and other charges, even though interest rates are not regulated by the Reserve Bank. NBFCs were advised to keep in view the guidelines on 'fair practices code' to ensure transparency.

VI.86 SEBI permitted FIMMDA to set up its reporting platform for corporate bonds and it went live from September 1, 2007. All NBFCs were required to report their secondary market transactions in corporate bonds in the OTC market, on FIMMDA's reporting platform with effect from September 01, 2007.

VI.87 All deposit-taking NBFCs (including RNBCs) were advised on March 5, 2008 that the cases of 'negligence and cash shortages' and 'irregularities in foreign exchange transactions' were to be reported as fraud if the intention to cheat/defraud was suspected/proved. However, the following cases where fraudulent intention was not suspected/proved at the time of detection, were required to be treated as fraud and reported accordingly: (i) cases of cash shortages of more than Rs.10,000; and (ii) cases of cash shortages of more than Rs.5,000, if detected, by management/auditor/inspecting officer and not reported on the occurrence by the persons handling cash.

VI.88 The regulations of Mutual Benefit Financial Companies (Notified Nidhis) and Mutual Benefit Companies (Potential Nidhis) have been with the Ministry of Corporate Affairs from 2001. Accordingly, reflecting this status, the provisions of the Non-Banking Financial Companies Acceptance of Public Deposits (Reserve Bank) Directions, 1998 as applicable to Mutual Benefit Financial Companies and Mutual Benefit Companies were updated and such companies were exempted from the provisions of the said directions. However, it was clarified in October 2007 that if the application of any MBC (Potential Nidhi) for grant of Nidhi status was rejected by the Central Government under the provisions of the Companies Act, 1956, the provisions of the aforementioned Directions as applicable to NBFCs will apply to such companies.

VI.89 On the lines of the guidelines issued to banks on unsolicited commercial communications, NBFCs were advised in November 2007: (i) not to engage telemarketers (DSAs/DMAs) who did not have any valid registration certificate from Department of Telecommunications (DoT), Government of India, as telemarketers; (ii) to furnish the list of telemarketers (DSAs/DMAs) engaged by them along with the registered telephone numbers being used by them for making telemarketing calls to TRAI; and (iii) to ensure that all agents presently engaged by them register themselves with DoT as telemarketers.

VI.90 In terms of paragraph 5A of the Residuary Non-Banking Companies (Reserve Bank) Directions, 1987, it is obligatory on the part of the residuary non-banking companies (RNBCs) to inform depositors about the maturity of the deposit at least two months before the date of maturity of the deposit. RNBCs were advised on December 14, 2007 that in the interest of the depositors, where an RNBC fails to repay the deposit along with interest on maturity on the claim made by the depositor, it shall be liable to pay interest in the following manner: (i) if the company has intimated about the maturity to the depositor at least two months before the date of maturity and has sufficient evidence for the same, *viz*., acknowledgement from the depositor, but the depositor fails to submit his claim on maturity, then the company will be required to pay interest at the rate as applicable to the deposit from the date of claim till the date of repayment along with the amount due on maturity; (ii) if the company has not intimated about the maturity to the depositor two months before the date of maturity, then, as and when the depositor makes a claim, the company will be required to pay interest at the rate as applicable to the deposit from the date of maturity till the date of repayment along with the amount due on maturity.

VI.91 Securitisation Companies/Reconstruction Companies (SCs/RCs) were advised in March 2008 to furnish a copy of audited balance sheet along with the Directors' Report/Auditors' Report every year within one month from the date of annual general body meeting, in which the audited results were adopted, starting with the balance sheet as on March 31, 2008. Furthermore, in order to enable the investors to make informed decision on investment in security receipts (SRs), additional disclosures were prescribed, including date of acquisition of the assets, valuation of the assets and the interest of SCs/RCs in such assets at the time of issue of SRs.

VI.92 An important development during 2007-08 related to the inclusion of mortgage guarantee company (MGC) as a category of NBFC (Box VI.10). A company, which primarily transacts the business of providing mortgage guarantee with at least 90 per cent of the business turnover from mortgage guarantee business or at least 90 per cent of the gross income is from mortgage guarantee business, would qualify as a MGC.

Box VI.10
Mortgage Guarantee Company

Mortgage guarantee company (MGC) is defined as a company which primarily transacts the business of providing mortgage guarantee. Such companies issue guarantees for the repayment of the amount of housing loan and interest accrued thereon to a credit institution on the occurrence of a pre-determined trigger event. These guarantees help the primary lenders of the housing loan sector to transfer their credit risk to the MGC. Thus, MGCs are envisaged as providing a credit risk mitigation product. Globally, MGCs have played a crucial role in credit risk mitigation. MGCs were notified as NBFC by the Reserve Bank with the prior approval of the Central Government on January 15, 2008 in exercise of the powers conferred under Section 45 I (f)(iii) of the Reserve Bank of India Act, 1934. The mortgage guarantee product is a tri-partite contract between the borrower, the mortgage guarantee company and the creditor institution (banks/HFCs) in accordance with the proposals made in Union Budget 2007-08. The guidelines on registration and operations of MGCs and prudential norms and investment directions applicable to such companies were placed on the Reserve Bank's website on February 15, 2008.

The features of a mortgage guarantee contract

The essential features of a mortgage guarantee contract are:

- It shall be a contract of guarantee under Section 126 of the Indian Contract Act, 1872.
- The mortgage guarantee contract shall be unconditional and irrevocable and the guarantee obtained shall be free from coercion, undue influence, fraud, misrepresentation, and/or mistake under Indian Contract Act, 1872.
- The MGC shall guarantee the repayment of the principal and interest outstanding in the housing loan account of the borrower, up to the amount of guarantee.
- The guarantor shall pay the guaranteed amount on invocation without any adjustment against the realisable value of the mortgage property.
- It shall be a tri-partite contract among the borrower, the creditor institution and the mortgage guarantee company, which provides the mortgage guarantee.

Features of Mortgage Guarantee Company

The essential features of MGCs, in brief, are as under:

- It shall obtain a certificate of registration from the Reserve Bank before commencing business of mortgage guarantee.
- It shall have a minimum net owned fund of Rs.100 crore at the time of commencement of business, which shall be reviewed for enhancement after 3 years.
- It shall have a diversified share holding.
- It shall not accept public deposits. It shall not avail external commercial borrowings and shall adhere to prescribed prudential norms.
- It is required to create and maintain a contingency reserve by transfer of 40 per cent of the premium or fee earned or 25 per cent of the profit after provision or tax whichever is higher.
- A MGC is required to make good the guarantee liability without demur on the happening of trigger event.
- A MGC can not provide mortgage guarantee for a housing loan with 90 per cent and above loan to value ratio.

Investment Directions

Some features of the investment directions for MGCs include the following:

- The MGC shall frame its investment policy in line with the investment directions issued by the Reserve Bank.
- It shall invest only in the following instruments: (i) Government securities; (ii) securities of corporate bodies/public sector undertakings guaranteed by Government; (iii) fixed deposits/certificate of deposits/ bonds of scheduled commercial banks/PFIs; (iv) listed and rated debentures/bonds of corporate; (v) fully debt oriented mutual fund units; (vi) unquoted Government securities and Government guaranteed bonds.
- A mortgage guarantee company shall hold not less than 25 per cent of the total investment portfolio in Central/ State Government securities and the remaining investments with a ceiling of 25 per cent in any one category.
- All investment shall be marked to market.

Prudential Norms Directions

The MGCs are subject to the following prudential norms:

- An asset acquired from creditor institution on the happening of the trigger event is straightway required to be classified as non-performing asset.
- Income on an asset taken over from creditor shall be recognised only on cash basis. Other income will be recognised in accordance with directions applicable to non-deposit taking NBFCs.
- The premium or fee on the mortgage guarantee contracts shall be treated as income in the profit and loss account in accordance with the accounting standards issued by the Institute of Chartered Accountants of India.
- A MGC is required to maintain minimum capital adequacy ratio of 10 per cent, of which at least 6 per cent will be Tier I capital.

VI.93 To ensure a measured movement towards strengthening the financials of all deposit taking NBFCs by increasing their NOF to a minimum of Rs.200 lakh in a gradual, non-disruptive and non-discriminatory manner it was advised that NBFCs having a minimum NOF of less than Rs.200 lakh and eligible to accept public deposits may freeze their deposits at the level currently held by them. Further, such NBFCs were required to bring down public deposits to the revised ceiling of deposits as prescribed.

VI.94 Important changes in the existing guidelines on frauds strengthening the existing reporting mechanism and anti money laundering guidelines in the lines of other segments of the financial sector were also issued during the year.

Recent Developments in International Financial Markets and Lessons for Supervisors

VI.95 The credit markets in the developed economies especially in the US have witnessed turbulent conditions and significant loss of market liquidity, leading to financial distress in a few institutions prompting some of the major central banks to inject liquidity in the markets. While India has been relatively insulated from the impact of the credit market squeeze, the sub-prime episode, in retrospect, provides several useful lessons for the banks as also for the banking supervisors all over the world. The credit market developments were triggered by a combination of circumstances arising, *inter alia*, from (i) change in the macroeconomic environment not factored in by the credit intermediaries in their credit assessments; (ii) the adoption of 'originate-to-distribute' models by the credit/banking institutions, which tended to weaken their incentives for ensuring rigorous due diligence; (iii) large-scale reliance by the credit intermediaries on credit-risk transfer (CRT) instruments, including securitisation structures, which enabled the hiving off of such exposures to a variety of special purpose vehicles (SPVs) through issuance of securitised paper/mortgage backed securities (MBS)/structured finance products; and (iv) ready acceptance of the securitised products by the investors such as hedge funds, asset managers, structured investment vehicles (SIVs) and other specially designed conduits in various segments of the market, which led to a wide dispersal of the underlying credit risk to a larger number of investors who were not necessarily better equipped than the originating banks to assess the underlying credit risks. The turmoil holds many lessons for supervisors, particularly in the developing countries (Box VI.11).

VI.96 The crisis led to a co-ordinated attempt by financial supervisors for an evaluation of the country practices with regard to the existing regulatory and supervisory arrangements to deal with the stability concerns that arose from the turmoil (Box VI.12).

VI.97 In the backdrop of global financial developments the effectiveness of rules *versus* principle based regulations has been highlighted (Box VI.13).

MACRO-PRUDENTIAL INDICATORS REVIEW

VI.98 Monitoring of macro-prudential indicators (MPIs) since March 2000 has been an important element of supervision of the Reserve Bank. It supplements the on-site and off-site supervisory endeavour of the Reserve Bank. The MPIs comprise both aggregated micro-prudential indicators (AMPIs) of the health of individual financial institutions and macroeconomic indicators (MEIs) associated with the financial system soundness.

VI.99 An overview of MPIs for 2007-08 indicates a further improvement in various indicators of the major constituents of the financial sector (Table 6.5). Capital adequacy ratios continued to remain significantly above the minimum requirements for scheduled commercial banks. Asset quality, in general, improved. Return on assets of scheduled commercial banks during 2007-08 improved slightly from the previous year's level, while that of primary dealers (PDs) witnessed a moderate decline.

Capital Adequacy

VI.100 The capital to risk-weighted asset ratio (CRAR) of scheduled commercial banks improved further at end-March 2008 in comparison with the position at end-March 2007, suggesting that the expansion of capital outpaced the increase in total

Box VI.11
Lessons from Sub-Prime Crisis

The major lessons emanating from the recent financial market turmoil are briefly enumerated below:

Underwriting Standards

The episode has once again brought to the fore the imperative of observing prudent underwriting standards by the credit intermediaries. The traditional banking tools such as the loan-to-value ratio, debt service ratio (particularly, after the initial "teaser rates" came to an end), purpose of the loan, verification of documentary evidence of income and assets of the borrowers and ongoing monitoring of the borrowers' affairs have demonstrated their continued relevance, despite rapid advancements in the financial technology and products. The products created through sophisticated financial engineering may not be sustainable over the long term if their building blocks are not underpinned by rigorous underwriting standards.

Risk Transfer

The risk transfer by adoption of "originate-to-distribute" models by the credit intermediaries tended to weaken their incentives for ensuring rigorous due diligence at the credit appraisal stage, leading to assumption of significant amount of credit risks on low-quality/sub-prime counterparties. The insufficient understanding as to how complex structured products work, the nature of the risks to which the investors were actually exposed, and, in the case of risk transfer, where the risk ultimately resided (indeed, whether any risk has really been transferred) further added to the problem. Also, many investors had difficulties in interpreting the external ratings of complex structured products and often thought that market and liquidity risks were covered by the external ratings when, in fact, they were not.

Liquidity Risk

There had been an insufficient recognition on the part of supervisors and banks of the close link between market liquidity (ability to rapidly execute large volume transactions without impacting prices) and an individual bank's funding liquidity (ability to fund increase in assets and meet obligations as they come due). The recent credit turmoil has underscored the importance, for both banks and supervisors, of considering market disruption scenarios as well as institution-specific scenarios in liquidity planning – which should also encompass the liquidity demands arising from off-balance sheet commitments, implicit or explicit, of the credit intermediaries. The assumptions underlying the liquidity contingency plans such as assuming assets' inherent liquidity through asset marketability due to loan sales and securitisation, as well as ability to drawdown contingent facilities, need to be realistic, and not overly optimistic, with greater emphasis on cash-flows and stress-testing.

Valuation

The recent market turmoil and resulting illiquidity has highlighted the importance of reliable valuations and transparency of risk exposures. Some banks seem to have used inappropriately optimistic valuation and modelling methodologies to determine the initial and ongoing value of certain securitisation exposures such as collateralised debt obligations (CDOs) and residual interests. The feasibility of mark-to-market model valuations and valuations inferred from the market value of underlying assets for CDOs and other structured products has been called into question.

Residual risks in structured products

There was insufficient recognition of residual risks in the structured products on the part of investing banks, as well as those banks acting as issuers and sponsors of asset-backed commercial paper (ABCP) programmes. For instance, banks that extended liquidity facilities to ABCP programmes were exposed to high degrees of credit risk, which may be subtly embedded within the facilities' provisions. While all commitments embody some degree of credit risk, certain commitments extended to ABCP programmes for providing liquidity could subject the extending institution to the credit risk of the underlying asset pool, often trade receivables or other structured products, or of a specific company using the ABCP program for funding. Securitisation exposures may also expose banks to significant reputational risks. Often, banks sponsoring the issuance of asset-backed securities act as servicer, administrator, or liquidity provider in the securitisation transaction. In order to avoid a possible increase in their funding costs, banks may support their securitisation transactions beyond their contractual obligations by improving the performance of the securitised asset pool, for instance, by adding higher quality assets to the securitised asset pool. Similarly, owing to the liquidity problems faced by the bank-sponsored structured investment vehicles (SIVs), the sponsor banks brought their SIVs on to their balance sheets, for reputational reasons, even though there was no contractual obligation to do so.

Transparency and Disclosure

The recent difficulties experienced by banks and investors alike with respect to complex structured products highlighted the lack of transparency due to insufficient disclosure. But the turmoil also made clear that investors did not make full use of information even in those instances where it was available. These problems might perhaps have been avoided or at least mitigated through greater transparency, particularly with respect to the exposures of some large international institutions to CDOs of securities backed by subprime mortgages originated in the United States.

Regulatory Scope

In view of ever-increasing integration of different segments of the financial market, the potential of the unregulated market participants for infecting the regulated parts of the system, no matter how well supervised, needs better recognition by the financial supervisors. The regulatory gaps in which the unregulated entities operate need to be identified and effectively addressed so that the systemically-important regulated entities are not put to undue risk by the activities of the unregulated entities, entailing significant public cost.

Box VI.12
Financial Stability Forum (FSF) Report - Status

In the wake of the global financial market turmoil, the FSF's Report (April 2008) identified the underlying causes and weaknesses in the international financial markets. The Report contains, *inter alia*, proposals of the FSF for implementation by end-2008 for strengthening prudential oversight of capital, liquidity and risk management, enhancing transparency and valuation, changing the role and uses of credit ratings, strengthening the authorities' responsiveness to risk and implementing robust arrangements for dealing with stress in the financial system. The Reserve Bank had put in place regulatory guidelines covering many of these aspects, while in regard to others, actions are being initiated. In many cases, actions have to be considered as work in progress. In any case, the guidelines are aligned with the global best practices while tailoring them to meet country-specific requirements at the current stage of institutional developments. Several proposals made by the FSF have already been implemented in India as detailed below:

Strengthened Prudential Oversight of Capital, Liquidity Risk Management

- The phased implementation process of Basel II is underway and the process of implementation is being monitored on an on-going basis for calibration and fine-tuning.
- The minimum capital requirement has been prescribed at higher levels of nine per cent, under Basel Framework. Banks' exposure to sensitive sectors and their liquidity position are monitored on a regular basis. Extensive guidelines have been issued for off-balance sheet vehicles in the form of SPVs for the purpose of securitisation with prescription of capital charge for liquidity facilities to such SPVs. There is a requirement to put in place policies and framework for stress test for various risk factors.
- The credit conversion factors, risk weights and provisioning requirements for specific off-balance sheet items including derivatives are at an enhanced level while complex structures like synthetic securitisation are not permitted.
- Broad guidelines for asset-liability management have been put in place. Banks have been provided flexibility in devising their own risk management strategies as per board-approved policies. Greater granularity to measurement of liquidity risk was introduced by splitting the first time bucket and placing caps on net cumulative negative mismatches in them.
- The overnight unsecured market for funds has been restricted only to banks and primary dealers (PDs) resulting in shift of trading volumes to the collateralised market from the overnight unsecured market. Limits have been placed on (i) borrowing and lending in the call money market to 100 per cent of capital funds (*i.e.*, sum of Tier I and Tier II capital) on a fortnightly average basis; and (ii) 'purchased inter-bank liabilities' (IBL) to 200 per cent of its net worth (300 per cent for banks with a CRAR above 11.25 per cent).

Enhancing Transparency and Valuation

- The valuation norms and market discipline in respect of complex financial products including issuance of guidelines on valuation of various instruments/assets have been strengthened. Comprehensive guidelines have been put in place on derivatives incorporating risk management and corporate governance aspects, suitability and appropriateness policy, prudential norms relating to derivatives, specific transparency and valuation standards, such as prescription of making available a calculator or at least access to a calculator for selling structured products by banks which will enable the users to mark-to-market these products on an ongoing basis. All permitted derivative transactions can be calculated only at prevailing market rates.
- A set of disclosure requirements has been developed which allow the market participants to assess key pieces of information on capital adequacy, risk exposure, risk assessment processes and key business parameters. This in turn, will provide a consistent and understandable disclosure framework that enhances comparability; compliance requirement with the Accounting Standard on disclosure of accounting policies issued by the Institute of Chartered Accountants of India (ICAI).
- Detailed formats for disclosures under the Pillar 3 of Basel II framework have been prescribed with clause for imposition of penalty including financial penalty for non compliance.

Changes in the Role and Uses of Credit Ratings

- A detailed process of identifying the eligible credit rating agencies has been undertaken. Norms have been prescribed to ensure consistency in selection of credit rating agencies by banks and application of their rating while disallowing banks to 'cherry pick' the assessments provided by different credit rating agencies. The names of the credit rating agencies, the risk weights associated with the particular rating grades and aggregated risk weighted assets, are required to be disclosed.

Strengthening the Authorities' Responsiveness to Risks

- A system has been put in place for exchanging supervisory information on specific issues with a few other overseas banking supervisors/regulators. A working group has been constituted to lay down a roadmap for adoption of a suitable framework for cross-border supervision and supervisory cooperation with overseas regulators and examine the arrangement of supervisory college arrangement.

Robust Arrangements for Dealing with Stress in the Financial System

- Institutional arrangement has been put in place to oversee the functioning of the financial markets on a daily basis.
- Institutional arrangements have been put in place for liquidity management facilities, including the liquidity adjustment facility (LAF), open market operations (OMOs) and market stabilisation scheme (MSS) besides standing facilities such as export credit refinance (ECR) and the liquidity facility for standalone PDs.
- The Reserve Bank has been empowered under the existing legal framework to deal with the resolution of weak and failing banks. Enabling provisions exist in the Banking Regulation Act for voluntary amalgamation and compulsory merger of banks under Sections 44A and 45, respectively;
- The deposit insurance cover is offered by the Deposit Insurance and Credit Guarantee Corporation of India (DICGC).

Box VI.13
Principle-based Regulation

Principle-based or 'light-touch' regulation was originally conceived at the Bank of England prior to the 1997 reforms. It refers to moving away where possible, from dictating through detailed prescriptive rules and supervisory actions on how firms should operate their business. It accords regulated firms the responsibility to decide how best to align their business objectives and processes with the outcomes as specified by the regulators. This entails laying down desirable regulatory outcomes in principles and outcome-focused rules, enabling the regulators to engage with the firms' senior management in pursuit of these outcomes.

The shift to a more principle-based approach to regulation complements the risk and evidence-based models. In evidence based-approach it is considered first and foremost whether there is a market failure that needs to be addressed and, if so, whether regulation is the best way to deal with it. Principle-based regulation steers the expectations of firms and the way to deal with them. Principle-based regulation is considered by many as the natural next step in the process of regulatory evolution, allowing continuance of improvement in the regulatory regime for the financial services industry and consumers.

According to the proponents of principle-based regulation, past experience suggests that prescriptive standards have been unable to prevent misconduct. The ever-expanding rule books, designed to prevent misdemeanour, have not stopped mis-selling, market misconduct or other undesirable practices. Instead, it is believed that detailed rules have become an increasing burden on the regulator and the industry's resources. Financial markets are constantly changing. Continuous innovation and new product development are important ways in which the financial services industry generates benefits for consumers and markets. It is important that regulation can respond rapidly to the pace of change in markets and allows them to continue to develop for the benefit of its users. Regulation that focuses on outcomes rather than prescription is more likely to support this development and innovation. In a quickly changing market place, principles are far more durable. The merits of principle-based approach to financial regulation are as follows:

- It is easier to generate a set of principles rather than a set of detailed rules.
- Understanding a set of principles is easier for all stakeholders.
- Owing to its greater flexibility, it is particularly suitable for a heterogeneous banking sector.
- The financial services industry has more flexibility to develop its own compliance ethos within the context of its own markets, legislative backgrounds and cultures.
- It encourages a co-operative and outcome-oriented relationship between a firm and its regulator and facilitates mutual understanding among regulators.
- It provides a basis for open dialogue between the regulator and the regulated, promotes a co-operative and educative approach to supervision, *etc*.

On the other hand a principle-based regulation is considered to have several problems and downsides such as:

- Principle-based regimes do not give the industry the comfort of knowing where it stands because the meaning of the principles is not sufficiently certain.
- The move to more principle-based regulation could result in concerns over accountability in a number of ways.
- There is a risk that principle-based regulation can give rise to charges of "regulatory creep".
- The overall effectiveness of principle-based regulation is critically dependent on the ethical and governance standards that prevail in the financial and corporate worlds in any country.
- Regulators see principle-based regulation as posing high regulatory risks and they fear that the operating flexibility that principle-based regulation permits could be misused in environments with insufficiently high standards of internal corporate ethics, compliance and governance.
- Violation of rigid but specific rules is much easier to establish than broader principles that are more open to subjective interpretation.

Rule-based and principle-based supervisory approaches are not mutually exclusive. The Financial Services Authority (FSA) of the UK has a rule book of over 6,000 pages. Principles could help in framing the rules and discipline rule making. The regulators, therefore, need to identify the areas in which these supervisory approaches are effective and boost the effectiveness of the regulations in their entirety, based on the optimal combination of these two approaches.

risk-weighted assets (Table 6.5). The growth in risk-weighted assets during 2007-08 was lower than the previous year, reflecting lower growth in the advances portfolio of banks. The increase in regulatory capital was mainly on account of core capital (*i.e.*, Tier I). The core capital ratio increased from 8.3 per cent at end-March 2007 to 9.1 per cent at end-March 2008. All the banks complied with the prescribed minimum CRAR at end-March 2008 (Table 6.6).

VI.101 The CRAR of the scheduled UCBs at end-March 2008, was higher than that at end-March 2007 (Table 6.5). Out of 53 scheduled UCBs, the CRARs of 41 UCBs were 9 per cent and above, while that of 10 UCBs were less than 3 per cent.

Table 6.5: Select Financial Indicators

(Per cent)

Item	Year ended March	Scheduled Commercial Banks	Scheduled Urban Cooperative Banks	Development Finance Institutions	Primary Dealers	Non-Banking Financial Companies
1	2	3	4	5	6	7
CRAR	2007	12.3	11.4	25.3	33.4	21.1
	2008	13.1	11.9	26.3	37.5	22.4
Gross NPAs to Gross Advances	2007	2.7	17.7	5.6	n.a.	1.6
	2008	2.4	14.2	0.6	n.a.	2.6
Net NPAs to Net Advances	2007	1.1	3.3	0.1	n.a.	0.0
	2008	1.1	2.3	0.1	n.a.	0.3
Return on Total Assets	2007	0.9	0.7	1.5	2.9	1.0
	2008	1.0	0.7	1.3	2.5	n.a.
Return on Equity	2007	13.2	n.a.	6.7	9.0	8.6
	2008	12.5	n.a.	6.1	10.7	n.a.
Cost/Income Ratio	2007	51.2	58.9	20.5	49.9	17.3
	2008	49.2	56.2	21.2	25.4	n.a.

n.a.: Not available.

Note : 1. Data are provisional.
2. Data for 2008 in respect of Non-Banking Financial Companies (NBFCs) pertain to the period ended September 2007.
3. Data for scheduled commercial banks pertain to the domestic operations only and may not tally with the balance sheet data.
4. The above figures pertain to stand-alone Primary Dealers (PDs) which increased to nine as at end-March 2008 from eight as at end-March, 2007 with the authorisation of a new stand-alone PD on November 01, 2007.

Source : Off-site returns for scheduled commercial banks, scheduled urban co-operative banks, NBFCs and PDs and FIs.

VI.102 The CRAR of FIs as a group increased from 25.3 per cent at end-March 2007 to 26.3 per cent at end-March 2008 (Tables 6.5 and 6.7). This was mainly on account of an increase in the CRAR of refinancing institutions.

VI.103 The CRAR of the NBFCs as a group increased from 21.1 per cent at end-March 2007 to 22.4 per cent at end-September 2007, well above the regulatory minimum (12 per cent). Companies having CRAR less than 12 per cent declined both

Table 6.6 : Scheduled Commercial Banks – Frequency Distribution of CRAR

(End-March)

(Per cent)

Bank Group	End-March	Negative	Between 0 and 9 per cent	Between 9 and 10 per cent	Between 10 and 15 per cent	15 per cent and above	Total
1	2	3	4	5	6	7	8
Public Sector Banks	2007	0	0	0	28	0	28
	2008	0	0	0	28	0	28
Nationalised Banks	2007	0	0	0	20	0	20
	2008	0	0	0	20	0	20
SBI Group	2007	0	0	0	8	0	8
	2008	0	0	0	8	0	8
Private Sector Banks	2007	1*	0	2	19	3	25
	2008	0	0	1	17	5	23
Old Private Sector Banks	2007	1*	0	2	11	3	17
	2008	0	0	1	10	4	15
New Private Sector Banks	2007	0	0	0	8	0	8
	2008	0	0	0	7	1	8
Foreign Banks	2007	0	0	0	10	19	29
	2008	0	0	1	7	20	28
All Banks	2007	1	0	2	57	22	82
	2008	0	0	2	53	24	79

* : Pertains to Sangli Bank, subsequently merged with ICICI Bank.

Note : Data are provisional and unaudited.

Source : Off-site supervisory returns submitted by the banks pertaining to their domestic operations only.

Table 6.7: CRAR and Net NPAs of Select Financial Institutions

(End-March 2008)

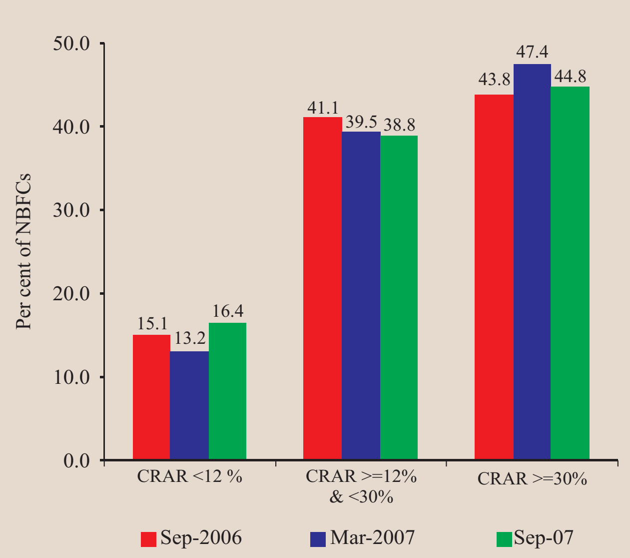
(Per cent)

Financial Institution	CRAR (Per cent)	Net NPAs (Rupees crore)	Net NPAs to Net loans
1	2	3	4
Term-Lending Institutions (TLIs)			
EXIM Bank	15.13	113.06	0.39
All TLIs	**15.13**	**113.06**	**0.39**
Refinancing Institutions (RFIs)			
NABARD	26.61	19.28	0.02
NHB	22.56	0.00	0.00
SIDBI	46.55	49.06	0.25
All RFIs	**30.84**	**68.34**	**0.06**
All FIs	**26.28**	**181.40**	**0.12**

Source : Off-site returns submitted by FIs.

in absolute and percentage terms, while companies having CRAR in excess of 30 per cent declined in absolute terms, but increased in percentage terms, implying that the sector has been consolidating. The number of companies having CRAR above 30 per cent constituted almost 50 per cent of the total number of companies. Companies with CRAR of less than 12 per cent were largely problem/weak companies (Chart VI.1). The CRAR of PDs increased to 37.5 per cent at end-March 2008 from 33.4 per cent at end-March 2007. The CRAR of PDs remained much higher than their regulatory minimum.

Chart VI.1: Frequency Distribution of CRAR of Reporting NBFCs



Asset Quality

VI.104 Asset quality of scheduled commercial banks improved further during the year. The gross NPA ratio declined to 2.4 per cent while the net NPA ratio remained at 1.1 per cent at end-March 2008 (Table 6.8). Robust economic activity and better recovery climate have facilitated the reduction in non-performing assets in recent years. Net NPAs of only six banks were in excess of 2 per cent of net advances (Table 6.9). Asset quality of financial institutions and scheduled UCBs also improved

Table 6.8: Scheduled Commercial Banks – Performance Indicators

(Per cent)

Item/Bank Group	2007-08				2007-08	2008-09 Q1
	Q1	Q2	Q3	Q4		
1	2	3	4	5	6	7
Operating Expenses/Total Assets*						
Scheduled Commercial Banks	2.1	1.9	2.0	1.4	1.8	1.9
Public Sector Banks	1.8	1.7	1.6	1.1	1.6	1.6
Old Private Sector Banks	1.9	1.7	1.7	1.3	1.7	1.7
New Private Sector Banks	2.5	2.5	2.6	2.3	2.5	2.6
Foreign Banks	2.9	2.5	3.3	2.7	2.8	2.7
Net Interest Income/Total Assets*						
Scheduled Commercial Banks	2.8	2.3	2.4	2.0	2.4	2.5
Public Sector Banks	2.7	2.1	2.1	1.7	2.2	2.3
Old Private Sector Banks	2.9	2.5	2.4	1.8	2.4	2.7
New Private Sector Banks	2.3	2.2	2.6	2.4	2.4	2.7
Foreign Banks	4.2	3.4	3.7	3.9	3.8	3.8
Net Profit/Total Assets*						
Scheduled Commercial Banks	1.0	1.0	1.0	0.9	1.0	0.9
Public Sector Banks	0.9	0.9	1.0	0.7	0.9	0.6
Old Private Sector Banks	1.1	1.0	1.2	0.7	1.0	0.8
New Private Sector Banks	0.8	1.0	1.1	1.1	1.0	0.6
Foreign Banks	2.2	1.8	0.9	2.4	1.8	2.7
Gross NPAs to Gross Advances**						
Scheduled Commercial Banks	2.8	2.7	2.6	2.4	2.4	2.4
Public Sector Banks	2.9	2.8	2.6	2.4	2.4	2.2
Old Private Sector Banks	3.1	2.8	2.7	2.3	2.3	2.4
New Private Sector Banks	2.5	2.6	2.7	2.9	2.9	3.2
Foreign Banks	2.0	1.9	1.9	1.8	1.8	1.9
Net NPAs to Net Advances**						
Scheduled Commercial Banks	1.2	1.2	1.1	1.1	1.1	1.1
Public Sector Banks	1.2	1.2	1.1	1.1	1.1	1.0
Old Private Sector Banks	0.9	0.8	0.7	0.7	0.7	0.8
New Private Sector Banks	1.3	1.3	1.4	1.4	1.4	1.5
Foreign Banks	0.8	0.8	0.8	0.8	0.8	0.7
CRAR**						
Scheduled Commercial Banks	12.6	13.3	13.1	13.1	13.1	12.7
Public Sector Banks	12.9	12.8	12.7	12.6	12.6	12.3
Old Private Sector Banks	13.0	13.1	13.7	14.1	14.1	13.9
New Private Sector Banks	11.5	15.9	15.4	14.4	14.4	14.1
Foreign Banks	12.3	11.4	11.8	13.4	13.4	12.2

* : Annualised to ensure comparability between quarters.

** : Position as at the end of the quarter.

Source : Off-site supervisory returns submitted by the banks pertaining to their domestic operations.

significantly during 2007-08, with net NPA ratios at 0.1 per cent and 2.3 per cent, respectively (see Table 6.5). Out of 53 scheduled UCBs, net NPA ratios of 37 UCBs were 5 per cent or less (Table 6.10).

Earnings and Profitability Indicators

VI.105 Total income of SCBs increased from 8.04 per cent of their assets in 2006-07 to 8.59 per cent in 2007-08 due to an increase in both non-interest income and interest income (Table 6.11). Non-interest income of the SCBs increased by more than 50 per cent during the year.

Table 6.9: Net NPAs to Net Advances of Scheduled Commercial Banks

	Public Sector Banks		Private Sector Banks		Foreign Banks
	SBI Group	Nationalised Banks	Old	New	
1	2	3	4	5	6
2003-04					
Up to 2 per cent	6	5	2	4	19
Above 2 per cent and up to 5 per cent	2	9	9	5	4
Above 5 per cent and up to 10 per cent	0	4	7	0	3
Above 10 per cent	0	1	2	1	7
2004-05					
Up to 2 per cent	7	10	4	6	22
Above 2 per cent and up to 5 per cent	1	8	12	3	2
Above 5 per cent and up to 10 per cent	0	2	4	1	2
Above 10 per cent	0	0	0	0	4
2005-06					
Up to 2 per cent	7	15	11	6	26
Above 2 per cent and up to 5 per cent	1	5	7	2	0
Above 5 per cent and up to 10 per cent	0	0	2	0	0
Above 10 per cent	0	0	0	0	3
2006-07					
Up to 2 per cent	8	18	14	7	27
Above 2 per cent and up to 5 per cent	0	2	2	1	1
Above 5 per cent and up to 10 per cent	0	0	1	0	0
Above 10 per cent	0	0	0	0	1
2007-08*					
Up to 2 per cent	7	19	15	7	25
Above 2 per cent and up to 5 per cent	1	1	0	1	2
Above 5 per cent and up to 10 per cent	0	0	0	0	0
Above 10 per cent	0	0	0	0	1

* : Data as on March 31, 2008 are unaudited and provisional.
Source : Off-site supervisory returns submitted by banks pertaining to their domestic operations only.

Table 6.10: Net NPAs to Net Advances of Scheduled Urban Co-operative Banks*

(Frequency Distribution)

Net NPAs to Net Advances	2005-06	2006-07	2007-08
1	2	3	4
Up to 2 per cent	25	23	24
Above 2 and up to 5 per cent	8	14	13
Above 5 and up to 10 per cent	10	9	6
Above 10 per cent	11	7	10
Total	**54**	53	53

* Data are provisional.
Source : Off-site supervisory returns.

VI.106 Higher interest expenses, however, led to an increase in total expenditure (as per cent to total assets), despite the fall in operating expenses. As a result, during 2007-08, profits before provisions and taxes (as per cent to total assets) remained at the same level as that of the previous year. However, returns on assets (profit as per cent to total assets) at 0.99 per cent during 2007-08 were slightly higher than those during 2006-07 (0.89 per cent) due to lower provisions. As many as 51 banks (out of 79

Table 6.11: Operational Results of Scheduled Commercial Banks – Key Ratios

(Per cent to total assets)

Indicator	2005-06	2006-07	2007-08
1	2	3	4
1. Total Income (i+ii)	8.03	8.04	8.59
i) Interest Income (net of interest tax)	6.65	6.88	7.17
ii) Non-Interest Income	1.38	1.16	1.42
2. Total Expenditure (i+ii)	5.98	6.11	6.66
i) Interest Expenses	3.82	4.13	4.81
ii) Operating Expenses	2.16	1.97	1.85
3. Earnings Before Provisions and Taxes (EBPT)	2.05	1.92	1.92
4. Provisions and Contingencies	1.17	1.03	0.93
5. Profit after Tax	0.88	0.89	0.99
			(Amount in Rupees crore)
1. Total Income (i+ii)	2,16,286	2,66,266	3,54,093
i) Interest Income (net of interest tax)	1,79,087	2,27,731	2,95,688
ii) Non-Interest Income	37,199	38,535	58,405
2. Total Expenditure (i+ii)	1,61,048	2,02,167	2,74,452
i) Interest Expenses	1,02,866	1,36,899	1,98,236
ii) Operating Expenses	58,182	65,267	76,216
3. Earnings Before Provisions and Taxes (EBPT)	55,212	63,429	79,254
4. Provisions and Contingencies	31,549	33,991	38,283
5. Profit after Tax	23,663	29,438	40,971

Note : 1. Off-site supervisory returns submitted by the banks pertaining to their domestic operations only.
2. Data for March 2008 are provisional and unaudited.

banks) recorded an increase in return on assets during the year (Table 6.12).

VI.107 The return on total assets of scheduled UCBs was maintained at 0.67 per cent in 2007-08 as compared with 0.69 per cent in 2006-07 (Table 6.13). The return on assets of PDs declined marginally to 2.48 per cent during 2007-08 from 2.92 per cent during 2006-07 (refer Table 6.5).

Table 6.13 Operational Results of Scheduled Urban Co-operative Banks - Key Ratios

(as per cent to total assets)

No.	Item	2006-07	2007-08
1	2		3
1.	Total Income (i+ii)	6.63	6.59
	i) Interest Income	5.82	6.11
	ii) Non-Interest Income	0.81	0.48
2.	Total Expenses (i+ii)	5.43	5.45
	i) Interest Expenditure	3.53	3.94
	ii) Non-interest Expenses	1.90	1.51
3.	Earnings Before Provisions and Taxes	1.20	1.14
4.	Provisions and Contingencies	0.51	0.47
5.	Profit after Tax	0.69	0.67

Note : All data are provisional.

Sensitivity to Market Risk

Interest Rate Risk

VI.108 The major portion of investment portfolio of the banking system at end-March 2008 comprised securities in the 'held to maturity' (HTM) category (about 60 per cent). As investments under the HTM category are not required to be marked to market (MTM), unlike those in the trading book, *viz*., (i) 'available for sale' (AFS) and (ii) 'held for trading' (HFT), the investment portfolio of the scheduled commercial banks is relatively less sensitive to interest rate risk. However, banks reported high MTM losses during March 2008 on account of upward movement in sovereign yields. As a result, the cushion available, in the form of outstanding balance in provisions for depreciation in respect of investments held in trading book, declined to a negligible amount after taking into account the MTM losses. Although banks have adopted various portfolio management techniques such as reduction of duration, particularly in the case of the trading book in conjunction with reduction in the size of the trading book itself, to mitigate the interest rate risk, the system would be under pressure if the yield increase continues unabated.

Currency Risk

VI.109 In the foreign exchange market, the Indian rupee exhibited generally two-way movement vis-à-vis the US dollar during 2007-08. This reinforces the need for all agents with foreign currency exposure to use appropriate hedging instruments and strategies to cushion against possible adverse exchange rate movements.

Table 6.12: Operational Results of Scheduled Commercial Banks – 2007-08

(Number of banks showing increase in ratios during the period)

Ratio to total Assets		Public Sector Banks		Private Sector Banks		Foreign Banks	All Banks
		SBI Group	Nationalised Banks	Old Private Sector	New Private Sector		
1	2	3		4	5	6	7
1.	Total Income	8	16	12	8	17	61
	i) Interest Income	7	15	12	8	17	59
	ii) Non-Interest Income	7	15	12	7	17	58
2.	Total Expenditure	8	19	13	8	16	64
	i) Interest Expenses	8	20	14	7	16	65
	ii) Operating Expenses	1	0	2	6	14	23
3.	Earnings before Provisions and Taxes (EBPT)	1	6	8	6	19	40
4.	Provisions and contingencies	0	4	4	7	14	29
5.	Profit after Tax	4	11	11	5	20	51

Note : 1. Off-site supervisory returns submitted by the banks pertaining to their domestic operations only.
2. Data are provisional and unaudited.

Commodity Risk

VI.110 Global commodity prices increased sharply in recent months, driven by strong growth worldwide, especially in emerging market economies and speculative price pressures in financial markets. The Commodity Research Bureau (CRB) Index for the commodities increased from 316.7 as on July 2, 2007 to 462.7 as on June 30, 2008. During this period, the price of spot gold increased from US$ 654.75 to US$ 930.25 and that of crude (Brent) increased from USD 73.81 to USD 139.30. Apart from fuelling inflation, this also led to significant portfolio rebalancing for global financial institutions. In India, the volatility of the commodity prices impact the banks either through investment or through the credit channel. The principal channel of risk transmission is through their credit exposure to commodity traders and industries, whose profitability is contingent upon stable commodity prices, unless hedged by them. It would, therefore, be necessary for the banks to be alive to this risk and take appropriate risk containment measures.

Equity risk

VI.111 With the rationalised norms on capital market exposure being applicable from April 2007, the regulatory limit on individual banks' exposure to capital market is now capped at 40 per cent of banks' net worth as at end-March of the previous year. The overall exposure of the banking system to capital market at end-March 2008 was 28 per cent of net worth. Several regulatory requirements prescribed by the Reserve Bank ensure that the banks' participation in the capital market is within limits and also that the banks' advances are well collateralised, so that they are able to protect their advances for investments in the capital market.

Liquidity

VI.112 Capital flows and swings in cash balances of the Governments were the main drivers of liquidity conditions in the financial markets, imparting some volatility to overnight interest rates. The Reserve Bank continued with its policy of active management of liquidity through the appropriate use of all policy instruments at its disposal flexibly. The ratio of liquid assets to total assets in respect of scheduled commercial banks were at 32.3 per cent at end-March 2008, the same level as at end of the previous year.

Outlook

VI.113 Various initiatives undertaken by the Reserve Bank were aimed at aligning its regulatory environment with international best practice. Foreign banks and banks with international presence successfully migrated to Basel II on March 31, 2008. The remaining commercial banks would migrate to Basel II on March 31, 2009. The recent global financial market developments provide some useful lessons for the regulators and supervisors. The Financial Stability Forum has made several proposals for implementation by end-2008. While India has already implemented some of these proposals, other proposals would be carefully examined and appropriate action would be taken, wherever necessary. In the coming years, banks need to strengthen their risk management framework in view of the domestic and international developments, particularly in the emerging areas of risk, *viz*., liquidity risk and risks arising out of off-balance sheet and derivatives markets transactions. Improvement in customer service, including rationalisation of service charges and speedy grievance redressal would be the focus areas.

VII PUBLIC DEBT MANAGEMENT

VII.1 The Reserve Bank's debt management strategy during 2007-08 continued to be guided by the twin objectives of minimisation of cost over time and pursuit of maturity profiles consistent with rollover risk. The debt management operations were undertaken in an environment characterised by pre-emptive monetary tightening measures and upward shifting of yield curve. With buoyant deposit growth during the year, a major source of demand for Government securities emanated from the banking sector for complying with the statutory requirement, followed by the insurance sector.

VII.2 This Chapter reviews the debt management operations of the Reserve Bank during 2007-08. The market borrowing programme of the Central Government, which was larger than that in the previous year, was successfully completed with lower devolvement on primary dealers (PDs). The auctions for dated securities were broadly in accordance with the issuance calendar, barring one unscheduled auction in the first half of the year. The weighted average cost of market borrowings increased during the year, reflecting the hardening of the interest rate structure. The policy of passive consolidation of dated securities and elongation of maturity profile continued during the year. The weighted average maturity increased marginally during the year, reflecting the improvement in the risk profile of outstanding open market debt.

VII.3 The market borrowing programme of the State Governments during 2007-08 was conducted entirely through the auction route. The gross amount raised during 2007-08 was more than twice the amount raised in the previous year as States were sanctioned additional allocations by the Centre to meet the shortfall in National Small Savings Fund (NSSF) collections during 2007-08. The average issuance size of State Government securities, however, continued to remain relatively small. The weighted average yield firmed up during the year and the weighted average spreads of the cut-off yields in the auctions over secondary market yields of comparable Central Government securities were higher than those in the previous year.

VII.4 The combined net issuance of Government securities under the normal market borrowing programme of the Centre and the States at Rs.1,65,728 crore in 2007-08 was higher than Rs.1,25,549 crore in 2006-07. In addition, special securities amounting to Rs.38,050 crore were issued outside the market borrowing programme to various entities in 2007-08 (Rs.40,321 crore in 2006-07). The successful completion of the market borrowing programme reflected the improved market perception of the fiscal parameters, market depth and favourable liquidity conditions that necessitated large additional issuances of government securities under the MSS.

CENTRAL GOVERNMENT

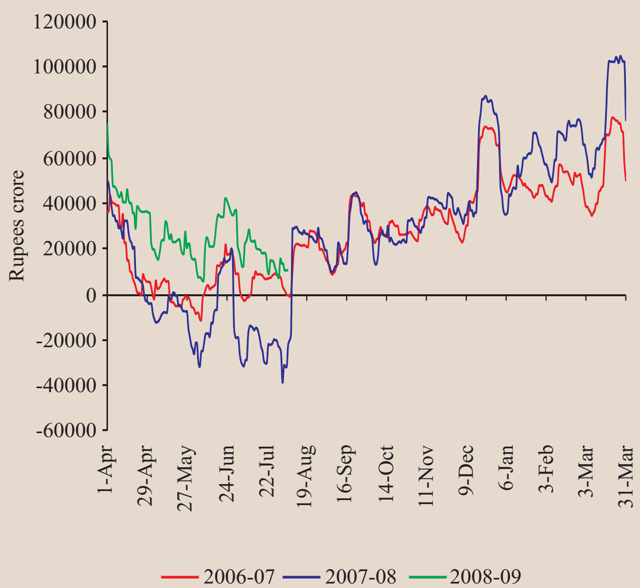
Ways and Means Advances

VII.5 The limits for Ways and Means Advance (WMA) to the Central Government for 2007-08 were fixed at Rs.20,000 crore for the first half of the year (April-September) and Rs.6,000 crore for the second half of the year (October-March), thereby restoring the practice of fixing the limits on a half-yearly basis which existed prior to 2006-07. During 2006-07, WMA limits were fixed on a quarterly basis, mainly to facilitate the transition necessitated by the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 which prohibited the Reserve Bank's participation in the primary issuances of Government securities with effect from April 1, 2006. The Reserve Bank retained the flexibility to revise the limits in consultation with the Government, taking into consideration the transitional issues and prevailing circumstances. The interest rate on WMA continued to be at the repo rate and that on overdraft, at repo rate *plus* two percentage points.

VII.6 During 2007-08, the liquidity position of the Central Government remained, in general, comfortable although there were some pressures during the first quarter of the year and in July 2007.

The surplus cash balances of the Centre, which amounted to Rs.50,092 crore at end-March 2007, were drawn down to meet the higher than anticipated spending by the Centre. With a sharp increase in the borrowing requirements resulting from accentuated mismatches between revenue receipts and aggregate expenditure during the first four months of 2007-08, the Central Government took recourse to WMA and overdraft on three occasions, with the peak overdraft at Rs.12,305 crore. A surplus was built up in June 2007 ahead of the Central Government's acquisition of the Reserve Bank's stake in State Bank of India (SBI), which was used up by the end of the month to meet this expenditure and the Central Government reverted to WMA. With the transfer of surplus from the Reserve Bank on August 9, 2007, the Central Government went into surplus cash balance mode and remained so thereafter, touching a peak of Rs.1,04,741 crore on March 27, 2008 (Chart VII.1). During 2007-08, the Central Government availed WMA for a total of 91 days as compared with 39 days during 2006-07. The Central Government also resorted to overdraft for 37 days. The surplus balance (inclusive of investment balance of Rs.20,000 crore) was at Rs.76,686 crore as on March 31, 2008.

Chart VII.1: Cash Balances of the Central Government



VII.7 The WMA limits for 2008-09 have been fixed at Rs.20,000 crore for the first half of the year (April-September) and Rs.6,000 for the second half of the year (October-March). The applicable interest rate on WMA and overdraft would continue to be linked to the repo rate as hitherto. The Centre began the fiscal year with a large surplus balance of Rs.76,686 crore and continued to be in surplus throughout the first quarter as against a recourse to WMA and OD for 52 days and 10 days, respectively during the corresponding quarter of the previous year. This was despite the larger net market borrowing requirement (GFD) during the quarter and reflected the larger build-up of surplus balances as at end-March 2008 and additional borrowings of Rs.20,000 crore through Treasury Bills. During the second quarter (up to August 14) the Centre took recourse to WMA for three days between August 4, 2008 and August 6, 2008 as compared with 39 days of WMA and 27 days of OD during the corresponding period of the previous year.

Treasury Bills

VII.8 The annual issuance calendar released on March 30, 2007 left the notified amounts of 91-day, 182-day and 364-day Treasury Bills (TBs) under the normal market borrowing programme unchanged at Rs.500 crore (weekly auction), Rs.500 crore (fortnightly auction) and Rs.1,000 crore (fortnightly auction), respectively. The notified amounts of TBs under the normal market borrowing programme were, however, increased on several occasions in June 2007 to, *inter alia*, finance the temporary cash mismatch that was anticipated to arise on account of transfer of the Reserve Bank's stake in SBI on June 29, 2007. An additional amount of Rs.32,500 crore outside the issuance calendars (Rs.27,500 crore by way of TBs and Rs.5,000 crore by way of dated securities) was raised in this regard (Table 7.1). The notified amounts of TBs issued under the MSS were varied during the year, keeping in view the prevailing liquidity conditions. The net issuances (excluding MSS) of 91-day, 182-day and 364-day TBs declined as compared with the previous year (Appendix Table 58). The normal market borrowing component of all issues of TBs was fully subscribed by the market.

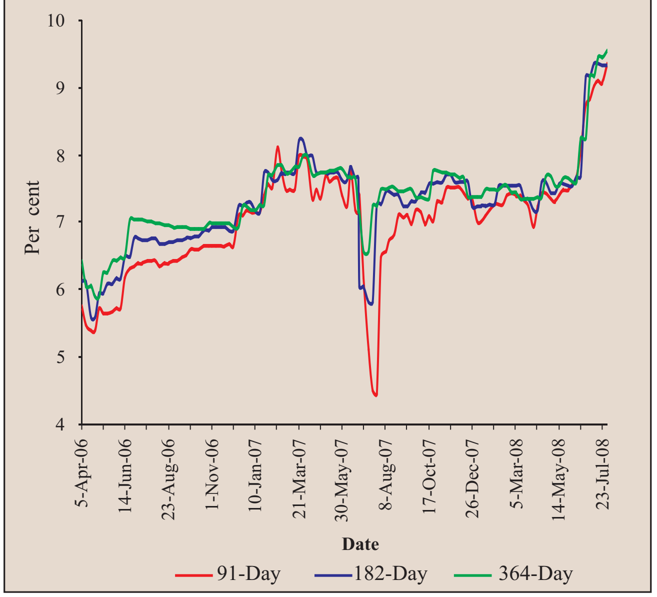
Table 7.1: Additional Borrowings through Treasury Bills to Finance Transfer of the Reserve Bank's Stake in SBI

(Rupees crore)

Date of Issue	Additional Issuances*
1	2
91-day	
June 8, 2007	1,500
June 13, 2007	3,000
June 15, 2007	3,000
June 22, 2007	3,000
June 27, 2007	5,000
June 29, 2007	3,000
Total	**18,500**
182-day	
June 13, 2007	2,000
June 15, 2007	2,000
June 29, 2007	2,000
Total	**6,000**
364-day	
June 8, 2007	1,000
June 22, 2007	2,000
Total	**3,000**
Grand Total	**27,500**

*: Over and above the notified amount.

Chart VII.2: Primary Market Yields of Treasury Bills



VII.9 Primary market yields of TBs across all maturities hardened during 2007-08 (Table 7.2). Barring the sharp dip in yields on July 18, 2007, and easing of yields in February and March 2008, reflecting easy liquidity conditions and very low short-term interest rates, the yields during 2007-08 were higher than their respective levels a year ago (Chart VII.2). The firming up of yields reflected higher money market interest rates, removal of the ceiling on absorption through reverse repo and hikes in the cash reserve ratio. International developments, particularly, the cut in the Fed Funds target rate led to a softening of rates in October 2007 and January 2008. A notable feature during 2007-08 was a better management of the usually tight year-end liquidity

Table 7.2: Profile of Treasury Bills

(At Face Value)

(Rupees crore)

Type of Treasury Bills	Weighted average cut-off yield (Per cent)		Gross amount		Net amount		Outstanding Amount	
	2006-07	2007-08	2006-07	2007-08	2006-07	2007-08	End-March 2007	End-March 2008
1	2	3	4	5	6	7	8	9
91-day	6.80	7.09	1,31,577	2,10,365	28,911	-5,272	45,229	39,957
			(48,222)	(64,841)	(14,473)	(-4,841)	(14,473)	(9,632)
182-day	6.87	7.38	36,912	46,926	7,435	-421	17,206	16,785
			(16,125)	(20,605)	(4,950)	(-345)	(7,950)	(7,605)
364-day	7.07	7.50	53,813	57,205	8,795	3,392	53,813	57,205
			(20,440)	(25,000)	(4,440)	(4,560)	(20,440)	(25,000)

Note: Figures in parentheses pertain to issuances under the Market Stabilisation Scheme (MSS).

conditions than during 2006-07. Reflecting this, and trends in money market segments, the primary yields as at end-March 2008 for 91-day, 182-day and 364-day TBs were placed at 7.23 per cent, 7.36 per cent and 7.35 per cent, respectively, lower by 75, 84 and 63 basis points, respectively, than those at end-March 2007. The yield spread of 364-day TBs over 91-day TBs varied between 208 basis points (July 18, 2007) and 5 basis points (March 12, 2008) with the higher spread in July 2007 reflecting, *inter alia,* the ceiling of Rs.3,000 crore on reserve repo auctions under the liquidity adjustment facility (LAF). With the withdrawal of this ceiling on August 6, 2007, the average yield spread for the remaining period of the year was 31 basis points (27 basis points a year ago) (Table 7.3). The average yield spread during 2007-08 was 42 basis points (38 basis points a year ago).

VII.10 During 2007-08, non-competitive bids aggregating Rs.1,11,551 crore of TBs were received as compared with Rs.72,514 crore during the previous year, indicating the enduring nature of surplus cash balances of the State Governments. The share of non-competitive bids in gross issuances of auctioned TBs increased to 35 per cent during 2007-08 from 33 per cent during 2006-07, almost entirely due to investments by the State Governments.

Table 7.3: Treasury Bills - Primary Market

Month	Notified Amount (Rupees crore)	Average Implicit Yield at Minimum Cut-off Price (Per cent)			Bid-Cover Ratio*		
		91-day	182-day	364-day	91-day	182-day	364-day
1	2	3	4	5	6	7	8
2007-08							
April	15,000	7.53	7.87	7.72	2.87	3.36	3.16
May	18,500	7.59	7.70	7.79	2.33	2.57	2.33
June	35,000	7.41	7.76	6.67	3.23	4.11	3.97
July	12,500	5.07	5.94	6.87	4.48	2.70	4.56
August	20,500	6.74	7.37	7.42	2.11	1.41	2.46
September	25,000	7.08	7.33	7.48	2.07	2.91	2.83
October	28,500	7.11	7.45	7.37	2.16	1.73	3.23
November	22,500	7.47	7.65	7.75	1.63	1.38	1.88
December	7,500	7.41	7.60	7.69	4.41	4.67	3.67
January	19,000	7.08	7.24	7.39	2.63	1.61	4.36
February	15,500	7.33	7.40	7.51	2.15	2.91	2.78
March	5,000	7.33	7.45	7.40	3.97	4.17	3.34
2008-09							
April	22,000	7.28	7.41	7.53	1.70	1.36	2.36
May	21,000	7.41	7.55	7.61	2.65	2.78	3.05
June	11,500	8.01	8.42	7.93	2.00	2.76	2.80
July	16,000	9.07	9.33	9.39	2.52	2.72	3.55

* : Ratio of competitive bids received to notified amount

VII.11 The calendar for the regular auction of TBs for 2008-09 was announced on March 24, 2008. The notified amounts were kept unchanged at Rs.500 crore each for 91-day and 182-day TBs and Rs.1,000 crore for 364-day TBs. However, the notified amount (excluding MSS) of 91-day TBs was increased by Rs.2,500 crore each on ten occasions and by Rs.1,500 crore on one occasion and that of 182-day TBs was increased by Rs.500 crore each on two occasions during 2008-09 (up to August 14, 2008). Thus, an additional amount of Rs.27,500 crore (Rs.17,500 crore, net) was raised over and above the notified amount in the calendar to finance the expected temporary cash mismatch arising from the expenditure on farmers' debt waiver scheme.

Dated Securities

VII.12 Net market borrowings through dated securities at Rs.1,10,671 crore during 2007-08, increased by 3.5 per cent over that of Rs.1,06,921 crore during 2006-07. Gross market borrowings through dated securities at Rs.1,56,000 crore during 2007-08, increased by 6.9 per cent over that of Rs.1,46,000 crore during 2006-07 (Table 7.4, Appendix Tables 34 and 59). The total devolvement on PDs was lower at Rs.957 crore during 2007-08 than Rs.5,604 crore during 2006-07.

VII.13 The Reserve Bank continued with the policy of passive consolidation of dated securities and elongation of maturity profile of securities during 2007-08. Out of 35 dated securities issued during the year, 34 securities were re-issues of existing securities; one new security of 10-year maturity was issued to provide a benchmark in the secondary market (Appendix Table 60). In 2006-07, three securities out of the 33 securities issued during the

Table 7.4: Gross and Net Market Borrowings of the Central Government

(Rs. crore)

Instrument	2006-07 (Actual)	2007-08 (BE)	2007-08 (Actual)	2008-09 (BE)	2008-09 (Actual)*
1	2	3	4	5	6
Total	1,79,373 (1,11,275)	1,88,828 (1,09,579)	1,88,205 (1,09,504)	1,75,780 (99,000)	95,845 (57,199)
of which:					
(i) Dated Securities	1,46,000 (1,06,921)	1,55,455 (1,09,579)	1,56,000 (1,10,671)	1,49,780 (1,05,205)	82,000 (57,982)
(ii) 364-day Treasury Bills	33,373 (4,354)	33,373 (-)	32,205 (-1,167)	26,000 (-6,205)	13,845 (-783)

BE: Budget Estimates *: As on August 14, 2008

Note: Figures in parentheses represent net borrowings.

year were new issuances. Out of 102 outstanding marketable securities (inclusive of MSS) amounting to Rs.13,32,435 crore as on March 31, 2008, 20 securities, each with minimum outstanding amount of Rs.25,000 crore, accounted for as much as 54 per cent of the total outstanding amount (27 per cent as at end-March 2007), indicating the liquidity potential of these securities.

VII.14 The introduction of the Primary Auction Module in the public debt office-negotiated dealing system (PDO-NDS) has increased the efficiency of the auction process. However, the time taken to complete the entire auction process does not compare favourably with the international best practice. In this regard, an internal Working Group (Chairman: Shri.H.R.Khan) was constituted to suggest measures to improve the overall efficiency of the auction process (Box VII.1).

VII.15 The aggregate amount raised through dated securities during the first half of 2007-08 was Rs.97,000 crore, which was Rs.5,000 crore more than the amount indicated in the issuance calendar. The issuance calendar for the second half of the fiscal year, which was for raising Rs.59,000 crore through dated securities, was adhered to. Thus, the actual issuance during 2007-08 aggregated to Rs.1,56,000 crore.

VII.16 The weighted average yield remained high during the first quarter of 2007-08, reflecting the hardening of overall interest rate conditions, but declined thereafter. For the year as a whole, the weighted average yield of dated securities increased for the fourth year in succession during 2007-08 and was placed at 8.12 per cent as compared with 7.89 per cent during 2006-07 and 7.34 per cent in 2005-06 (Chart VII.3). The weighted average coupon

Box VII.1
The Working Group on Auction Process of Government of India Securities

With a view to improving the efficiency of the auction process for Government securities and bringing it on par with the international best standards, an Internal Working Group (Chairman: Shri.H.R.Khan) was constituted i) to review the extant auction procedure followed; ii) make suggestions to reduce the time taken for completion of the auction process; and iii) improve the overall efficiency. The Working Group reviewed the cross country experiences of auction processes in Government securities and consulted market participants to address the various issues relating to the existing auction procedure. The Group made several important recommendations as detailed below:

(a) The time gap between bid submission and declaration of auction results may be reduced progressively, from the existing 3 hours to 1 ½ hours in the short-term and further to 1 hour in the medium term and to 30 minutes in the long term.

(b) The time for submission of non-competitive bids in auctions of dated securities as well as Treasury Bills, both in electronic and physical form, may be advanced.

(c) Eligible entities and individuals desirous of submitting non-competitive bids may be allowed access through a bank/PD only electronically.

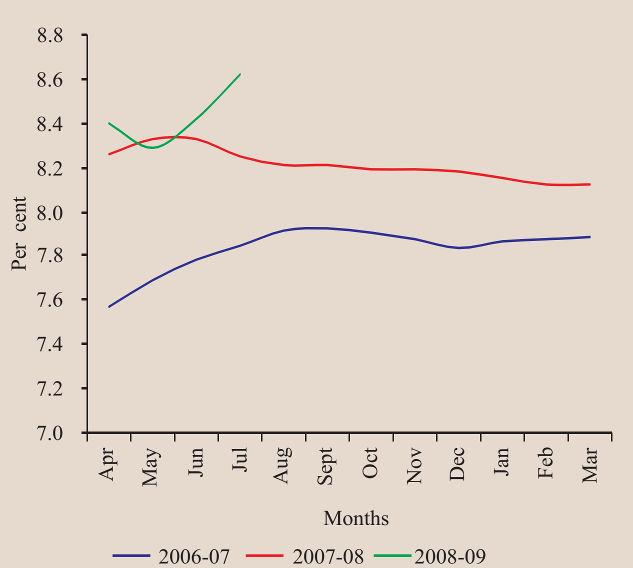
(d) Bank/PD may be allowed to submit a single consolidated bid on behalf of all its constituents, with the responsibility of verifying the genuineness of non-competitive bids vesting with the bank/PD concerned.

(e) Physical bids may be accepted only in exceptional circumstances and competitive bids of non-NDS members may be routed electronically through NDS members.

(f) Direct participation of non-NDS members in auctions of Government securities may be facilitated in the next phase through a secured web-based system linked to the new primary auction module for auctions in Government of India dated securities.

The recommendations of the Working Group are being examined in consultation with the Government of India.

Chart VII.3:Weighted Average Yield of Primary Issues of Dated Securities



on the outstanding stock of Central Government dated securities, however, continued its downward trend, declining to 8.50 per cent as on March 31, 2008 from 8.55 per cent as at end-March 2007.

VII.17 The weighted average maturity of dated securities issued during the year was higher at 14.90 years than 14.72 years during 2006-07 (Table 7.5). The weighted average maturity of the outstanding stock increased to 10.59 years as on March 31, 2008 from 9.97 years as at end-March 2007 (excluding MSS securities).

VII.18 During 2007-08, the spread between the primary cut-off yields in the auctions of dated securities and the prevailing secondary market yields of dated securities of similar maturity ranged between (-) 48 and 8 basis points. However, of the 35 auctions of dated securities, the spread in 28 auctions ranged between (-) 5 and 5 basis points, reflecting efficient price discovery in the primary auctions (Table 7.6).

VII.19 The share of securities with residual maturity of over 10 years issued during 2007-08 declined to 43 per cent of the total issuances as compared with 46 per cent during 2006-07. There was no issue of dated securities with tenors up to 5 years during 2007-08. The share of outstanding stock under 5 years declined to 20 per cent during 2007-08 from 26 per cent during the previous year while that of the outstanding stock with over 10 years residual maturity increased to 36 per cent from 33 per cent during 2006-07 (Table 7.7).

VII.20 Annual repayment obligation based on the repayment schedule of outstanding market loans of the Central Government as on March 31, 2008 indicates bunching of repayments in nominal terms between 2011-12 and 2017-18, with the repayments

Table 7.5: Central Government's Market Loans- A Profile*

(Yield in per cent/Maturity in years)

Year	Range of YTMs at Primary Issues			Issues during the year			Outstanding Stock	
	under 5 years	5-10 years	Over 10 years	Weighted Average Yield	Range of Maturities	Weighted Average Maturity	Weighted Average Maturity	Weighted Average Coupon
1	2	3	4	5	6	7	8	9
1997-98	10.85-12.14	11.15-13.05	-	12.01	3-10	6.60	6.50	..
1998-99	11.40-11.68	11.10-12.25	12.25-12.60	11.86	2-20	7.70	6.30	..
1999-00	-	10.73-11.99	10.77-12.45	11.77	5-19	12.60	7.10	..
2000-01	9.47-10.95	9.88-11.69	10.47-11.70	10.95	2-20	10.60	7.50	..
2001-02	-	6.98-9.81	7.18-11.00	9.44	5-25	14.30	8.20	10.84
2002-03	-	6.65-8.14	6.84-8.62	7.34	7-30	13.80	8.90	10.44
2003-04	4.69	4.62-5.73	5.18-6.35	5.71	4-30	14.94	9.78	9.30
2004-05	5.90	5.53-7.20	4.49-8.24	6.11	5-30	14.13	9.63	8.79
2005-06	-	6.70-7.06	6.91-7.79	7.34	5-30	16.90	9.92	8.75
2006-07	7.69-7.94	7.06-8.29	7.43-8.75	7.89	4-30	14.72	9.97	8.55
2007-08	-	7.55-8.44	7.62-8.64	8.12	6-29	14.90	10.59	8.50

*: Excludes issuances under MSS; YTM: Yield to Maturity; .. :Not Available; - : No Issues

Table 7.6: Primary Cut-Off Yield and Prevailing Secondary Market Yield

(Amount in Rupees crore/Yield in per cent)

Date of Auction	Residual Maturity	Gross amount raised	Cut-off yield	Prevailing Secondary market yield	Spread (Basis Points) (4)-(5)	Bid-Cover Ratio
1	2	3	4	5	6	7
April 12, 2007	8.39	6,000	8.16	8.16	0.00	1.88
April 12, 2007	29.15	4,000	8.58	8.56	0.02	2.66
April 27, 2007	9.71	6,000	8.16	8.11	0.05	2.15
May 11, 2007	9.92	6,000	8.31	8.28	0.03	1.58
May 11, 2007	29.06	4,000	8.64	8.58	0.06	2.51
May 25, 2007	8.26	5,000	8.24	8.16	0.08	3.57
May 25, 2007	14.96	3,000	8.41	8.37	0.04	2.85
June 5, 2007	9.86	6,000	8.18	8.15	0.03	2.50
June 5, 2007	29.00	3,000	8.52	8.48	0.04	2.42
June 12, 2007	9.84	5,000	8.44	8.38	0.06	3.30
June 15, 2007	9.83	6,000	8.35	8.29	0.06	4.76
July 6, 2007	10.00	6,000	7.99	7.96	0.03	3.01
July 6, 2007	28.91	4,000	8.45	8.39	0.06	2.07
July 20, 2007	6.11	6,000	7.59	7.54	0.05	2.33
July 20, 2007	25.10	3,000	8.34	8.33	0.01	3.76
August 3, 2007	9.93	6,000	7.93	7.88	0.05	3.32
August 3, 2007	25.06	4,000	8.45	8.93	-0.48	2.45
August 24, 2007	6.02	5,000	7.87	7.86	0.01	2.90
August 24, 2007	9.89	2,000	7.91	7.91	0.00	2.93
September 7, 2007	14.43	4,000	8.16	8.16	0.00	3.84
September 7, 2007	28.74	3,000	8.41	8.36	0.05	2.89
October 12, 2007	9.73	6,000	7.91	7.89	0.02	2.74
October 12, 2007	24.87	4,000	8.45	8.43	0.02	2.56
October 26, 2007	5.84	4,000	7.74	7.73	0.01	2.94
October 26, 2007	14.54	4,000	8.13	8.12	0.01	3.59
November 8, 2007	14.26	5,000	8.26	8.19	0.07	1.81
November 8, 2007	28.57	3,000	8.39	8.38	0.01	3.10
November 23, 2007	9.62	3,000	7.90	7.89	0.01	2.23
November 23, 2007	14.47	4,000	8.20	8.18	0.02	3.35
December 14, 2007	9.56	5,000	7.92	7.90	0.02	2.12
December 14, 2007	28.47	2,000	8.26	8.25	0.01	3.69
January 11, 2008	9.49	6,000	7.55	7.57	-0.02	2.33
January 11, 2008	28.40	4,000	7.89	7.87	0.02	3.73
February 8, 2008	28.32	4,000	7.77	7.76	0.01	2.91
February 8, 2008	14.01	5,000	7.62	7.61	0.01	2.77

crossing Rs.1,00,000 crore in 2016-17 and 2017-18 (Table 7.8). However, relative to projected GDP, the repayment obligations would be more evenly paced out.

VII.21 The share of high cost debt declined further during 2007-08 as compared with the previous year. The share of the outstanding stock with the coupon of 9 per cent and above declined to 30.4 per cent as on March 31, 2008 from 36.7 per cent as on March 31, 2007. However, reflecting the hardening of interest rates, the share of outstanding stock of debt contracted at interest rates of 7.00-8.99 per cent

Table 7.7: Maturity Profile of Central Government Dated Securities*

(per cent)

Year	Issued during the year			Outstanding Stock		
	Under 5 Years	5-10 Years	Over 10 Years	Under 5 Years	5-10 Years	Over 10 Years
1	2	3	4	5	6	7
1997-98	18	82	0	41	41	18
1998-99	18	68	14	41	42	16
1999-00	0	35	65	37	39	24
2000-01	6	41	53	27	47	26
2001-02	2	24	74	31	36	33
2002-03	0	36	64	26	35	39
2003-04	5	15	80	24	32	44
2004-05	11	11	78	27	30	43
2005-06	0	26	74	26	31	43
2006-07	7	47	46	26	41	33
2007-08	0	57	43	20	44	36

***:** Excluding issues under MSS.

was about 52 per cent during 2007-08 (39.5 per cent a year ago) (Table 7.9).

Table 7.8: Repayment Schedule of the Centre's Outstanding Market Loans*

(As on March 31, 2008)

(Rupees crore)

Year	Amount
1	2
2008-2009	44,028 #
2009-2010	52,589
2010-2011	66,586
2011-2012	73,581
2012-2013	74,621
2013-2014	80,009
2014-2015	69,018
2015-2016	76,244
2016-2017	1,14,130
2017-2018	1,20,774
2018-2019	42,478
2019-2020	28,000
2020-2021	11,000
2021-2022	55,846
2022-2023	57,465
2023-2024	21,000
2025-2026	16,688
2026-2027	19,389
2027-2028	17,680
2028-2029	11,000
2031-2032	2,687
2032-2033	35,957
2034-2035	29,350
2035-2036	29,000
2036-2037	55,000
Total	**12,04,118 #**

***** : Excluding issuances under MSS.
# : Excludes Rs. 547 crore pertaining to a security with call and put option.

Table 7.9: Interest Rate Profile of the Outstanding Stock of Central Government Securities*

Interest Rate (Per cent)	Outstanding Amount (Rupees crore)		Share in Total (Per cent)	
	End-March 2007	End-March 2008	End-March 2007	End-March 2008
1	2	3	4	5
4.00-4.99	11,000	4,500	1.0	0.4
5.00-5.99	82,818	74,818	7.6	6.2
6.00-6.99	1,63,949	1,29,444	15.1	10.8
7.00-7.99	3,20,540	4,46,540	29.6	37.1
8.00-8.99	1,07,681	1,81,782	9.9	15.1
9.00-9.99	71,424	70,751	6.6	5.8
10.00-10.99	1,01,382	93,067	9.4	7.7
11.00-11.99	1,18,668	1,10,556	10.9	9.2
12.00-12.99	93,184	92,660	8.6	7.7
13.00-14.00	12,700	0	1.2	0.0
Total	**10,83,346**	**12,04,118#**	**100**	**100**

***:** Excluding issuances under the MSS.
#: Excludes Rs. 547 crore pertaining to a security with call and put option.

Conversion of Recapitalisation Bonds/Special securities issued to Nationalised Banks

VII.22 The Union Budget 2006-07 had announced the unwinding of the entire outstanding amount of recapitalisation bonds/special securities issued to nationalised banks, amounting to Rs.20,809 crore, through conversion into tradable, SLR eligible, Central Government dated securities. While one tranche of conversion was effected during 2006-07 for Rs.8,708 crore, the remaining amount was converted in two tranches of Rs.6,831 crore and Rs.5,270 crore, respectively, during 2007-08. In each of these tranches, three new securities of 15, 20 and 25 years' maturity were issued with SLR status in *lieu* of the erstwhile recapitalisation bonds.

Special Securities issued by Central Government during 2007-08

VII.23 With a view to compensating oil marketing companies (OMCs) for estimated under-recoveries on account of sale of petroleum products and settlement of contingent liabilities during 2007-08, the Central Government issued two special securities to OMCs - for Rs.11,257 crore on January 18, 2008 and for Rs.9,297 crore on March 28, 2008 - aggregating to Rs.20,554 crore.

VII.24 Two special securities were issued to fertiliser companies as compensation towards fertiliser subsidy during the financial year 2007-08. The first tranche of special securities with a 16-year maturity was issued to 22 fertiliser companies for Rs.3,890 crore on December 7, 2007. The second tranche of special securities with 18-year maturity was issued to 23 fertiliser companies for Rs.3,610 crore on February 18, 2008. Thus, the total issuances of special securities to fertiliser companies during 2007-08 aggregated Rs.7,500 crore.

VII.25 The Central Government also issued special securities with 16-year maturity for Rs.9,996 crore to SBI on March 27, 2008, as subscription towards SBI's rights issue of equity shares. Thus, the special securities issued to various entities aggregated to Rs.38,050 crore in 2007-08 as compared with Rs.40,321 crore in 2006-07.

Market Borrowings during 2008-09

VII.26 The market borrowings (including dated securities and 364-day TBs) of the Central Government for 2008-09 are budgeted lower at Rs.1,75,780 crore (net Rs.99,000 crore) than the actual amount raised in 2007-08. On March 24, 2008, the issuance calendar for dated securities for the first half of 2008-09 (April-September) was released in consultation with the Central Government. Accordingly, an amount of Rs.96,000 crore is scheduled to be raised as compared with Rs.97,000 crore raised during the corresponding period of the previous year. The monthly amount to be raised varies from Rs.8,000 crore (September 2008) to Rs.20,000 (April and May 2008) (Table 7.10). While 36 per cent of the securities to be raised during the first half of 2008-09 would be of tenor between 10-14 years, 32 per cent of the securities would be of the tenor 20 years and above.

VII.27 During 2008-09 so far (up to August 14, 2008), the Central Government has raised Rs.82,000 crore through dated securities under the market borrowing programme. The borrowings were raised in accordance with the indicative calendar except for the auction on July 24, 2008, where a 10-year benchmark security was issued in place of a higher maturity security in view of uncertain market conditions. The auctions held on July 24, 2008 and August 8, 2008 were based on uniform price method. All auctions during 2008-09 (up to August 14, 2008)

Table 7.10: Indicative Calendar and Actual Borrowings of the Central Government - 2008-09

(Amount in Rupees crore/Maturity in years/Yield in Percent)

Sr.	Borrowings as per Auction Calendar			Actual Borrowings			
No.	Period of auction	Amount	Residual Maturity	Date of Auction	Amount	Residual Maturity	Yield
1	2	3	4	5	6	7	8
1.	April 4 - 11, 2008	6,000	5-9 year	April 11, 2008	6,000	7.38	8.14
		4,000	20- year and above		4,000	24.37	8.67
2.	April 18 - 25, 2008	6,000	10-14 year	April 21, 2008	6,000	10.00	8.24
		4,000	20- year and above		4,000	28.13	8.77
3.	May 2-9, 2008	6,000	5-9 year	May 9, 2008	6,000	7.92	7.96
		4,000	20-year and above		4,000	24.29	8.35
4.	May 16-23, 2008	6,000	10-14 year	May 23, 2008	6,000	9.91	8.07
		4,000	20-year and above		4,000	23.72	8.52
5.	May 30- June 6, 2008	6,000	10-14 year	June 6, 2008	6,000	9.87	8.26
		4,000	20 year and above		4,000	24.22	8.72
6.	June 13 - 20, 2008	6,000	15-19 year security	June 20, 2008	6,000	18.64	9.25
7.	July 4-11, 2008	6,000	10-14 year	July 4, 2008	6,000	9.79	9.13
		4,000	20 year and above		4,000	23.61	10.03
8.	July 18-25, 2008	6,000	15-19 year	July 24, 2008	6,000	9.74	9.08
9.	August 1-8, 2008	6,000	10-14 year	August 8, 2008	6,000	9.70	9.14
		4,000	20 year and above		4,000	24.06	9.88
10.	August 14-22 , 2008	6,000	15-19 year				
11.	September 5-12, 2008	5,000	10-14 year				
		3,000	20-year and above				
	Total	**96,000**			**82,000**		

were for reissuance of existing securities, barring one new issue of 10-year maturity (see Appendix Table 60). The weighted average maturity of dated securities issued during 2008-09 (up to August 14, 2008) at 15.21 years was higher than 14.32 years during the corresponding period of the previous year. The weighted average yield of dated securities issued during the same period increased to 8.72 per cent from 8.24 per cent.

STATE GOVERNMENTS

Ways and Means Advances

VII.28 The revised Scheme of Ways and Means Advances (WMA) and Overdrafts (OD) for the State Governments put in place from 2006-07 following the recommendations of the Advisory Committee on WMA and OD to State Governments (Chairman: Shri.M.P. Bezbaruah), was continued for 2007-08. The aggregate normal WMA limit for the State Governments for 2007-08 was retained at Rs.9,875 crore. Furthermore, under Section 21A of the Reserve Bank of India Act, the Reserve Bank entered into an agreement with the Government of the Union Territory of Puducherry effective December 17, 2007 for carrying out its general banking business and managing rupee public debt and its normal WMA limit was fixed at Rs.50 crore. Accordingly, the aggregate normal WMA limit of all States (inclusive of Union Territory of Puducherry) was at Rs.9,925 crore for 2007-08. The rates of interest on normal/special WMA and OD were linked to the repo rate. In addition, with the objective of providing an incentive to the State Governments to build up the consolidated sinking fund (CSF) and guarantee redemption fund (GRF), the net incremental annual investment in these funds were made eligible for availing special WMA up to a ceiling equivalent to the normal WMA limit.

VII.29 During 2007-08, the average utilisation of normal WMA by the State Governments was high during the first half of the year, but moderated in the second half, particularly in the last quarter. The average utilisation of special WMA for 2007-08 was significantly higher than in 2006-07 throughout the year, barring March 2008. The average utilisation of OD was high during the first half but tapered off towards the close of the year. There was no OD in the months of February and March 2008 (Table 7.11).

Table 7.11 : WMA/Overdrafts of the State Governments*

(Rupees crore)

Month	Special WMA			Normal WMA			Overdraft			Total		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
1	2	3	4	5	6	7	8	9	10	11	12	13
April	25	235	489	723	114	287	37	15	139	785	364	916
May	6	437	310	162	654	3	0	461	0	169	1552	313
June	1	204	9	3	222	0	0	10	0	4	436	9
July	5	389	25	56	310	0	0	3	0	61	702	25
August	10	307		145	476		10	281		164	1064	
September	10	961		223	601		2	225		235	1787	
October	9	254		189	184		22	128		220	566	
November	10	279		268	351		48	127		327	757	
December	22	161		246	103		122	13		390	277	
January	43	72		297	81		75	34		415	187	
February	39	72		121	8		5	0		165	80	
March	35	5		4	1		2	0		41	6	
Average	**18**	**281**	**365**	**203**	**259**	**73**	**27**	**108**	**46**	**248**	**648**	**316**

*: Average of daily outstandings.

VII.30 During 2007-08, eight States resorted to WMA while three States availed OD as compared with eight States and two States, respectively, during the previous year. The number of days for which the States were in WMA was lower than those in the previous year for Jharkhand, Kerala, Maharashtra and Uttarakhand but higher for Punjab, West Bengal, Mizoram and Nagaland (Table 7.12).

Table 7.12: State and Union Territory-wise Availment of WMA/Overdraft

(Rupees crore)

S. No.	States	WMA		Overdraft			
		2006-07	2007-08	2006-07		2007-08	
		Number of days	Number of days	Number of Occasions*	Number of days	Number of Occasions*	Number of days
1	2	3	4	5	6	7	8
1	Andhra Pradesh	0	0	0	0	0	0
2	Bihar	0	0	0	0	0	0
3	Chhattisgarh	0	0	0	0	0	0
4	Goa	0	0	0	0	0	0
5	Gujarat	0	0	0	0	0	0
6	Haryana	0	0	0	0	0	0
7	Jharkhand	29	0	0	0	0	0
8	Karnataka	0	0	0	0	0	0
9	Kerala	223	184	9	63	9	51
10	Madhya Pradesh	0	0	0	0	0	0
11	Maharashtra	42	0	0	0	0	0
12	Orissa	0	0	0	0	0	0
13	Punjab	0	19	0	0	0	0
14	Rajasthan	0	0	0	0	0	0
15	Tamil Nadu	0	0	0	0	0	0
16	Uttar Pradesh	0	0	0	0	0	0
17	West Bengal	0	142	0	0	6	65
18	Puducherry	–	0	–	–	0	0
	Special Category States						
1	Arunachal Pradesh	2	0	0	0	0	0
2	Assam	0	0	0	0	0	0
3	Himachal Pradesh	1	1	0	0	0	0
4	Manipur	0	3	0	0	0	0
5	Meghalaya	0	0	0	0	0	0
6	Mizoram	1	4	0	0	0	0
7	Nagaland	28	30	2	16	1	3
8	Tripura	0	0	0	0	0	0
9	Uttarakhand	63	5	0	0	0	0

*: Refers to fresh occurrences of overdrafts during the year. – : Not Applicable.

VII.31 Based on the recommendations of the Committee (Chairman: Shri. M.P. Bezbaruah), the State-wise normal WMA limits for 2008-09 were reviewed towards the end of the year. Accordingly, it was decided to retain the extant State-wise normal WMA limits of Rs.9,925 crore for 2008-09 (inclusive of Rs.50 crore for the Union Territory of Puducherry) (Table 7.13). During 2008-09 (up to August 14, 2008), four States availed of WMA, out of which three States also resorted to OD for a period ranging between 4 and 14 days. While the utilisation of WMA/OD was high in April 2008, it tapered off sharply thereafter, with no State availing normal WMA/OD in June and July 2008. The average daily utilisation of WMA and OD during 2008-09 (up to August 14, 2008) was Rs.313 crore as compared with Rs.769 crore during the corresponding period of the previous year.

VII.32 Despite a significant deceleration in the automatic inflow of NSSF funds due to lower collections, most State Governments accumulated sizeable cash surpluses, reflecting the State-level fiscal consolidation measures and the substantial

Table 7.13: Normal WMA Limits of States/UT

(Rupees crore)

State/U.T.	2004 (effective April 1, 2004)	2005 (effective April 1, 2005)	2006 (effective April 1, 2006)	2007 (effective April 1, 2007)	2008 (effective April 1, 2008)
1	2	3	4	5	6
Non-Special Category States/U.T.					
Andhra Pradesh	700	770	880	880	880
Bihar	340	380	425	425	425
Chhattisgarh	155	175	190	190	190
Goa	65	65	65	65	65
Gujarat	520	575	630	630	630
Jharkhand	175	225	280	280	280
Haryana	245	280	295	295	295
Karnataka	505	570	625	625	625
Kerala	315	345	350	350	350
Madhya Pradesh	395	420	460	460	460
Maharashtra	1,000	1,050	1,160	1,160	1,160
Orissa	250	270	300	300	300
Punjab	325	360	360	360	360
Rajasthan	405	440	505	505	505
Tamil Nadu	615	670	730	730	730
Uttar Pradesh	835	920	1,020	1,020	1,020
West Bengal	480	495	545	545	545
Puducherry	NA	NA	NA	50#	50
Sub Total	**7,325**	**8,010**	**8,820**	**8,870**	**8,870**
Special Category States					
Arunachal Pradesh	50	50	65	65	65
Assam	250	295	300	300	300
Himachal Pradesh	140	145	190	190	190
Manipur	50	55	60	60	60
Meghalaya	50	55	60	60	60
Mizoram	50	50	55	55	55
Nagaland	60	65	80	80	80
Tripura	70	80	100	100	100
Uttarakhand	95	130	145	145	145
Sub Total	**815**	**925**	**1,055**	**1,055**	**1,055**
Total	**8,140**	**8,935**	**9,875**	**9,925**	**9,925**

U.T. : Union Territory #: Effective December 17, 2007 increase in the discretionary market borrowings. The surplus cash balances of the State Governments are automatically invested in 14-day Intermediate Treasury Bills (ITBs) at a discount rate of 5 per cent. In search of higher yields, the State Governments resorted to investment in auction Treasury Bills (ATBs). As a result, during 2007-08, the monthly average investment by the State Governments in ITBs declined by 8 per cent to Rs. 39,654 crore from Rs.42,988 crore in the previous year. Correspondingly, the monthly average investment by the State Governments in ATBs increased by 64.4 per cent to Rs.34,393 crore from Rs.20,920 crore in the previous year (Table 7.14). However, in anticipation of meeting their year-end expenditure, the States appeared to have shifted from ATBs to ITBs and also temporarily parked the proceeds from market borrowings in ITBs. As a result, the outstanding investments by the States in ITBs, at Rs.68,129 crore (26 States), were higher at end-March 2008 than Rs.39,217 crore (22 States) at end-March 2007. The outstanding investment of State Governments in ATBs at end-March 2008 was lower at Rs.29,486 crore than Rs.34,186 crore at end-March 2007.

VII.33 The liquidity position of most of the States has remained generally comfortable during 2008-09 so far. The average investment by State Governments in TBs (both ITBs and ATBs) during 2008-09 (up to August 14, 2008) was higher than during the corresponding period of the previous year. The outstanding investment of State Governments in TBs at Rs.84,905 crore on August 14, 2008 was higher as against Rs.78,238 crore on August 14, 2007.

VII.34 Consolidated sinking funds (CSFs) and the guarantee redemption funds (GRFs) of the State Governments were exclusively invested in Government securities held in the books of the Reserve Bank up to 2007-08. In view of the sharp increase in the quantum of the investment portfolio of the States and the finite stock of securities with the Reserve Bank, the Bank purchased Government securities amounting to Rs.2,073 crore on behalf of State Governments from the secondary market during 2008-09 so far (up to July 31, 2008) and transferred these securities to the CSF set up by the State Governments without loading any additional charge (Box VII.2).

Table 7.14: Investments of the State Governments/UT*

(Rupees crore)

	Investment in 14-day Treasury Bills			Investment in Auction Treasury Bills			Total		
Month	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
1	2	3	4	5	6	7	8	9	10
April	32,538	31,160	48,192	14,247	34,496	31,780	46,785	65,656	79,972
May	34,559	31,359	48,280	17,542	32,612	32,244	52,101	63,971	80,525
June	40,680	44,430	42,865	19,262	32,500	40,285	59,941	76,930	83,150
July	47,089	35,938	46,742	16,626	39,557	38,802	63,715	75,495	85,543
August	47,538	36,458		17,249	42,477		64,787	78,935	
September	47,858	34,282		18,762	39,201		66,620	73,483	
October	38,470	32,052		21,529	35,195		59,999	67,246	
November	41,694	30,556		21,656	33,872		63,350	64,427	
December	43,879	38,042		25,106	31,565		68,985	69,607	
January	42,860	45,029		25,591	29,661		68,451	74,690	
February	48,054	50,633		24,554	32,403		72,608	83,036	
March	50,632	65,910		28,920	29,181		79,552	95,091	
Average	**42,988**	**39,654**	**46,520**	**20,920**	**34,393**	**35,778**	**63,908**	**74,047**	**82,298**

* : Average of Friday outstandings.

Box VII.2
Management of States' Investment Portfolio by the Reserve Bank

Consolidated Sinking Fund (CSF)

Following the recommendations of the Tenth Finance Commission (1995) and subsequent discussions with the State Governments, the Reserve Bank circulated the scheme of CSF to the State Governments in June 1999. The objective of setting up the CSF by the State Governments was to provide a cushion to the repayment of open market loans. As per the scheme, the State Governments were required to contribute to the Fund every year 1 to 3 per cent of the outstanding open market loans as at the end of the previous year. Withdrawal was not allowed before 5 years from the date of notification of the scheme by the State Government. The investments in CSF were undertaken by the Reserve Bank out of its own stock of Government securities. The scheme was revised in line with the recommendations of the Twelfth Finance Commission (TFC, November 2004), the Advisory Committee on Ways and Means Advances to State Governments (Chairman: Shri M. P. Bezbaruah) (October, 2005) and the Technical Group on Borrowings by the States (Chairperson: Smt. Shyamala Gopinath) (December 2005). The revisions included (i) extending the ambit of the CSF to cover amortisation of all liabilities (and not just open market borrowings as was the case earlier); (ii) eligibility of the States to avail special WMA equivalent to their net incremental annual investment in CSF; (iii) contribution by the States of at least 0.5 per cent of the outstanding liabilities to the Fund; and (iv) provision for acquiring of securities by the Reserve Bank from the secondary market. The revised scheme was circulated by the Reserve Bank in May 2006 to the State Governments. As on August 13, 2008, 18 States notified the CSF scheme, of which 14 States notified the revised CSF scheme. The aggregate outstanding investments in CSF by the 18 State Governments increased to Rs.20,966 crore as on July 31, 2008 from Rs.3,015 crore as on July 31, 2004.

Guarantee Redemption Fund (GRF)

In accordance with the recommendations of the Technical Committee on State Government Borrowings (1999) set up by the Reserve Bank to examine the issue of State Government guarantees in all its aspects, the Reserve Bank circulated the scheme of GRF to the State Governments in August 2001. The investments in GRF were undertaken by the Reserve Bank out of its own stock of Government securities. The objective of setting up GRF was to provide a cushion to the servicing of contingent liability arising from invocation of guarantees issued by the Government in respect of bonds issued and other borrowings by state level undertakings or other bodies. As per the scheme, the State Governments were required to contribute an amount equivalent to at least 1/5th of the outstanding invoked guarantees *plus* an amount of likely invocation as a result of the incremental guarantees issued during the year, so as to reach the level deemed sufficient to meet the amount of anticipated guarantees devolving on the Government as a result of the likely invocation of outstanding guarantees in the succeeding 5 years. The scheme was revised in line with the recommendations of the TFC, the Advisory Committee on WMA to State Governments and the Technical Group on Borrowings by the States. The revisions included eligibility of the States to avail Special WMA equivalent to their net incremental annual investment in GRF and provision for acquiring of securities by the Reserve Bank from the secondary market. The revised scheme was circulated by the Reserve Bank in May 2006 to the State Governments. As on August 13, 2008, eight States notified the GRF scheme, of which three States notified the revised GRF scheme. The aggregate outstanding investments in GRF by the eight State Governments increased to Rs.2,869 crore as on July 31, 2008, from Rs.556 crore as on July 31, 2004.

Calamity Relief Fund (CRF)

Following the recommendations of the TFC, the Central Government had circulated the CRF scheme among the State Governments. The scheme involved the constitution of a calamity relief fund by each State for the purpose of financing natural calamity relief assistance. The TFC worked out the total size of CRF at Rs.21,333 crore with contribution from Centre and States in the ratio of 75:25, for the operative period 2005-2010. The scheme was subsequently revised and circulated in June 2006 wherein States were given discretion to choose the Reserve Bank as the fund manager. The investments under the CRF scheme are not eligible for special WMA facility. The States are yet to notify the CRF scheme with the Reserve Bank as the fund manager.

Special Reserve Fund (SRF)

The TFC had recommended that external assistance be transferred by the Central Government to the State Governments on a back-to-back basis on the same terms and conditions as attached to such assistance by external funding agencies. The recommendation was accepted by the Central Government. Furthermore, the Technical Group on Borrowings by State Governments (Chairperson: Smt. Shyamala Gopinath) (December 2005) recommended the setting up of a separate sinking fund for managing exchange rate risks which could be funded by the savings resulting from payment of lower rate of interest on external borrowings in favourable times. The modalities for setting up of the fund were discussed in the State Finance Secretaries Conference.

Market Borrowings

VII.35 The provisional net allocation under the market borrowing programme for the State Governments for 2007-08 was placed at Rs.28,781 crore. Taking into account the repayments of Rs.11,555 crore and additional allocation of Rs.40,234 crore (of which Rs.35,780 crore was on account of shortfall in collections under the NSSF), the gross allocation amounted to Rs.80,570 crore during 2007-08. The State Governments raised a gross amount of Rs.67,779 crore in 2007-08 as compared with Rs.20,825 crore in the previous year (Table 7.15 and Appendix Table 61). The entire gross amount was raised through the auction route during 2007-08 as in the previous year. Four States (Chhattisgarh, Haryana, Orissa and Tripura) did not participate in the market borrowing programme during 2007-08, while 11 States did not raise the entire amount allocated to them.

VII.36 During 2007-08, 18 tranches of auctions were held under the market-borrowing programme of the State Governments as compared with 12 tranches of auctions during the previous year. All the issues during 2007-08 were of 10-year maturity. The State Governments raised market loans in all the months of 2007-08 (Table 7.16 and Appendix Table 62).

VII.37 During 2007-08, while two State Governments had accessed the market as many as nine times, two other State Governments accessed the market only on one occasion. In all, 120 new securities were issued by the State Governments during 2007-08 as compared to 72 securities during 2006-07 (Table 7.17). The average issue size during 2007-08 was Rs.565 crore as compared with Rs.289 crore during the previous year.

VII.38 The weighted average cost of market borrowings for State Governments increased significantly from 6.13 per cent in 2003-04 to 8.25 per cent in 2007-08 reflecting the general hardening of interest rates. The weighted average yield firmed up by 15 basis points during 2007-08 as compared to 47 basis points during 2006-07 (Appendix Table 63). The cut-off yield in the auction of State Government securities ranged between 7.84 per cent and 8.90 per cent during 2007-08 (Table 7.18).

Table 7.15: Annual Market Borrowings of the State Governments

(Rupees crore)

Items	2006-07	2007-08#	2008-09
1	2	3	4
1. Net Allocation	17,242	28,781	44,692 P
2. Additional Allocation	2,803	4,454	45 P
3. Additional allocation on account of NSSF shortfall	-	35,780	-
4. Total Net allocation (1+2+3)	**20,045**	**69,015**	**44,737 P**
5. Repayments	6,551	11,555 *	14,371 (5,130) @
6. Gross Allocation (4+5)	**26,597**	**80,570**	**59,108 P**
7. Total Amount Raised	**20,825**	**67,779**	**10,812 @**
8. Net amount raised (7-5)	**14,274**	**56,068**	**5,682 @**
9. Outstanding State Development Loans (end-period)	**2,42,777**	**2,98,845**	**-**

P : Provisional.
* : Excluding Rs.156 crore of buy-back of securities by Government of Orissa.
\# : Includes the Union Territory of Puducherry.
@: Up to August 14, 2008.

Table 7.16: Month-wise Market Borrowings of State Governments

Sr. No.	Month/ Date	No. of States/ U.T.	Raised through Auction: Amount (Rupees crore)	Raised through Auction: Cut-off Yield (Percent)	Spread over Central Government Dated Security (Basis points)
1	2	3	4	5	6
2007-08					
1.	April	5	1,837	8.30	22
2.	May	1	350	8.34	23
3.	May	2	1,400	8.40	28
4.	June	9	3,566	8.45-8.57	23-35
5.	July	5	1,389	8.00-8.25	19-44
6.	August	8	3,484	8.30-8.90	30-90
7.	September	8	3,074	8.14-8.50	32-68
8.	October	1	590	8.20	29
9.	October	4	4,672	8.31-8.40	37-46
10.	November	6	5,300	8.39-8.69	51-81
11.	November	6	5,212	8.45-8.50	55-60
12.	December	11	2,963	8.39-8.58	50-69
13.	January	6	5,833	8.03-8.12	33-42
14.	January	12	7,778	7.84-7.98	46-60
15.	February	13	7,776	7.93-8.02	39-48
16.	February	7	4,975	8.12-8.48	47-83
17.	March	4	4,349	8.28-8.45	63-80
18.	March	12	3,229	8.35-8.70	54-89
	Total		**67,779**	**7.84-8.90**	**19-90**
2008-09					
1.	April	4	2,648	8.50-8.60	35-45
2.	May	5	3,264	8.39-8.68	30-59
3.	June	3	2,300	9.38-9.59	77-98
4.	July	1	500	9.81	49
5.	July	3	2,100	9.86-9.90	48-52

UT: Union Territory.

Table 7.17: Frequency Distribution of Tranches of Auctions during 2007-08

No. of times entering the Market/Tranches	No. of States/U.T.	No. of securities issued
1	2	3
1	2	2
2	4	8
3	2	6
4	7	28
6	3	18
8	5	40
9	2	18
Total	**25**	**120**

UT: Union Territory.

Table 7.18: Yield on State Government Securities

(Per Cent)

Year	Range	Weighted Average
1	2	3
1997-98	12.30-13.05	12.82
1998-99	12.15-12.50	12.35
1999-00	11.00-12.25	11.89
2000-01	10.50-12.00	10.99
2001-02	7.80-10.53	9.20
2002-03	6.60-8.00	7.49
2003-04	5.78-6.40	6.13
2004-05	5.60-7.36	6.45
2005-06	7.32-7.85	7.63
2006-07	7.65-8.66	8.10
2007-08	7.84-8.90	8.25

VII.39 The increase in the cost of borrowings during the period 2004-05 to 2007-08 was highest in respect of Uttarakhand (202 basis points), while it was the lowest for Sikkim (107 basis points). The spread between minimum and maximum weighted average yield during 2007-08 increased to 64 basis points from 45 basis points during 2006-07; the spread, however, was lower than 87 basis points during 2004-05 (Appendix Table 63).

VII.40 The spread between the cut-off yield of State Government securities in the auctions and the secondary market yield of Central Government security of comparable maturity, was above 50 basis points for 49 (out of 120) securities issued during 2007-08 (Appendix Table 62); the spread was higher than 50 basis points for only two securities (out of 72 securities) issued during 2006-07. The weighted average spread was over 50 basis points for the Union Territory of Puducherry and for seven States, *viz.,* Andhra Pradesh, Goa, Uttar Pradesh, Bihar, Karnataka, Uttarakhand and Jammu & Kashmir (Table 7.19). Hardening of interest rates due to prevailing market conditions and large borrowings by the State Governments mainly resulted in higher spreads during 2007-08.

VII.41 As a result of increase in the cost of borrowings in 2007-08, the share of outstanding loans in the range of interest rate, 8.00-8.99 per cent increased sharply at end-March 2008 as compared with end-March 2007. The share of outstanding securities in other interest rate ranges declined significantly (Table 7.20).

VII.42 At end-March 2008, two-thirds of the total outstanding debt of State Governments were in the maturity bucket of 6-10 years, marginally lower than 67.1 per cent at end-March 2007. The share of loans in the maturity bucket of 6-10 years ranged between 47.4 per cent (Orissa) and 100.0 per cent (Puducherry) (Table 7.21).

Table 7.19: Weighted Average Spreads during 2007-08

Weighted Average Spread (Basis Points)	General Category States/UTs	Special Category States
1	2	3
31– 40	Madhya Pradesh and Rajasthan	Nagaland
41 – 50	Kerala, Tamil Nadu, Gujarat, Jharkhand, Maharashtra, Punjab and West Bengal	Assam, Arunachal Pradesh, Himachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim
51 – 60	Andhra Pradesh, Goa, Puducherry, Uttar Pradesh, Bihar and Karnataka	Uttarakhand
Above 60	-	Jammu & Kashmir

Table 7.20: Interest Rate Profile of the Outstanding Stock of State Government Securities

Sr. No.	Range of Interest Rate (per cent)	Outstanding Amount (Rupees crore)		Percentage to Total	
		End-March 2007	End-March 2008	End-March 2007	End-March 2008
	1	2	3	4	5
1.	5.00-5.99	33,825	33,825	13.9	11.3
2.	6.00-6.99	58,564	58,564	24.1	19.6
3.	7.00-7.99	59,638	69,936	24.6	23.4
4.	8.00-8.99	18,791	76,272	7.7	25.5
5.	9.00-9.99	5,412	5,412	2.2	1.8
6.	10.00-10.99	14,468	14,418	6.0	4.8
7.	11.00-11.99	16,934	16,869	7.0	5.6
8.	12.00-12.99	25,959	23,550	10.7	7.9
9.	13.00-13.99	9,186	0	3.8	0.0
	Total	**2,42,777**	**2,98,845**	**100**	**100**

VII.43 The maturity profile of market borrowings shows large repayment obligations from 2012-13 onwards due to high amount of borrowings between 2002-03 and 2004-05 under the Debt Swap Scheme. The repayment obligations will more than double in 2017-18 over the previous year on account of the large magnitude of borrowings during 2007-08 to meet the NSSF shortfall (Table 7.22).

Indicative Calendar for Market Borrowings of State Governments

VII.44 The Annual Policy Statement of the Reserve Bank for 2006-07 proposed, *inter-alia*, that "States, at their discretion and initiative, would be encouraged to develop an advance indicative open market borrowing calendar". Based on the decisions taken in the 18th and 19th Conferences of the State Finance Secretaries, an attempt was made to obtain the period-wise borrowing requirements from the State Governments during 2007-08. In order to initiate a step towards greater transparency in market borrowings of the State Governments in a progressive manner, the Reserve Bank issued a press release on 'Market Borrowings of State Governments' on September 12, 2007 detailing net allocation, maturities, the amount raised till then and the balance to be raised during the remaining period of 2007-08.

Use of Cash Balances to Retire debt

VII.45 The build up of large surplus cash balances by the State Governments in recent years and the negative spread earned on the investment of such balances prompted some State Governments to utilise them to retire outstanding debt. The scheme for the buy-back of outstanding State Development Loans (SDLs) which was made operative during

Table 7.21: Maturity Profile of Outstanding State Government Securities

(At End-March 2008)

Sr. No.	State	Percentage to Total Amount Outstanding		Total Amount Outstanding (Rupees crore)
		0-5 years	6-10 years	
1	2	3	4	5
1.	Andhra Pradesh	38.8	61.2	29,186
2.	Arunachal Pradesh	17.7	82.3	598
3.	Assam	38.0	62.0	7,155
4.	Bihar	48.8	51.2	11401
5.	Chhattisgarh	43.7	56.3	1,837
6.	Goa	35.3	64.7	1,477
7.	Gujarat	33.1	66.9	19,021
8.	Harayana	42.5	57.5	4,741
9.	Himachal Pradesh	29.8	70.2	5,905
10.	Jammu & Kashmir	25.4	74.6	5,645
11.	Jharkhand	23.5	76.5	4,039
12.	Karnataka	47.9	52.1	11,988
13.	Kerala	27.9	72.1	16,481
14.	Madhya Pradesh	34.4	65.6	13,257
15.	Maharashtra	18.6	81.4	27,711
16.	Manipur	23.4	76.6	1,078
17.	Meghalya	32.6	67.4	1,268
18.	Mizoram	31.2	68.8	838
19.	Nagaland	34.6	65.4	1,998
20.	Orissa	52.6	47.4	8,024
21.	Punjab	23.0	77.0	13,228
22.	Rajasthan	39.7	60.3	19,303
23.	Sikkim	22.1	77.9	742
24.	Tamil Nadu	32.6	67.4	20,502
25.	Tripura	41.5	58.5	1,114
26.	Uttarakhand	25.5	74.5	4,620
27.	Uttar Pradesh	40.2	59.8	33,771
28.	West Bengal	21.4	78.6	31,579
29.	Puducherry	0.0	100.0	337
	Total	**33.1**	**66.9**	**2,98,845**

Note: Data are provisional

Table 7.22: Maturity Profile of Outstanding State Loans and Power Bonds

(At end-March 2008)

(Rupees crore)

Year	State Loans	Power Bonds	Total Outstanding
1	2	3	4
2008-09	14,371	2,907	17,278
2009-10	16,238	2,907	19,145
2010-11	15,660	2,907	18,567
2011-12	21,993	2,907	24,900
2012-13	30,628	2,870	33,498
2013-14	32,079	2,870	34,949
2014-15	33,384	2,870	36,254
2015-16	35,191	2,907	38,098
2016-17	31,522	1,453	32,975
2017-18	67,779	0	67,779
Total	**2,98,845**	**24,598**	**3,23,443**

2006-07 through two rounds of reverse auctions, continued during 2007-08. A total amount of Rs.156 crore covering 11 SDLs of Government of Orissa was purchased through these operations which were conducted through secondary market purchases on NDS-OM platform in February and March 2008. Two State Governments, *viz.,* Orissa and Tamil Nadu, also bought back the loans amounting to Rs.217 crore and Rs.1,178 crore, respectively, borrowed from the National Small Savings Fund (NSSF).

Market Borrowings of State Governments during 2008-09 so far (up to August 14, 2008)

VII.46 The estimated net market borrowings of the State Governments for 2008-09 are placed at Rs.44,737 crore inclusive of additional allocation of Rs. 45 crore. Taking into account repayments of Rs.14,371 crore, the gross market borrowings of State Governments are estimated at Rs.59,108 crore. During the current year so far (up to August 14, 2008), eight State Governments raised Rs.10,812 crore under the market borrowing programme as compared with Rs.8,542 crore during the corresponding period of the previous year. The cut-off yield in the auction ranged between 8.39 per cent and 9.90 per cent. The weighted average interest rate on market loans firmed up to 9.07 per cent during 2008-09 (up to August 14, 2008) from 8.35 per cent during the corresponding period of 2007-08. The spreads of State Government securities over the yields of Central Government security of corresponding maturity ranged between 30 and 98 basis points as against 19 and 44 basis points during the corresponding period of 2007.

Conference of State Finance Secretaries

VII.47 The 20th Conference of State Finance Secretaries was held on August 24, 2007. Apart from operational issues pertaining to Government transactions, the discussions primarily focused on issues relating to the framework for investment of the cash balances of the State Governments, investment portfolio of the States, management of foreign exchange risk by the States in the context of back-to-back transfer of external loans from the Centre and the Standing Technical Committee on the borrowings of the States. The issues focused in the 21st Conference held on May 15, 2008 related to surplus cash balances of the State Governments, market borrowings, budget management and management of various funds of the States.

Outlook

VII.48 The size of market borrowing programme of the Central Government through dated securities for 2008-09 is placed lower than the actual borrowing raised during 2007-08, reflecting the decline in the borrowing requirements as envisaged in the Union Budget 2008-09. However, the size of 'off-budget' borrowings by way of issuances of special securities could have implications for management of normal market borrowings. The enactment of the Government Securities Act, 2006 and Government Securities Regulations, 2007 would facilitate introduction of STRIPS. In order to carry forward the reform process to enhance efficiency in debt management, active consolidation and appropriate mix of securities could be pursued during 2008-09. An Internal Working Group was constituted by the Reserve Bank to review the extant auction procedure followed for issuances of Government securities and make suggestions to reduce the time taken for completion of the auction process and improve the overall efficiency. The recommendations of the Working Group are being examined for implementation. Measures are being initiated to introduce the scheme of non-competitive bidding facility in the auctions of State Government securities during 2008-09. Re-issuances of State Governments securities could be pursued in consultation with the State Governments to improve liquidity by building up a critical mass.

VIII CURRENCY MANAGEMENT

VIII.1 The objective of the Reserve Bank's currency management operations is to ensure an adequate supply of good quality banknotes and coins. Accordingly, the Reserve Bank continued to take various measures during 2007-08 to meet the increased public demand for banknotes and coins while simultaneously improving the quality of banknotes. The demand for banknotes was met in full during 2007-08. There was a marked improvement in the quality of Rs.10 denomination banknotes due to sustained efforts to increase the supply of fresh banknotes and mop up of the soiled banknotes. The number of soiled banknotes disposed off by the Reserve Bank during 2007-08 increased significantly, reflecting continued efforts towards weeding out soiled banknotes, increase in disposal capacity by resorting to second shift of currency verification and processing system (CVPS) operations, overhauling of existing machines and upgradation in their capacities. The mechanisation of note processing activities was achieved at all the 4,271 currency chests of commercial banks. Furthermore, all the currency chests held with banks were equipped with note sorting machines (NSMs). As a next logical step, the Bank has initiated exercise to procure and install desktop NSMs in select non-currency chest branches, based on the volume of cash handled, proximity to international border and quantum of detection of counterfeit notes.

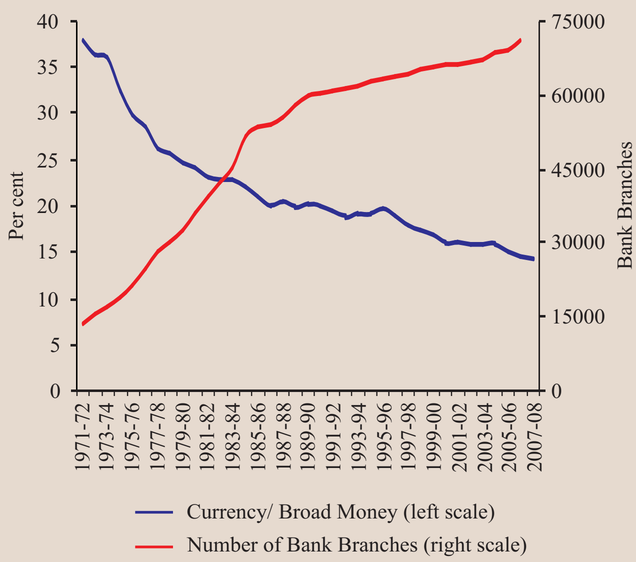
VIII.2 In the above backdrop, this Chapter details the currency management operations of the Reserve Bank during 2007-08. The Reserve Bank continued with its initiatives under a multi-pronged approach to ensure regular supply of fresh banknotes, speedier disposal of soiled banknotes and extending mechanisation of cash processing activity to meet the public's demand for good quality banknotes. The continued emphasis by the Reserve Bank on discontinuing the practice of stapling banknotes also contributed to the improvement in quality of banknotes. The indent for banknotes placed with the printing presses was met in full, both in terms of volume and value. The recent trend of the growth in the volume of banknotes being lower than that in value terms continued during 2007-08, reflecting the ongoing compositional shift in favour of higher denomination notes. The increased demand for coins, which began from October 2006 onwards, strengthened further during 2007-08. The Reserve Bank adequately met the increased demand for coins. The total number of currency chests and State Treasury Offices (STOs) declined further during 2007-08, reflecting the impact of the ongoing policy of rationalisation and consolidation of currency chests by public sector banks. Equipping all the currency chests with note sorting machines as well as the setting up of the Forged Note Vigilance Cells (FNVCs) at the banks helped in increasing the detection rates of counterfeit notes at the currency chest level itself.

BANKNOTES IN CIRCULATION

VIII.3 During 2007-08, the value of banknotes in circulation rose by 17.2 per cent (17.6 per cent during 2006-07) whereas the volume of banknotes rose by 11.0 per cent (5.2 per cent a year ago). Continuing its declining trajectory witnessed in the past few years, the ratio of currency with the public to broad money (M_3) declined further to 14.2 per cent at end-March 2008 from 14.6 per cent a year ago (Chart VIII.1). The ratio of currency with the public to GDP continued to increase further to 12.0 per cent in 2007-08 from 11.6 per cent, a year ago.

VIII.4 The growth in the volume of banknotes, thus, continued to be lower than that in value terms, reflecting the gradual compositional shift towards higher denomination banknotes, particularly Rs.1,000 and Rs.500. While the volume of Rs.500 denomination banknotes increased by 16.7 per cent during 2007-08 (23.6 per cent a year ago), that of Rs.1,000 denomination banknotes rose by 50.7 per cent (45.7 per cent a year ago). The volume of Rs.10 denomination banknotes increased by 30.4 per cent due to sustained efforts to infuse a greater number of fresh banknotes into circulation to bring about an improvement in the quality of these banknotes. As a

Chart VIII.1: Share of Currency in Broad Money



result of sustained efforts to release the stock held with currency chests, the volume of banknotes in the denominations of Rs. 2 and Rs. 5 also increased by 23.2 per cent. However, the volumes of banknotes of denominations of Rs. 20, Rs. 50 and Rs. 100 decreased marginally as compared with those in 2006-07 (Table 8.1).

VIII.5 In volume terms, Rs.100 denomination banknotes had the largest share (30 per cent of the total pieces in circulation) at end-March 2008. In terms of value, Rs. 500 denomination banknotes had the largest share (45 per cent of the total value of banknotes in circulation) at end-March 2008 (Chart VIII.2). The consistent shift from lower denomination to higher denomination banknotes could be partly attributed to the technological advancements (growing network of ATMs) coupled with the rising income levels.

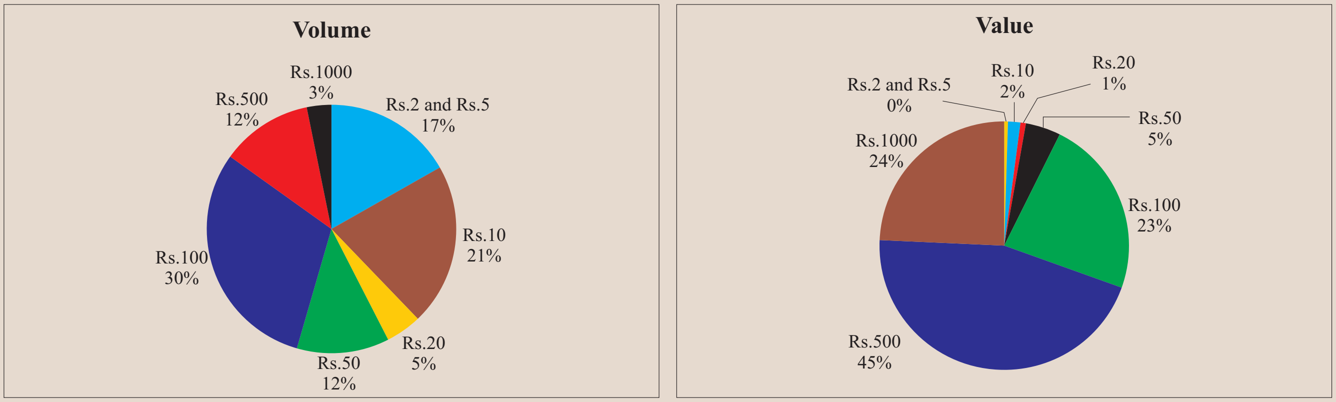
Coins in Circulation

VIII.6 The trend of increased demand for coins, which started from October 2006 onwards led by demand for Rs. 2 coins, continued during 2007-08. The total value of coins (including small coins in circulation) increased by 13.3 per cent during 2007-08 (11.2 per cent in 2006-07 and 2.2 per cent in 2005-06). In volume terms, the increase was 5.7 per cent in 2007-08 (6.5 per cent in 2006-07 and 1.4 per cent in 2005-06) (Table 8.2). The value of coins, relative to the value of the banknotes, declined from 1.71 per cent at end-March 2006 to 1.62 per cent at end-March 2007 and further to 1.56 per cent at end-March 2008. Amongst coins, while Re.1 coins had the largest share in terms of volume (25.9 per cent), Rs.5 coins had the largest share in value terms (35.8 per cent). In volume terms, Re.1, Rs.2 and Rs.5 coins increased by 8.1 per cent, 28.1 per cent and 12.8 per cent, respectively, during 2007-08. In value terms, Re.1, Rs.2 and Rs.5 coins increased by 8.0 per cent, 28.2 per cent and 12.8 per cent, respectively, during 2007-08.

Table 8.1: Banknotes in Circulation

Denomination	Volume (Million pieces)			Value (Rupees crore)		
	End-March 2006	End-March 2007	End-March 2008	End-March 2006	End-March 2007	End-March 2008
1	2	3	4	5	6	7
Rs.2 and Rs.5	6,217	6,008	7,405	2,431	2,334	2,747
Rs.10	6,274	7,155	9,333	6,274	7,155	9,333
Rs.20	2,038	2,089	2,054	4,076	4,178	4,108
Rs.50	5,568	5,590	5,302	27,840	27,951	26,508
Rs.100	13,464	13,544	13,457	1,34,640	1,35,444	1,34,575
Rs.500	3,647	4,508	5,262	1,82,350	2,25,400	2,63,108
Rs.1000	643	937	1,412	64,300	93,676	1,41,219
Total	**37,851**	**39,831**	**44,225**	**4,21,911**	**4,96,138**	**5,81,598**

Chart VIII.2: Banknotes in Circulation: End-March 2008



CURRENCY OPERATIONS

VIII.7 In order to provide the public with good quality banknotes, the Reserve Bank continued with its initiatives under a multi-pronged approach involving regular supply of fresh banknotes, speedier disposal of soiled banknotes and extending mechanisation of cash processing activity. The discontinuance of the practice of stapling banknotes also contributed to the improvement in quality of banknotes. Banks were repeatedly advised to issue only clean banknotes to the public and to remit the soiled banknotes in unstapled condition to the Reserve Bank through currency chests. The Reserve Bank has been examining various options to increase the life of the banknotes as part of its clean note policy.

Currency Chests

VIII.8 The core central banking function of note issue and currency management is performed by the Reserve Bank through its 18 Issue Offices, the sub-office of the Issue Department at Lucknow, a currency chest at Kochi and a wide network of 4,271 currency chests and 4,033 small coin depots. The Reserve Bank has agency arrangements, mainly with scheduled commercial banks, under which a currency chest facility is granted to them. The total number of currency chests and State treasury offices (STOs) declined further during 2007-08, reflecting the impact of the on-going policy of rationalisation and consolidation of currency chests by public sector banks (Table 8.3). SBI and Associate banks carried out a detailed exercise with a view to rationalising and consolidating their currency chests. As a result, the number of chests at their branches in metros and major urban centres declined significantly. Two regional rural banks (Prathama Bank, Uttar Pradesh and Tripura Gramin Bank, Tripura) were granted 'in principle' approval for setting up currency chests. The number of currency chests at STOs declined to 17 and efforts are afoot to close them gradually. State

Table 8.2 : Coins in Circulation

Denomination	Volume (Million pieces)			Value (Rupees crore)		
	End-March 2006	End-March 2007	End-March 2008	End-March 2006	End-March 2007	End-March 2008
1	2	3	4	5	6	7
Small coins	54,115	54,277	54,735	1,357	1,364	1,455
Re. 1 coins	18,730	22,878	24,721	1,873	2,288	2,472
Rs. 2 coins	6,684	7,441	9,535	1,337	1,488	1,907
Rs. 5 coins	5,289	5,761	6,500	2,645	2,881	3,250
Total	**84,818**	**90,357**	**95,491**	**7,212**	**8,021**	**9,084**

Table 8.3: Currency Chests

Category	Number of Currency Chests			
	June 30, 2005	June 30, 2006	June 30, 2007	Dec. 31, 2007
1	2	3	4	5
Treasuries	149	116	23	17
State Bank of India	2,198	2,182	2,127	2,097
SBI Associate Banks	1,008	994	988	983
Nationalised Banks	983	1,028	1,061	1,074
Private Sector Banks	72	83	94	95
Co-operative Banks	1	1	1	1
Foreign Banks	4	4	4	4
Reserve Bank (offices and currency chests)	20	20	20	20
Total	**4,435**	**4,428**	**4,318**	**4,291**

Bank Group continued to have the largest share (71.8 per cent) of currency chests, followed by nationalised banks (25.0 per cent). The process of closing existing repositories or converting them into full-fledged currency chests initiated earlier was completed during the year and there were no repositories attached to currency chests as on March 31, 2008.

Indent and Supply of Fresh Banknotes

VIII.9 The indent for banknotes for the year was met in full (for the second year in succession) by the printing presses (Tables 8.4 and 8.5). This can be attributed to effective monitoring of supplies and efficient allocation and management of the capacities at the presses (depending on the denominations printed).

Printing Costs of Banknotes

VIII.10 As part of its ongoing efforts to reduce the expenditure on printing of banknotes, the Reserve Bank continued with the efforts to source banknotes from the lowest cost producer. Accordingly, the Reserve Bank has been sourcing banknotes from the two presses each of the Security Printing and Minting Corporation of India Ltd. (SPMCIL) and from Bharatiya Reserve Bank Note Mudran (Pvt.) Ltd. (BRBNMPL). The amount charged for printing banknotes during 2007-08 was Rs. 2,026 crore, of which Rs. 908 crore was paid to the SPMCIL presses in respect of 5,442 million banknotes supplied by them and Rs.1,118 crore to BRBNMPL for 8,488 million notes procured from its presses (Table 8.6). It has been the Reserve Bank's endeavour to consistently bring down the cost of banknotes and to encourage the note presses to bring about greater efficiencies in their operations while maintaining the quality of the printed banknotes.

Indent, Supply and Distribution of Coins

VIII.11 During 2007-08, there was a spurt in the indent placed by the Reserve Bank on the mints to meet the increased demand for coins (Table 8.7). The stock of 359 million pieces of Rs.5 cupro-nickel coins with the mints was also lifted by the Reserve Bank with the concurrence of the Government. The increased demand for coins was also met by issue of 127 million pieces of 50 paise coins. The measures

Table 8.4: Volume of Banknotes Indented and Supplied

(Million pieces)

Denomination	2005-06			2006-07			2007-08			2008-09
	Indent	Supply	% of Supply to Indent	Indent	Supply	% of Supply to Indent	Indent	Supply	% of Supply to Indent	Indent
1	2	3	4	5	6	7	8	9	10	11
Rs.5	—	50	—	—	50	—	—	—	—	—
Rs.10	3,300	1,183	36	3,500	3,480	99	4,200	4,193	100	5,000
Rs.20	1,200	706	59	500	438	88	600	636	106	500
Rs.50	2,700	1,063	39	1,400	1,458	104	1,200	1,213	101	1,000
Rs.100	5,550	3,208	58	4,000	4,034	101	4,200	4,199	100	4,200
Rs.500	1,800	661	37	1,500	1,473	98	1,800	1,805	100	3,500
Rs.1000	450	130	29	600	589	98	700	699	100	800
Total	**15,000**	**7,001**	**47**	**11,500**	**11,522**	**100.2**	**12,700**	**12,745**	**100.4**	**15,000**

Table 8.5: Value of Banknotes Indented and Supplied

(Rupees crore)

Denomination	2005-06 Indent	2005-06 Supply	2005-06 % of Supply to Indent	2006-07 Indent	2006-07 Supply	2006-07 % of Supply to Indent	2007-08 Indent	2007-08 Supply	2007-08 % of Supply to Indent	2008-09 Indent
1	2	3	4	5	6	7	8	9	10	11
Rs. 5	—	25	—	—	25	—	—	—	—	—
Rs. 10	3,300	1,183	36	3,500	3,480	99	4,200	4,193	100	5,000
Rs. 20	2,400	1,412	59	1,000	876	88	1,200	1,272	106	1,000
Rs. 50	13,500	5,316	39	7,000	7,292	104	6,000	6,065	101	5,000
Rs. 100	55,500	32,084	58	40,000	40,348	101	42,000	41,990	100	42,000
Rs. 500	90,000	33,065	37	75,000	73,655	98	90,000	90,250	100	1,75,000
Rs. 1,000	45,000	12,960	29	60,000	58,910	98	70,000	69,900	100	80,000
Total	**2,09,700**	**86,045**	**41.0**	**1,86,500**	**1,84,586**	**99.0**	**2,13,400**	**2,13,670**	**100.1**	**3,08,000**

initiated by the Reserve Bank to meet the increased demand for coins included: (i) arrangements for retail distribution through post offices, RRBs and UCBs, in addition to bank branches; (ii) identification of 2,000 bank branches across the country for distribution of coins; (iii) issuance of press releases informing the public of the same and putting the list of these bank branches on the Reserve Bank website; (iv) organisation of coin melas by several Issue Offices of the Bank at various prominent centres for disbursing coins directly to consumers; (v) bulk issuance of coins to registered associations of hotels, retail shops and chemists; and (vi) participation of the Reserve Bank offices in exhibitions/trade fairs and distribution of coins directly to the members of public.

Table 8.6 : Supply and Cost of Banknotes

Year (July-June)	SPMCIL Supply (Million pieces)	SPMCIL Cost (Rupees crore)	BRBNMPL Supply (Million pieces)	BRBNMPL Cost (Rupees crore)
1	2	3	4	5
2003-04	4,951	894.2	8,421	815.3
2004-05	4,160	783.3	7,391	660.3
2005-06	2,697	405.9	4,194	629.0
2006-07	5,136	1,041.9	7,348	978.3
2007-08	5,442	908.1	8,488	1,118.1

SPMCIL : Security Printing and Minting Corporation of India Ltd.
BRBNMPL : Bharatiya Reserve Bank Note Mudran (Pvt.) Ltd.

Disposal of Soiled Banknotes

VIII.12 There was a marked improvement in the number of soiled banknotes disposed by the Reserve Bank during 2007-08. As many as 10,696 million pieces of soiled banknotes (24 per cent of banknotes in circulation) were processed and removed from circulation during the year. Within soiled banknotes, Rs.100 denomination notes constituted the largest share, followed by Rs.10 denomination notes (Table 8.8). As against total disposal of 10,696 million pieces during the year (7,325 million pieces a year ago), 13,742 million pieces of fresh banknotes were supplied to members of public and currency chests during the year (10,703 million pieces a year ago). The number of banknotes withdrawn from circulation and eventually disposed of at the Reserve Bank offices increased during the year as part of an ongoing effort towards lifting of soiled banknotes, increase in disposal capacity by resorting to second shift of currency verification and processing systems (CVPS) operations, overhauling of existing machines and upgradation in their capacities.

VIII.13 During 2007-08, 6,287 million pieces of banknotes were processed through CVPS operations (as compared with 4,532 million pieces, a year ago). The remaining banknotes were disposed of under the Dynamic Working Model, which is a statistical method in which a representative sample of a lot (*i.e.,* soiled banknotes considered for processing) is taken for checking of discrepancies, *i.e.*, for shortages and

Table 8.7: Indent and Supply of Coins

(Million pieces)

Denomination	2005-06 Indent	2005-06 Supply	2006-07 Indent	2006-07 Supply	2007-08 Indent	2007-08 Supply	2008-09 Indent
1	2	3	4	5	6	7	8
25 paise	0	0	0	0	0	0	0
50 paise	0	0	0	0	185	127	400
Re. 1	0	13	0	45	1,500	1,294	2,500
Rs. 2	0	22	700	686 #	1,500	1,562	1,800
Rs. 5	0	7	0	11	300	173	800
Total	**0**	**42***	**700**	**742**	**3,485**	**3,156**	**5,500**

* : Includes mainly commemorative coins.

: New ferritic stainless steel coins, for which an indent of 700 million pieces was placed in December 2006 in view of the rise in international prices of copper and nickel.

counterfeits. If the shortages and counterfeits detected in the representative sample are within the 'tolerance limit', then the remaining lot is shredded, otherwise it is subjected to 100 per cent checking on CVPS. This 'tolerance' is based on the past data on denomination specific shortages and counterfeits of notes detected at each Reserve Bank's office. Disposal of lower denomination notes increased by 28 per cent during 2007-08.

Mechanisation

VIII.14 Mechanisation of cash processing activity and disposal of soiled banknotes continued to be one of the major thrust areas of the Reserve Bank in currency management. With all the currency chests currently equipped with at least one note sorting machine, banks have been advised to install desktop note sorting machines (NSMs) in non-currency chest branches also based on the volume of cash handled. The Reserve Bank has also initiated the process for procurement of NSMs for installation at its Issue offices and select bank branches across the country (Box VIII.1).

Counterfeit Banknotes

VIII.15 During 2007-08, the number of counterfeit banknotes detected at the Reserve Bank's offices and bank branches increased by 86.9 per cent. In

Table 8.8: Disposal of Soiled Notes and Supply of Fresh Banknotes

Denomination	Volume in million pieces					
	2005-06		2006-07		2007-08	
	Disposal	Supply	Disposal	Supply	Disposal	Supply
1	2	3	4	5	6	7
Rs. 1,000	5	279	7	405	17	663
Rs. 500	242	996	276	1,427	444	1756
Rs. 100	3,250	3,223	2,360	3716	3,727	4,015
Rs. 50	2,160	1,221	1,456	1,438	2,172	1,522
Rs. 20	532	730	489	739	834	728
Rs. 10	2,593	2,392	2,243	2,719	3,030	4,580
Up to Rs. 5	522	64	494	259	472	478
Total	**9,304**	**8,905**	**7,325**	**10,703**	**10,696**	**13,742**
Memo:						
Total Banknotes in Circulation		**37,851**		**39,831**		**44,225**

Note: Supply figures are notes issued to public by issue offices plus remittances sent to currency chests and therefore differ from the figures in Table 8.4 which gives notes supplied by presses to the Reserve Bank.

Box VIII.1
Note Sorting Systems

As a part of the plan to effectively control the circulation of counterfeit notes at the entry point itself as also to ensure furtherance of 'Clean Note Policy', that is only non-issuable banknotes are sent to the Reserve Bank and only good quality re-issuable banknotes are issued to the public, banks were advised to mechanise the currency chest operations, in a time bound manner. Accordingly, banks were required to provide note sorting machines of appropriate capacity at all their chest branches. All the currency chest branches in the banking network have since installed note sorting machines.

In order to further strengthen the detection and anti-counterfeiting systems, the Reserve Bank will be installing NSMs at select non-chest branches all over the country based on their proximity to international borders, higher counterfeit detection and those having high cash handling requirements.

value terms, the counterfeit notes increased by 137.1 per cent on account of rise in detections in the notes of higher denominations, *viz*., Rs.100 and above (Table 8.9).

VIII.16 The significant increase in detection was attributable to installation of NSMs by all the banks at their currency chest branches (to facilitate examination and detection of counterfeit notes at the currency chest level itself), and the setting up of the Forged Note Vigilance Cells (FNVCs) at the banks (to ensure stringent levels of anti-counterfeit management in the banking system). The share of the counterfeit notes detected at the Reserve Bank's offices declined from 96.1 per cent in 2005-06 to 56.4 per cent in 2006-07 and further to 31.7 per cent in 2007-08 indicating increased effective use of NSMs at currency chest branches (Table 8.10).

VIII.17 The FNVCs constituted at the head offices of the banks perform several important functions such as (i) dissemination of the Reserve Bank's instructions on counterfeit notes to their branches; (ii) monitoring implementation of these instructions; (iii) consolidation of data on detection of counterfeit notes and follow-up of counterfeit note cases with the police; (iv) stepping up of surveillance at currency chests where detection of shortages/defective/ counterfeit notes was higher; and (v) ensuring installation of NSMs at currency chests and monitoring the detection of counterfeit notes at currency chests /other branches.

Computerisation of Currency Management

VIII.18 The Reserve Bank had taken up the task of putting in place an Integrated Computerised Currency Operations and Management System (ICCOMS) comprising 3 components, *viz.,* Currency Chest Reporting System (CCRS), ICCOMS-Issue Department (ICCOMS-ID) and Currency Management Information System (CMIS) in the central office, Issue Departments in regional offices and currency chests maintained by various banks. The project includes computerisation and networking of the currency chests with the Reserve Bank's Issue

Table 8.9: Counterfeit Notes Detected

	Number of pieces			Value (Rupees)		
Denomination	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08
1	2	3	4	5	6	7
Rs.10	80	110	107	800	1,100	1,070
Rs. 20	340	305	343	6,800	6,100	6,860
Rs. 50	5,991	6,800	8,119	2,99,550	3,40,000	4,05,950
Rs. 100	104,590	68,741	110,273	1,04,59,000	68,74,100	1,10,27,300
Rs. 500	12,014	25,636	66,838	60,07,000	1,28,18,000	3,34,19,000
Rs. 1000	902	3,151	10,131	9,02,000	31,51,000	1,01,31,000
Total	**123,917**	**104,743**	**195,811**	**1,76,75,150**	**2,31,90,300**	**5,49,91,180**

Note: Data are exclusive of the counterfeit notes seized by police and other enforcement agencies.

Table 8.10: Counterfeit Notes Detected at the Reserve Bank and Bank Branches

(In pieces)

Year	Detection at Reserve Bank	Detection at Other Banks	Total
1	2	3	4
2005-06	119,068 (96.1)	4,849 (3.9)	123,917
2006-07	59,048 (56.4)	45,695 (43.6)	104,743
2007-08	62,134 (31.7)	133,677 (68.3)	195,811

Note : Figures in parentheses in columns (2) and (3) represent the shares in total.

offices to facilitate prompt, efficient and error-free reporting and accounting of the currency chest transactions and seamless flow of information between the Issue Departments and the Central Office in a secure manner with proactive monitoring. The 'live-run' of CCRS component under ICCOMS, which commenced last year, has since stabilised and enabled the Reserve Bank to account for currency transfer transactions efficiently. Under the second component, *viz.*, ICCOMS-ID, transactions are put through by all the 19 offices of the Reserve Bank on a 'straight through put' process. As part of CMIS, which became operational during the year, the data replicated from all the Issue Offices has enabled the Reserve Bank to identify stock of banknotes and coins, accumulation and disposal of soiled notes, consumption of fresh notes and reissuables and coins at all the Issue Offices and monitor notes in circulation at any point of time on an all-India basis.

Customer Service

VIII.19 The Reserve Bank continued with its efforts to improve customer service in matters relating to issue/acceptance of coins from public and exchange of soiled and mutilated banknotes. In this regard, the Reserve Bank reiterated its directions to all scheduled commercial banks to issue/accept coins and soiled banknotes in transactions or for exchange without any restriction. Those offices, where demand for coins picked up, were advised to arrange for organisation of coin camps at identified locations in consultation with the banks. Efforts were continued to provide timely and efficient customer service not only at the Reserve Bank's offices but also at the chest and the bank branches.

VIII.20 For improved customer service towards exchange of mutilated banknotes, the Reserve Bank has proposed simplification of the existing Note Refund Rules and the same would be put in place after notification by the Government.

VIII.21 As a part of awareness campaign, the Reserve Bank in association with the National Film Development Corporation (NFDC) has developed a film to create awareness on security features of banknotes and on 'do's and don'ts' for handling of banknotes. This, being in electronic media, will serve as an important tool for building awareness amongst public cutting across all strata of society through the length and breadth of the country.

VIII.22 Against the backdrop of significant changes in currency management operations in the last few years, a Working Group on Currency Management (Chairman: Shri U. S. Paliwal) was set up to look into the existing systems and procedures and suggest ways for further improvement and rationalisation in the area of cash handling, processing and distribution. The Group, in its *Interim* Report submitted to the Reserve Bank recommended, *inter alia*, the introduction of non-sequential numbering of banknotes in the denominations of Rs.500 and Rs.1,000 at the presses as also a system of incentives/disincentives for proper/improper handling of cash and better/bad customer service (Box VIII.2).

Bharatiya Reserve Bank Note Mudran Pvt. Ltd.

VIII.23 The Bharatiya Reserve Bank Note Mudran Pvt. Ltd. (BRBNMPL), incorporated as a wholly owned subsidiary of the Reserve Bank, was set up in 1996 to take over the work of the New Note Press project. The BRBNMPL prints bank notes at its two note presses *viz*., Mysore (Karnataka) and Salboni (West Bengal). The total supply of banknotes by BRBNMPL during 2007-08 (July-June) was 8,488 million pieces (7,348 million pieces during 2006-07).

Box VIII.2
Non-sequential Numbering of Banknotes

The Reserve Bank introduced the ‘star series’ numbered banknotes in the denomination of Rs. 10, Rs. 20 and Rs. 50 in April 2006. Star series is a special series of numbering which is different from normal numbering method. The star series of numbering is basically used for replacing the defective notes (single/packet) with star series notes. One complete prefix series with “*” is exclusively reserved for numbering in star series. Star series may have the following sequence of numbering 0AA*000001 up to OAA*1000000.

After successful introduction of star series banknotes in the denominations of Rs. 10, Rs. 20 and Rs. 50, the Reserve Bank will now be introducing non-sequential numbering for Rs. 500 and Rs. 1,000 denominations notes. With this system in place, a fresh banknote packet will have 100 pieces that may not be serially numbered banknotes from 1 to 100. In other words, the packet will contain 100 pieces but some of the banknotes in the sequence will not be there. The system will result in cost and manpower rationalisation at the presses.

As it is, serially numbered banknote packets are available only in the fresh note packets issued over the counter and through ATMs. Majority of the public/users of cash receive re-issuables banknotes, which are not serially numbered. With the increase in the demand for banknotes of Rs. 500 and Rs. 1,000 denominations, especially for ATMs, it is essential to meet the demand for fresh banknotes by bringing greater efficiency at the presses.

Outlook

VIII.24 The currency management operations of the Reserve Bank would continue to be conducted with the objective of ensuring an adequate supply of good quality banknotes and coins in the country in an efficient manner. Various options would be explored for increasing the circulation life of banknotes. Rationalisation of the systems and procedures would be pursued with a view to increasing the efficiency of operations. Efforts would also be made to strive towards setting international benchmarks in currency management.

IX PAYMENT AND SETTLEMENT SYSTEMS AND INFORMATION TECHNOLOGY

IX.1 The payment and settlement system, by providing a fast, efficient and secure basis for financial transactions, forms the bedrock of the financial system. Information Technology (IT) has become the single largest facilitating force behind the successful transformation of transactions and analytical processing of banking business. The convergence of paper and electronic modes of payment, improvement in operational efficiency and flexibility through adoption of IT intensive processes and innovations in the nature of new delivery channels have significantly changed the financial landscape of the Indian banking sector. During 2007-08, the Reserve Bank continued to exercise its oversight for facilitating a secure, efficient and sound payment and settlement systems. The Reserve Bank put in place a robust IT system for itself besides charting out the IT Vision Document for the banking system.

IX.2 This Chapter highlights the role played by the Reserve Bank, through intensive consultations, in modernising the payment and settlement systems, and increasing IT intensity of the banking system. It covers the measures being initiated to operationalise the Payment and Settlement Systems Act, 2007 which provides a well founded legal basis for payment systems. Several important policy directions issued by the Board for Regulation and Supervision of Payment and Settlement Systems (BPSS) relating to legal, risk mitigation and customer service are also covered. Various indicators of the payment system point towards a sharp increase in both volumes and values put through systemically important payment system (SIPS) and retail payment system, especially through the electronic clearing instruments, *viz*., real time gross settlement (RTGS), forex and Government securities clearing and retail electronic fund transfer (EFT) and card based payments within retail payment system. The Reserve Bank initiated measures in various areas such as RTGS and centralised funds management system (CFMS) facilities, reduction in cost for electronic transactions, framework for electronic benefit transfer and Indo-Nepal remittances scheme. Setting up of data centres and successful migration of many of its systems to the new centres, which would not only enable consolidation of systems and centralised data processing but also business continuity and disaster recovery, was the major highlight of the IT implementation in the Reserve Bank during 2007-08. Implementation of the integrated accounting system (IAS), operationalisation of the centralised public accounts system (CPADS), implementation of the integrated computerised currency operations and management system (ICCOMS), migration to multi-protocol label switching (MPLS) of Indian financial network (INFINET) and migration of its corporate mail to a centralised system were the other major developments in the area of IT implementation within the Reserve Bank. In order to delineate the broad approaches being followed by the Reserve Bank so as to enable banks to plan their IT initiatives suitably, the latest version of the Financial Sector Technology (FST) Vision document for the period 2008-2010 was also released.

PAYMENT AND SETTLEMENT SYSTEMS

Board for Regulation and Supervision of Payment and Settlement Systems (BPSS)

IX.3 The Payment and Settlement Systems Act, 2007 was notified in the Official Gazette of the Government of India on December 20, 2007. The Act provides for a well founded legal basis for payment systems, an important element of compliance with the Core Principles for Systemically Important Payment Systems. The Board for Regulation and Supervision of Payment and Settlement Systems Regulations (BPSS), 2008 and the Payment and Settlement Systems Regulations, 2008 were notified on August 12, 2008. The BPSS Regulations cover: (i) composition of the Board; (ii) functions and powers of the Board; (iii) powers to be exercised on behalf of the Board; and (iv) constitution of sub-committees. The Payment and

Settlement Systems Regulations cover the following: (i) authorisation of payment systems including submission of application for authorisation for commencing or carrying on a payment systems, grant of authorisation certificates, certificate format, *etc*.; (ii) payment instructions and determination of standards; (iii) furnishing of returns, documents and other information; (iv) furnishing of audited balance sheets, *etc*.

IX.4 The Board for Regulation and Supervision of Payment and Settlement Systems (BPSS), met on five occasions during July 2007 to June 2008. The thrust of the Board's directions was on issues relating to legal, risk mitigation and customer service in payment and settlement systems. The Board provided direction on several important areas, which, *inter alia*, included (i) preparation of a framework for payments through mobile phones; (ii) extension of jurisdiction of the magnetic ink character recognition (MICR) clearing houses; (iii) computerisation of non-MICR clearing houses; (iv) conducting a survey to ascertain whether extension of RTGS business hours (by half an hour) actually met the customers' needs; (v) expanding national electronic funds transfer (NEFT) system to make all RTGS branches NEFT enabled; (vi) disseminating information on major payment services offered by banks covering the range of service charges and quantum of compensation to be paid by banks for deficiency in these services; (vii) exploring the feasibility of developing a domestic card to inject competition in the market in a non-discriminatory manner; (viii) releasing the Report on Oversight of Payment Systems in India; (ix) preparing a technical paper on the expansion of city jurisdiction for clearing purposes and exploring the scope of 'cluster' approach; (x) initiating a dialogue for bringing the post offices into the fold of the retail electronic payment system; (xi) upgrading the NEFT system into a 24x7 type remittance system; (xii) launching the Indo-Nepal remittance system; (xiii) rationalising customer charges for use of ATMs for cash withdrawal and balance enquiry with an aim to enhance transparency in service charges and facilitate optimum use of ATMs; and (xiv) making mandatory use of electronic mode of payment for large value transactions (initially Rs.1 crore and above, later Rs.10 lakh and above) between the Reserve Bank regulated entities and markets.

IX.5 Following the directions of the Board, the consolidated information on service charges is available on the Reserve Bank's website with links provided to the websites of the respective banks. The regulatory circulars on customer charges for use of ATMs as also the mandatory use of electronic mode of payment for transaction of Rs.1 crore and above (Rs.10 lakh from August 1, 2008) between the Reserve Bank regulated entities and markets were issued and implemented by banks. Draft guidelines on mobile payments were also placed on the website.

DEVELOPMENTS IN PAYMENT AND SETTLEMENT SYSTEMS

IX.6 The value of annual turnover through various channels of the payment and settlement systems during 2007-08 increased sharply by 41.8 per cent as compared with 37.5 per cent during the previous year. As a result, the ratio of annual turnover to GDP, increased to 12.7 in 2007-08 from 10.2 in 2006-07 and 8.6 in 2005-06. Growth in the turnover during 2007-08 was led by the systemically important payment systems (SIPS) transactions and the settlement of financial market clearing which continued to witness a robust growth during the year. The share of these two types of transactions in total transactions increased to 85.1 per cent during 2007-08 from 82.9 per cent during 2006-07. The electronic clearing was led by RTGS clearing followed by forex clearing and government securities clearing. However, paper-based transactions remained significant both for SIPS and retail payment system in terms of the volume of clearing undertaken through these modes. The turnover of the RTGS system increased sharply by 47.8 per cent during 2007-08 on top of 60.1 per cent growth witnessed during 2006-07 (Table 9.1).

Table 9.1: Payment System Indicators – Annual Turnover

Item	Volume (000s)				Value (Rupees crore)			
	2004-05	2005-06	2006-07	2007-08	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5	6	7	8	9
Systemically Important Payment Systems (SIPS)								
1. Inter-bank Clearing	808	*	*	*	9,91,436	*	*	*
2. High Value Clearing	13,077	15,924	18,730	21,919	46,07,208	49,81,428	50,34,007	55,00,018
3. RTGS	460	1,767	3,876	5,840	40,66,184	1,15,40,836	1,84,81,155	2,73,18,330
Total SIPS (1 to 3)	**14,345**	**17,691**	**22,606**	**27,759**	**96,64,828**	**1,65,22,264**	**2,35,15,162**	**3,28,18,348**
					(3.1)	(4.6)	(5.7)	(7.0)
Financial Markets Clearing								
4. Government Securities Clearing	185	151	167	216	26,92,129	25,59,260	35,78,037	56,02,602
5. Forex Clearing	466	490	606	757	40,42,435	52,39,674	80,23,078	1,27,26,832
Total Financial Markets Clearing (4+5)	**651**	**641**	**773**	**973**	**67,34,564**	**77,98,934**	**1,16,01,115**	**1,83,29,434**
					(2.1)	(2.2)	(2.8)	(3.9)
Others								
6. MICR Clearing	927,571	1,015,912	1,125,373	1,201,045	37,57,608	44,92,943	54,01,429	60,28,672
7. Non-MICR Clearing	225,392	254,922	223,177	237,600	11,02,643	18,54,763	16,06,990	18,67,376
8. Retail Electronic Clearing	57,900	83,241	148,997	218,800	77,702	1,06,598	1,86,160	9,71,486
9. Cards	171,004	201,772	229,713	316,509	31,047	39,783	49,533	70,506
Total Others (6 to 9)	**1,381,867**	**1,555,847**	**1,727,260**	**1,973,954**	**49,69,000**	**64,94,087**	**72,44,112**	**89,38,039**
					(1.6)	(1.8)	(1.7)	(1.9)
Grand Total	**1,396,863**	**1,574,179**	**1,750,639**	**2,002,686**	**2,13,68,392**	**3,08,15,285**	**4,23,60,389**	**6,00,85,821**
					(6.8)	(8.6)	(10.2)	(12.7)

* : Paper-based inter-bank clearing was closed at Mumbai with effect from November 1, 2004 and was phased out at other centres by June 2005. Inter-bank transactions are now settled through the RTGS system, which became operational on March 26, 2004.

Note:
1. High value clearing refers to cheques of Rs.1 lakh and above.
2. Settlement of government securities clearing and forex transactions is through Clearing Corporation of India Ltd.
3. At end-March 2008, the MICR clearing was available at 60 centres (59 centres a year ago).
4. Electronic clearings comprise Electronic Clearing Services (ECS), Electronic Funds Transfer (EFT), Special Electronic Funds Transfer (SEFT) (in operation from April 2003 to February 2006) and NEFT (in operation since November 2005).
5. Cards include credit and debit.
6. Figures in parentheses are ratios to GDP at current market prices.

Retail Payment Systems

IX.7 The retail payment systems include cheque clearing, electronic clearing services and card payments. The turnover of the various retail payment systems combined together increased by 23.4 per cent during 2007-08 from 11.6 per cent in 2006-07 mainly on account of sharp growth in retail electronic funds transfer. Cheques continued to be the predominant mode of retail payment, though the share of retail electronic mode of payment increased during 2007-08.

IX.8 A new MICR cheque processing centre (CPC) was set up at Cuttack during the year, taking the total number of MICR CPCs to 60. MICR cheque clearing constituted 83.7 per cent and 86.1 per cent of the volume and value, respectively, of the paper based clearing during 2007-08. The non-MICR based clearing and settlement increased by 6.4 per cent and 16.2 per cent in volume and value, respectively. To improve efficiency in the non-MICR centres, computerisation of the clearing houses has been taken up. More than 800 clearing houses have been computerised where the settlement is done electronically, while the instruments still continue to be sorted manually. To further bring in efficiency in paper based clearing, cheque truncation was implemented as a pilot project in the National Capital Region of Delhi.

IX.9 Retail electronic funds transfer system comprises electronic clearing services (ECS), electronic funds transfer (EFT) and national electronic funds transfer (NEFT) systems. The electronic funds transfer increased by more than five times during 2007-08 over the previous year, reflecting a significant increase across all modes of retail electronic funds transfer systems (Table 9.2). The sharp growth in value of retail transactions *vis-a-vis* their volume growth reflected, *inter alia*, the use of electronic mode, as mandated by the stock exchanges, for refunding the oversubscription amount of IPOs floated by companies. Accordingly, the share of retail electronic funds transfer which remained fairly low in the retail payment system (2.6 per cent during 2006-07), increased sharply to 10.9 per cent during 2007-08. To encourage the use of electronic mode of payments, the Reserve Bank waived the processing charges for all electronic payment systems operated by the Reserve Bank for another year, *i.e.*, till March 2009. Also, the coverage of ECS has been increased and is now available at 70 centres as against 64 centres in the previous year. There has been a growth in the volume and value of transactions put through ECS (both credit and debit) due to increase in both the coverage and awareness about the ease in using this system. The ECS as also NEFT are being preferred for making refunds of subscription to IPOs. The EFT, which was operationalised in 1995, is now permitted only for Government payment. All other electronic retail funds transfer are encouraged through NEFT which is a much more secure payment system. NEFT ensures a wider geographical coverage. Both these factors have contributed to growing volumes being put through NEFT.

IX.10 The use of cards for making retail payments is also one of the preferred modes. This is evident from the increased volume of transactions through cards – both debit as well as credit (Table 9.3).

IX.11 The spread of automated teller machines (ATMs) across the country (more in the urban area) has increased customer convenience and reduced the need for visiting a branch for cash withdrawal and balance enquiry. The number of ATMs increased to 36,314 at end-June 2008 from 28,704 at end-June 2007. However, the non transparency in service charges levied on customers for cash withdrawals and balance enquiry on use of ATMs discouraged the customers from making optimum use of this facility. The Reserve Bank examined the various issues related to the use of bank's own ATMs as also ATMs of other banks by customers. An Approach paper on 'ATMs of Banks: Fair Pricing and Enhanced Access' was prepared. Based on the feedback received, the Reserve Bank issued regulatory guidelines on customer charges for use of ATMs for cash withdrawal and balance enquiry. The salient features of the guidelines, *inter alia*, include (i) use of own bank's ATMs for any purpose to be free from March 10, 2008; (ii) use of other banks' ATMs for balance enquiries to be free from March 10, 2008; (iii) charges for use of other banks' ATMs not to exceed Rs.20 per withdrawal from April 1, 2008, which will be made free from April 1, 2009.

IX.12 A number of State Governments have introduced social welfare programmes which involve payment to the beneficiaries. Payments are made either through Government offices or through banks or other means like money orders. The Reserve Bank has also undertaken certain initiatives to expand the

Table 9.2: Retail Electronic Funds Transfer Systems

Type	Volume (000s)				Value (Rupees crore)			
	2004-05	2005-06	2006-07	2007-08	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5	6	7	8	9
ECS-Credit	40,051	44,216	69,019	78,365	20,180	32,324	83,273	7,82,222
	(97.3)	(10.4)	(56.1)	(13.5)	(97.3)	(60.2)	(157.6)	(839.3)
ECS-Debit	15,300	35,958	75,202	127,120	2,921	12,986	25,441	48,937
	(93.7)	(135.0)	(109.1)	(69.0)	(29.6)	(344.6)	(95.9)	(92.4)
EFT/NEFT	2,549	3,067	4,776	13,315	54,601	61,288	77,446	1,40,326
	(211.2)	(20.3)	(55.7)	(178.8)	(218.8)	(12.2)	(26.4)	(81.2)

Note : Figures in parenthesis represent percentage change over previous year.

Table 9.3: Card-Based Payments

Type	Volume of transactions (000s)				Value of transactions (Rupees crore)			
	2004-05	2005-06	2006-07	2007-08	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5	6	7	8	9
Credit Cards	129,472 (29.2)	156,086 (20.6)	169,536 (8.6)	228,203 (34.6)	25,686 (45.4)	33,886 (31.9)	41,361 (22.1)	57,958 (40.1)
Debit Cards	41,532 (10.0)	45,686 (10.0)	60,177 (31.7)	88,306 (46.7)	5,361 (10.0)	5,897 (10.0)	8,172 (38.6)	12,521 (53.2)

Note : Figures in parenthesis represent percentage change over previous year.

outreach of banking facilities to sectors neglected so far, through its financial inclusion initiatives in the form of permitting banks to engage business correspondents (BCs). Combined with this, the need to channelise through the banking system the financial benefits extended by the Governments, both Central and the States, to the weaker and needy sections of the society, required the identification of the ultimate beneficiaries. In this regard, a Committee was appointed for analysing the related issues and suggesting an appropriate workable framework for electronic benefit transfer (EBT) system that can be considered for adoption by all the State Governments (Box IX.1).

IX.13 Many countries in the world have identified mobile phones as an important mode for delivery of

Box IX.1
Report of the Committee for Suggesting a Framework for Electronic Benefit Transfer – Major Recommendations

The underlying theme of the recommendations of the Committee (Chairman: R.B. Barman) was to have a broader methodology to ensure that Government payments reach the ultimate beneficiaries using the banking channels adopting the plan of financial inclusion using BCs and biometric based smart-card technology. The Committee also suggested a framework for monitoring the progress in implementation. The main recommendations of the Committee were as under:

- The Committee examined at length the advantages and disadvantages of three models of electronic benefit transfer (EBT), *viz*., bank-branch model, bank-led model and non-bank model. It preferred bank-led model over the other two models of disbursement of Government benefits. Such a model can operate in tandem with the strategy of 100 per cent financial inclusion.
- The Committee felt that, although the service area approach has well laid down systems for monitoring and review, and the banks and the State Governments are familiar with the modalities of implementation, in view of the easier implementation and monitoring feasibility of technology-based EBT systems, one-district-one-bank approach may be adopted. The places where one-district-multiple-banks approach was already working satisfactorily, the same may continue. The Government needs to identify the bank in consultation with the Reserve Bank to operationalise one-district-one-bank approach.
- Delivery of Government benefits at the place of habitation of the beneficiary should be the ultimate desirable goal. A two-stage approach be adopted. Initially, disbursements can be made at *Gram Panchayat* level through the bank or its business correspondents. Subsequently, disbursement can move to individual villages.
- Feasibility of e-governance kiosk operating as business correspondent under the existing guidelines be considered after they are well spread out and become viable entities in rural areas and offer payment services as extended arms of banks under the provisions of the extant guidelines of the Reserve Bank on business correspondents.
- There is a need to employ means of de-duplication system in order to ensure that beneficiaries are uniquely identified and any attempt to impersonate or to receive multiple benefits under the same scheme is prevented.
- Payment information should flow electronically from end to end so that a data base is created for generating various types of reports as required by the State Governments.
- The project of up-scaling the pilot to the entire state of Andhra Pradesh should be completed by December 2008.
- State and District Level Steering Committees be set up for the periodic monitoring of the implementation of the project. The State Level Committee be headed by the Chief Secretary, Government of Andhra Pradesh and the Principal Secretary, Rural Development would be the Convenor. The District Level Steering Committee be coordinated by the bank that has been allotted the district for EBT implementation.

banking services. The rapid expansion of this mode of communication has provided impetus for achieving the objective of financial inclusion. However, the technology is still evolving and security issues are being addressed. Nevertheless, this channel has provided the means of communication to a major proportion of the population in the remote areas. The reach of mobile phones in India has also been increasing at a very rapid pace. There were about 265 million mobile phone connections in the country as on March 31, 2008 and about eight million new connections are being added every month. In order to ensure a level playing field and considering that the technology is new, the Reserve Bank has placed draft guidelines, setting out indicative standards to ensure safety, security and integrity of transactions, on its website for public comments.

Real Time Gross Settlement (RTGS) System

IX.14 The RTGS system, which has been in operation since March 2004 for facilitating faster settlement of high value transactions, has stabilised with increased branch network and wider geographical coverage. The RTGS connectivity was extended to 47,608 branches at end-June 2008 facilitating sharp increase in volumes settled through this system. The volume and value of transactions through the RTGS system, both in the inter-bank and customer segment, increased sharply, particularly during the last quarter of 2007-08 (Table 9.4). The integration of the RTGS system with the Reserve Banks' internal accounting system (IAS) has enabled straight through processing (STP). Also, with the integration of the RTGS-IAS and the securities settlement system (SSS), automatic intra-day liquidity (IDL) is available. The clearing and settlement operations at NCC, Mumbai and CCIL operated systems are settled in the RTGS as multilateral net settlement batch (MNSB) mode.

Centralised Funds Management System (CFMS)

IX.15 The CFMS enables banks holding current account with the Reserve Bank to view their balances at all the Reserve Bank offices [through centralised funds enquiry system (CFES)] and transfer funds between the Reserve Bank offices [through centralised funds transfer system (CFTS)]. This facility is now available at all the Reserve Bank centres. At present, 71 member banks are making use of this facility extensively.

Indo-Nepal Remittances

IX.16 Considering the importance of establishing a formal remittance system between India and Nepal,

Table 9.4: RTGS Transactions

Year/ Month (end-March)	No. of Participants	No. of Branches	Inter-bank		Customer		Total	
			Volume	Value	Volume	Value	Volume (4+6)	Value (5+7)
1	2	3	4	5	6	7	8	9
2004-05	**N.A.**	**N.A.**	**391,931**	**38,16,522**	**68,492**	**2,49,662**	**460,423**	**40,66,184**
2005-06	**N.A.**	**N.A.**	**1,053,940**	**89,70,624**	**713,058**	**25,70,212**	**1,766,998**	**1,15,40,836**
2006-07	**106**	**28,697**	**1,393,728**	**1,13,13,347**	**2,481,779**	**71,67,808**	**3,875,507**	**1,84,81,155**
2007-08	**101**	**43,512**	**1,693,986**	**1,12,18,157**	**4,146,041**	**1,61,00,173**	**5,840,027**	**2,73,18,330**
April, 2007	105	29,000	122,776	11,09,958	205,699	8,37,607	328,475	19,47,565
May, 2007	105	29,850	131,529	8,75,831	236,852	9,33,090	368,381	18,08,921
June, 2007	100	30,795	131,482	8,16,060	248,997	12,50,114	380,479	20,66,174
July, 2007	100	31,840	131,358	8,40,713	263,319	13,83,382	394,677	22,24,096
August, 2007	100	32,768	137,414	9,83,549	280,917	11,88,034	418,331	21,71,582
September, 2007	100	33,578	127,097	9,10,182	277,955	12,09,225	405,052	21,19,407
October, 2007	99	34,485	141,349	8,46,505	340,576	13,07,703	481,925	21,54,208
November, 2007	100	35,685	146,727	8,87,495	375,960	13,94,946	522,687	22,82,441
December, 2007	100	36,677	145,098	7,91,095	408,181	14,14,048	553,279	22,05,144
January, 2008	100	38,926	159,111	11,88,764	475,241	17,46,045	634,352	29,34,809
February, 2008	102	41,760	156,135	9,89,587	481,218	16,37,191	637,353	26,26,778
March, 2008	105	43,512	163,910	9,78,417	551,126	17,98,788	715,036	27,77,205

N.A.: Not available.

a Committee (Chairman: Dr. R.B. Barman) was set-up. The Committee indicated the urgency of setting up a system, and suggested two alternative models – central bank model and commercial bank model. After examining the pros and cons of both the models, it was suggested that the central bank model involving the Reserve Bank and Nepal Rastra Bank is desirable. But in view of the fact that the Nepal Rastra Bank would take some time to get its infrastructure ready, it was suggested that the system may commence using commercial bank model. Accordingly, the system has commenced operations with effect from May 15, 2008 (Box IX.2).

Oversight of the Payments and Settlement Systems

IX.17 The Payment and Settlement Systems Act, 2007 has been notified empowering the Reserve Bank to regulate and supervise all payment systems in the country. The Reserve Bank, at present, is exercising these functions as the regulator of banks. The Bank has framed the minimum standards for MICR and non-MICR clearing houses. Similarly minimum standards for operations of ECS and NEFT have also been prepared and circulated to clearing houses for adoption.

INFORMATION TECHNOLOGY

Information Technology in the Reserve Bank

IX.18 The Reserve Bank increased the use of information technology (IT) for improving efficiency in its day-to-day operations. During 2007-08, the Reserve Bank pursued the objective of setting up data centres, which would not only enable the consolidation of systems and centralised data processing but also take care of business continuity and disaster recovery in the emergency. Accordingly, the Reserve Bank established three state-of-the-art data centres and successfully migrated many of its systems to the new data centres. The data centres were designed to meet the Tier-IV standard of the Uptime Institute[1], which provides for redundancy of all components. With the establishment of the data centres, the process of migration of systems from the existing distributed set up to the centralised backbone at the data centre has commenced. The secured internet website, the corporate mail messaging system and the document management information system (DMIS) have been migrated to the new set-up, while work is currently under progress in respect of migration of centralised public accounts department system (CPADS), which was made

Box IX.2
Indo-Nepal Remittance Scheme – Salient Features

i) The target group is the migrant workers of Nepalese origin working in India who make remittances at regular intervals to support their families left behind.

ii) This facilitates only one way remittances from India to Nepal using the banking system.

iii) A ceiling of Indian Rupees (INR) 50,000 is fixed per remittance and a Nepalese migrant worker is allowed to remit maximum of 12 remittances in a year under this Scheme.

iv) The remittances from India are denominated in INR, while the beneficiaries would be paid in Nepalese Rupees.

v) The remittance facility is extended to both customers as well as non-customers of the banks. Thus, a Nepalese migrant worker not having bank account at either end or both ends, can also participate in the remittance system. In such cases, the remitter has to produce identification documents like passport/PAN/ driving license/telephone bill/certificate of identification issued by employer in India with details and photograph.

vi) All NEFT enabled bank branches in India are to participate in this cross border remittance initiative.

vii) Remittances will be distributed to the beneficiaries in Nepal through the branches of Nepal State Bank Ltd. and their approved Agents.

viii) Since the target group is poor workers from Nepal, a concessional charge structure has been devised.

[1] The Uptime Institute is an internationally recognised institution, headquartered at Santa Fe, New Mexico, United States of America, that provides, among other things, standards for classification of data centres. These are termed as Tiers, with Tier IV being the highest level currently available, providing for 99.999 per cent uptime of data centres.

operational at all offices. Other systems are at various stages of migration. Critical payment system applications such as the RTGS and the negotiated dealing system (NDS) migrated to the systems in the data centre and were tested, thus paving the way for state-of-the-art solutions for the banking sector in particular, and the common man at large.

Technology Implementation within the Reserve Bank

IX.19 With IT firmly embedded in all the operations of the Reserve Bank, the need for safe and secure IT based systems assumes significance. During 2007-08, specific guidelines on information systems/ security policy, to be followed by all the IT users in the Bank were issued and widely disseminated amongst the staff, users of IT, vendors and other stake holders.

IX.20 The focus of IT services based facilitation for the internal users of the Reserve Bank continued to follow the broad precincts of ushering in a generic architecture for the Reserve Bank as a whole. This included the setting up of IT systems with a centralised approach; providing for common data bases and uniform operating environment and such measures as are aimed at easing of IT based operations within the Reserve Bank. Continuing its thrust towards providing holistic and centralised systems for the use of the various departments in the Bank, the following initiatives were taken during 2007-08.

IX.21 First, the integrated accounting system (IAS), which aims at replacing the existing legacy IT system in use at the Deposit Accounts Department of the Reserve Bank, was implemented. This system has been thoroughly tested and has been able to meet the operational requirements.

IX.22 Second, the CPADS as a parallel system at all the offices of the Reserve Bank was operationalised; the Centralised Public Debt Office (PDO) is in use for many years now.

IX.23 Third, the Integrated Computerised Currency Operations and Management System (ICCOMS) was implemented which facilitates cash and currency management with a centralised reporting for more than 4,500 currency chests in the country.

IX.24 Fourth, other systems which continued to operate smoothly include the Centralised Data Base Management System (CDBMS), the Data Warehouse of the Reserve Bank; the secured internet website (which provides an internet based access to authorised users); and systems for the regulatory and supervisory departments such as the off-site monitoring system (OSMOS) and centralised OSMOS (COSMOS).

IX.25 In order to provide a clear analysis of the level of IT absorption and use in the Reserve Bank, performance benchmarking in respect of key evaluation parameters is periodically done. In respect of four critical requirement factors, 100 per cent implementation was completed, while in respect of three other parameters, the implementation ranged between 90 and 97 per cent (Table 9.5).

Table 9.5: Critical IT Implementation Factors in 2007-08

Critical Requirement Factor	Performance Yardstick	Position at end-March 2007	Position at end-March 2008
1	2	3	4
Standardisation	Across all departments	95 per cent completed; 5 per cent under progress	97 per cent achieved; 3 per cent under progress
Integrated Application Systems	For all functional units	85 per cent completed; 15 per cent under progress	90 per cent achieved; 10 per cent under progress
Server Consolidation	At all locations	90 per cent completed; 10 per cent under progress	95 per cent completed; 5 per cent under progress
Connectivity	Across all offices and all locations	100 per cent completed	100 per cent completed
Productivity Tools	For all critical mainframe applications	100 per cent completed	100 per cent completed
Corporate e-mail	For all users at all locations	100 per cent completed	100 per cent completed
IS Security	For all information systems	95+ per cent completed	100 per cent completed

IX.26 Given the critical role played by IT solutions in day to day operations, it is imperative that they are available at all times. Therefore, to take care of any contingency even during a disaster, business continuity planning (BCP) is in place. Crucial IT based systems, including payment system application systems (such as the RTGS, CFMS, PDO-NDS and SFMS) have been designed in such a way so as to provide for a high level of uninterrupted availability. The conduct of periodical disaster recovery (DR) drills is done regularly involving all participating members.

IX.27 At the heart of all centralised operations using IT is a reliable communications network connecting all the locations of the Reserve Bank as also its constituents. The move to migrate from the closed user group network of the INFINET to the multi protocol label switching (MPLS) gained momentum. All offices of the Reserve Bank were connected using this new technology, which is aimed at providing for efficiency and lower costs without sacrificing the safety and security levels required for such network based operations.

IX.28 The corporate mail system of the Reserve Bank, which functions in a network based system, functioned satisfactorily. The major development during the year was the migration of the mail messaging system to a centralised system – called the single forest based mail messaging system. The new system, which provides access to authorised users from anywhere even while they are on the move, has stabilised.

IX.29 With IT-based delivery channels having come to stay, the need is to provide for convergence of technology using new delivery channels (Box IX.3).

Reserve Bank and the IDRBT

IX.30 The Institute for Development and Research in Banking Technology (IDRBT) has been at the heart of providing networking related infrastructure for not only the Reserve Bank but also for the banking sector as a whole. The Institute continued to provide

Box IX.3
Convergence of Technology – New Delivery Channels

Banks in the recent past have been able to provide services using new delivery channels and improve quality of services using IT-based solutions. Facilities such as internet and mobile banking have become accepted delivery channels that are becoming increasingly popular among the discerning customer. Internet banking, which commenced as a mere 'browse only' facility, today allows for a customer to perform almost all transactions. Similarly, using mobile technology, customers are able to transmit messages which result in fund transfers and debit authorisations, apart from getting to know transaction details for their respective accounts. Mobile telephone alerts on transactions beyond a particular threshold limit, internet based notifications and other phone banking facilities are also made available by banks. All the banks, which have implemented core banking systems, offer these facilities, *albeit* in differing ranges.

The Reserve Bank also provides a host of new channels for its constituents. The first such feature, implemented many years ago, related to the treatment of subsidiary general ledger (SGL) accounts. These accounts, which were treated as attached to the particular office where they were issued, acquired an all India character as far as their servicing was concerned. With the advent of large scale use of internet, customers of the Banking Department (including Government Departments) of the Reserve Bank can use the internet to get connected to the Reserve Bank's public website and thereafter login securely to access data pertaining to their accounts, and even download this information to their own computer systems so that they could use the data for further processing. On-line tracking of complaints, e-procurement facilities and electronic based communication to the central banks are other service delivery mechanisms already implemented using IT.

Continuing the process of providing newer delivery channels, the plans for the immediate future include the introduction of cheque truncation (where the physical paper cheque does not move; instead its image is used for processing, which results in quicker processing and hence quicker funds realisation, apart from less manual intervention). Besides, the work flow based processing (where the thrust is on less paper for communication and more real time information dissemination), mobile inputs/ alerts, web-based access, bulletin boards, *etc*. are being introduced.

At the heart of all these initiatives is the objective of convergence. Convergence is aimed at providing a multitude of technology based solutions, all of which will provide for inter-operability in a seamless manner to the user with a host of options to choose from, depending on his convenience.

INFINET related services with the thrust during the year being on the migration of the network to the multi-protocol label switching (MPLS) – based communication services for the banking sector as a whole. The IDRBT also continued to provide certification authority related functions to the banking sector and the management of the national financial switch (NFS), which facilitates inter-switch connectivity for ATMs.

Information Systems Audit

IX.31 Information systems (IS) audit is now a regular activity in the Reserve Bank and covers the entire life cycle relating to the IT systems. Various components such as pre-launch audit, post-implementation studies and regular IS audit follow internationally accepted norms and approaches. The large scale use of IT in day-to-day operations has also added a new dimension to the risks associated with these activities which have necessitated appropriate risk management systems (Box IX.4).

IT for the Financial Sector

IX.32 The IT initiatives taken by the Reserve Bank have an impact on the operations of the banks in the country. In order to provide the broad approaches being followed by the Reserve Bank so as to enable banks to plan their IT initiatives suitably, the Reserve Bank outlines its major plans in the form of a Financial Sector Technology (FST) Vision Document for the period 2008-10. The latest version of this document for the period 2008-10 was finalised and published during the year 2007-08 (Box IX.5).

IX.33 As far as banks are concerned, the major development during the year was the large scale adoption of core banking systems (CBS) by almost all the banks, which provides a host of facilities for customers of banks in addition to enhancing the processing structures of the banks as well.

Box IX.4
Risk Management in IT Based Operations

Risk management in an IT based environment is aimed at protecting an organisation so that its mission-critical activities are continued without any interruption, and not merely that its IT assets are protected. The objective of risk management is to ensure optimal security of the IT systems where information is stored, processed, or transmitted so as to enable the management to make well-informed risk management decisions and to facilitate the authorisation (or accrediting) of the IT systems on the basis of the supporting documentation. Risk management is effective if it is integrated at an early stage of an IT project, right from its conception. An example of risk management for a software system as can be incorporated in the software development life cycle (SDLC) is outlined below:

- Phase 1 – Initiation: The need for an IT system is expressed and the purpose and scope of the IT system is documented. Thereafter, identified risks are used to support the development of the system requirements, including security requirements, and a security concept of operations is formalised.
- Phase 2 – Development or acquisition of the software: The IT system is designed, purchased, programmed, developed, or otherwise constructed. The risks identified during this phase can be used to support the security analyses of the IT system that may lead to architecture and design trade-offs during the system development.
- Phase 3 – Implementation: The system security features should be configured, enabled, tested, and verified. The risk management process supports the assessment of the system implementation against its requirements and within its modelled operational environment. Decisions regarding risks identified must be made prior to the system operation.
- Phase 4 – Operations and maintenance: After it commences operations and performs its functions, the system may be modified on an ongoing basis through the addition of hardware and software and by changes in organisational processes, policies, and procedures. Risk management activities are performed for periodic system reauthorisation (or reaccreditation) or whenever major changes are made to an IT system in its operational, production environment (for instance, new system interfaces).
- Phase 5 – Disposal: This phase may involve the disposition of information, hardware and software. Activities may include moving, archiving, discarding, or destroying information and sanitising the hardware and software. Risk management activities are performed for system components that will be disposed of or replaced to ensure that the hardware and software are properly disposed of, that residual data are appropriately handled, and that system migration is conducted in a secure and systematic manner.

Box IX.5
Financial Sector Technology Vision Document – 2008-10

The Financial Sector Technology (FST) Vision Document outlines the general directional strategies to be followed by the Reserve Bank, which could stand out as lamp-posts for use by the banking sector as well. The FST Vision Document has the corporate objective as "enabling financial sector to leverage on IT for better customer service, improved housekeeping and overall systemic efficiency".

After providing a review of the level of achievements of the earlier FST Vision Document, the focus is on the thrust areas for the medium term of about three years. Recognising that IT would continue to be an integral part of financial operations and the core banking systems would have stabilised well across all banks, the major points of action would be the following:

- integration of core banking systems with common inter-bank payment systems such as NEFT and RTGS, in a straight through processing (STP) mode;
- approach towards centralisation in banks to facilitate customer relationship management (CRM) in a large scale and better MIS based decision making for the enterprise as a whole;
- large scale electronification of payment processes;
- providing for adequate business continuity plans, including disaster recovery systems;
- greater importance on IS Audit;
- emphasis on risk management relating to outsourcing;
- IT related requirements for ensuring time bound compliance to the needs for Basel II;
- large scale usage of standardised message based financial transaction processing;
- full scale implementation of core banking in the Reserve Bank as well; and
- periodical review of the achievement of these objectives.

Outlook

IX.34 The Payment and Settlement Systems Act, 2007 has been notified. The Reserve Bank has been vested with the powers to regulate and oversee the payment and settlement systems in the country, including those operated by entities not regulated by the Reserve Bank. The Reserve Bank would endeavour to ensure smooth operations of the existing payment systems while implementing the Act. The focus would be on authorising payment systems that should continue to operate. Desirous system providers would be analysed based on the need of the payment system(s) as also the capability of the provider. The setting up of the National Payments Council of India (NPCI) for retail operations and improving efficiency in the retail payment systems would be a priority. For ensuring smooth operations, greater focus would be placed on oversight of the payment and settlement systems. Widening of the RTGS network to cover more branches and prescription of mandatory electronic clearing of the high value transactions (March 2008) are likely to increase the RTGS turnover significantly in the coming years.

IX.35 The operations of the Reserve Bank have become increasingly IT intensive in recent times. With the data centres becoming fully operational, the respective business departments would be able to channel their efforts towards their core functional areas, while the IT related aspects will be taken care of by officials of the data centres. The objective is to ensure that IT is available for use by the functional units of the Reserve Bank as a tool to help them achieve operational excellence. Efforts are afoot to ensure that all processing requirement capabilities are taken care of from an IT perspective, resulting in a synergistic, well-bound and integrated relationship between IT and operations.

X HUMAN RESOURCE DEVELOPMENT AND ORGANISATIONAL MATTERS

X.1 The changing roles and activities of central banks and financial regulatory agencies and increased complexities in the financial system in recent years have brought to the fore issues relating to the human resource development function like never before. In the Reserve Bank also, the human resource development function has been receiving high attention. This is reflected in the Reserve Bank's efforts in meeting the evolving requirements through review of the extant systems and processes, systemic and case-specific innovations, constant upgradation of skills and technical expertise and instilling a high degree of professionalism among employees so as to enable them to take on the new and emerging challenges, on the one hand, and, to be able to balance life in the workplace and on the personal front on the other. With a view to reaching out to the common person in the country, the Reserve Bank constantly reviewed its communication strategies for disseminating information on its policies. Speeches by Top Management (Annex 1), reports of the various Working Groups (Annex II), and regular publications, an important part of the communication policy, are all placed on the Reserve Bank's website for wider dissemination.

X.2 This Chapter describes the various initiatives taken by the Reserve Bank to manage its human capital during 2007-08. It also sets out the various steps taken by the Reserve Bank for upgrading the human resources skills through appropriate training facilities at its own as well as external training institutes in areas of relevance to its working and operations. With a view to generating interest in and awareness about the Indian banking sector in general and the Reserve Bank in particular, the Reserve Bank launched the 'Reserve Bank of India Young Scholars Scheme' for students between 18 and 23 years of age and studying in undergraduate classes in various institutions across the country. Various measures were taken by the Customer Service Department of the Reserve Bank for improving the quality of customer service rendered to the members of public, banks, Central and State Governments and financial institutions.

X.3 The Reserve Bank's research departments continued to conduct analytical research on various aspects of the Indian economy and provide inputs in the conduct and formulation of the monetary and financial policies. A number of research papers were brought out by the staff of the Research Departments as well as other Departments of the Reserve Bank (Annex III). In order to explain the rationale and the analytics of its policy initiatives to the public, the Reserve Bank disseminated wide ranging information through press releases, notifications, master circulars, publications, speeches, frequently asked questions (FAQs) and advertisements.

X.4 Finally, the Chapter presents an overview of the meetings of the Central Board and its Committees. Seven meetings of the Central Board were held during the year ended June 30, 2008. The discussions in the meetings focused on the areas of currency management, information technology, human resource development, banking regulation and supervision, monetary and credit policy, accounting policy, and internal debt management policy. The deliberations of the Board also focused on the critical issue of ensuring the benefits of growth to the poorer sections of society and increasing the flow of credit to agriculture and rural areas.

HUMAN RESOURCE INITIATIVES

Training and Skills Enhancement

X.5 The various training colleges of the Reserve Bank continue to provide for the training needs of the officers of the Reserve Bank and the banking industry. The four Zonal Training Centres (ZTCs) extended training to Class III and IV staff of the Reserve Bank (Table 10.1).

Bankers' Training College

X.6 The Bankers' Training College (BTC) was established in 1954 to meet the training needs of banks and financial institutions in India. However, a need was felt to review the original mandate of the BTC and reposition it in consonance with the emerging needs of the banking and financial sector in India. The Reserve Bank had set up a Committee of external experts to, *inter alia*, suggest a repositioning of the College based upon a redefined mandate, draw up the broad contours of the appropriate organisational form, structure and

Table 10.1: Reserve Bank Training Establishments - Programmes Conducted

Training Establishment	2003-04 (July-June)		2004-05 (July-June)		2005-06 (July-June)		2006-07 (July-June)		2007-08 (July-June)	
	No. of Programmes	No. of Participants	No. of Programmes	No. of Participants	No. of Programmes	No. of Participants	No. of Programmes	No. of Participants	No. of Programmes	No. of Participants
1	2	3	4	5	6	7	8	9	10	11
BTC, Mumbai	171	3,204	153	3,287	85	1,908	89	2,148	42^	1,242^
RBSC, Chennai	144	2,874	133	2,895	127	2,633	138	2,941	158	3,302
CAB, Pune	147 *	3,138 *	146	3,364	152 #	3,812 #	146	4,279	154	4,511
ZTCs (Class III)	187	3,652	245	5,442	230	4,710	215	4,069	191	3,563
ZTCs (Class IV)	56	958	40	1,295	76	1,592	78	1,605	65	1309

^ : Figures pertain to July-February .
* : Includes 10 outstations programmes conducted at the initiative of Regional Offices involving 384 participants.
# : Includes 13 off-site programmes involving 437 participants.
BTC : Bankers' Training College. RBSC : Reserve Bank Staff College.
CAB : College of Agricultural Banking. ZTC : Zonal Training Centre.

autonomy levels for the new entity after repositioning and reflect on the role that the Reserve Bank may play in facilitating the growth and governance of such an entity and chart out the transition path for the College from its present to the envisaged form. Keeping in view the recommendations made by the Committee, the BTC was closed effective April 1, 2008. Prior to the closing (July 2007 to February 2008), the BTC conducted 42 training programmes in the areas of credit, forex and risk management; 'know your customer' (KYC) and anti-money laundering; advanced central banking; credit management for commercial banks; integrated risk management; compliance risk management; risk-based internal audit; Basel II and risk management; and integrated establishment systems. The members of faculty also handled sessions at various external institutes in India.

Reserve Bank Staff College, Chennai

X.7 The Reserve Bank Staff College (RBSC), established to impart training to the Reserve Bank's own officers in junior and middle management cadres and specialised development of officers in the senior management cadre, contributed to the upgradation of skills of all the cadres of the officers. In line with the changing environment, it has been consistently endeavouring to modernise the techniques of training as well as the coverage of inputs. Ethical issues, communication techniques as well as human values have been included in most of the programmes.

X.8 A number of topical programmes relating to currency management; knowledge management; inspections and audit; Integrated Computerised Currency Operations and Management System (ICCOMS); and financial markets were organised in the College during the year (Table 10.2). An interactive programme was organised by the College with senior Police Officers from Sardar Patel National Police Academy, Hyderabad on various issues relating to training and supervision. The College has also developed an E-learning package on "The Story of the Reserve Bank of India". As part of the efforts to bring operations and training inputs closer, the College mooted the concept of collaborative studies/ projects with regional offices and central office departments in areas relevant to the Reserve Bank. As a first step in this direction, the College has taken up a project on 'IT-enabled Financial Inclusion and Government Benefit Payments' jointly with officers from the Regional Office, Chennai of the Reserve Bank. In this project, an effort has been made to study the developments in the area of IT-enabled financial inclusion initiatives of various banks and how energies in this area can be harnessed to ensure an efficient and effective means of disbursing various benefit payments being made by the State Governments.

College of Agricultural Banking, Pune

X.9 The College of Agricultural Banking (CAB), originally set up with a focus on training the senior and middle level officers of rural and co-operative credit sectors, has, in recent years, diversified into areas relating to non-banking financial companies,

Table 10.2: Select Programmes/Seminars/Workshops Conducted by Training Colleges during 2007-08

Reserve Bank Staff College (RBSC)	College of Agricultural Banking (CAB)
1. Seminar on Currency Management	1. Customised Training Programme for Rural Branch Managers of Bank of Baroda on Financing Agriculture
2. Programme on Integrated Computerised Currency Operations and Managements System (ICCOMS)	2. Euromoney Training Programme on Financial Risk Management
3. Programme on Financial Markets	3. Workshop on Vulnerability Assessment in IT System
4. Workshop on Coaching / Mentoring	4. Programme on Financing Rural Micro Enterprises and Cluster Development
5. International Seminar on the Core Principles for Effective Banking Supervision	5. Euromoney Training Programme on Advanced Derivatives
6. Seminar on Monetary Policy Initiatives	6. Workshop on Business Continuity Management and Disaster Simulation Exercise (in association with the Business Continuity Management Institute)
7. Programme on Integrated Treasury Inspection	7. Programme on Core Banking Solutions for the CEOs/IT Heads of Regional Rural Banks and Urban Cooperative Banks
8. Customised Programme on Risk Management and Modelling for *Da Afghanistan* Officials	8. Seminar on Operational Risk Management in Central Banks in collaboration with *Banque de France* (International Banking and Finance Institute-IBFI)
	9. Legal and Regulatory Aspects of Banking Supervision (in collaboration with Newcastle University)
	10. Legal and Regulatory Aspects of Financial Crime (in collaboration with Newcastle University)
	11. Microfinance Conference
	12. International Workshop on Off-site Surveillance System for Credit Co-operatives for Central Bankers of SAARC and ASEAN countries
	13. Workshop on Technology Support for KYC/ AML Guidelines
	14. Seminar on Risk Management in Agriculture (in collaboration with NIA & MCX)

human resource management and information technology (IT). Keeping in view the emerging training needs, the College conducted various programmes on financial risk management, micro enterprises and cluster development (Table 10.2). The College also conducted agriculture project appraisal programme for officers of commercial banks; State focused programme on financing agri-business in Bihar, programme on core banking solutions for the CEOs/IT Heads of Regional Rural Banks (RRBs) and Urban Co-operative Banks (UCBs); CAB-NABARD collaborative exposure visit programme on financing self-help groups for senior bankers; and the conference of CEOs of regional rural banks.

X.10 The College conducted also several programmes, including interactive workshops for media persons; executive development programmes, conference of the IT heads of banks with a thematic focus on ISO 27001 information security management system standard; workshop on organic agriculture; annual conference of the in-charges of priority sector of banks, workshop on business continuity management and disaster simulation exercise in association with business continuity management institute based in Singapore.

X.11 The college organised international programmes, *viz*., the international programme on restructuring rural financial institutions in collaboration with Center for International Co-operation and Training in Agricultural Banking (CICTAB); seminar on operational risk management in central banks in collaboration with *Banque de France* (see para X.17); and customised programme on 'Central Banking' conducted exclusively for the Officers of Royal Monetary Authority of Bhutan. The

College launched a new website (www.cab.org.in) and developed an e-portal (www.ict.cab.org.in) on information and communication technology (ICT) enabled financial inclusion efforts of banks.

Deputation of Officers for Training in India and Abroad

X.12 In order to upgrade the skills of its human resources, the Reserve Bank also deputes its officers to various external training institutes, conferences, seminars and workshops, both in India and abroad. During 2007-08, 895 officers were deputed by the Bank to participate in training programmes, seminars and conferences organised by external management/banking institutions in India. The areas of training included human resources management, risk management, security, international banking, foreign trade, labour laws and micro finance. The Bank deputed 520 officers to attend training courses, seminars, conferences and workshops conducted by banking and financial institutions and multilateral institutions in more than 30 countries. The areas of training covered, *inter alia*, banking supervision, derivatives, risk management, financial programming and policies, central bank accounting, monetary policy and operations, finance for agriculture, rural development and macroeconomic management, human resources, debt assets and reserve management (Table 10.3).

X.13 With a view to enhancing the level of knowledge and sharpening executive skills, the Reserve Bank decided from the year 2007-08 to depute senior officers in the rank of Chief General Manager for advanced management/executive education programmes of about two to three weeks duration conducted at leading business schools abroad. Four Chief General Managers were deputed to pursue such courses in 2007-08 at internationally renowned business schools such as the Harvard Business School, the Columbia Business School and the London Business School. For the year 2008-09, four more Chief General Managers have been identified and they would pursue the programme during the course of the year.

Table 10.3: Number of Officers Trained in External Training Institutions in India and Abroad

Year	Number of officers trained in India	Number of officers trained abroad
1	2	3
2001-2002	355	137
2002-2003	452	208
2003-2004	433	242
2004-2005	521	171
2005-2006	625	273
2006-2007	871	352
2007-2008	895	520

X.14 With a view to giving exposure to the international arena and sharpening the management skills of the middle management, the Bank has decided to conduct collaborative programmes with Indian Institute of Management (IIM), Lucknow and Management Development Institute, Gurgaon for its officers. These programmes broadly designed as Advanced Management Courses would have two components. While the domestic learning component would be done at the collaborating institutions, the overseas component would be conducted at various renowned institutions abroad.

X.15 In order to hone the technical and management skills of the Reserve Bank's officers, a need was felt for greater coordination with leading central banks as well as other key regulatory and supranational agencies. With this objective, the Reserve Bank has been working towards putting in place the required mechanisms for the purpose with the respective institutions. Such two-way secondments have till now been put in place with the Bank of England, Reserve Bank of Australia and *Banque de France*.

X.16 Under this arrangement, while two officers from the Reserve Bank have been seconded to Bank of England in their Financial Stability Division and Monetary and Financial Statistics Division respectively, two officials from Bank of England have completed their secondment with the Monetary Policy Department and Financial Markets Department of the Reserve Bank. One more official from the Reserve Bank is expected to take up his secondment in Bank of England shortly. One officer from the Reserve Bank was also seconded to the Personnel Department in the Reserve Bank of Australia during the period. One officer from Reserve Bank has been seconded to *Banque de France* to their Reserves Management Directorate, while one official from *Banque de France* is expected to take up his secondment in Reserve Bank's Department of

Banking Supervision shortly. Besides, one officer from the Reserve Bank has been deputed to the Bank of Mauritius in the area of supervision for three years, effective November 2007. One officer had been deputed to the post of India Analyst in a project run jointly by Bank of Japan and Waseda University in Tokyo; the deputation period of the officer has been extended by two years up to the year 2010. Furthermore, in response to a request received from the Royal Monetary Authority of Bhutan to provide technical assistance for setting up of the Claims Section in their Currency Management Wing, the Reserve Bank would shortly depute a suitable officer there for a period of six weeks.

X.17 The Reserve Bank and *Banque de France* have decided to henceforth organise International Seminars together on themes of common interest in India and France on an alternate basis. The first such seminar on "Operational Risk Management in Central Banks" was held at the College of Agricultural Banking, Pune on December 20 and 21, 2007. This Seminar provided important insights into the evolving risk universe for central banks as well as the tools and strategies needed for designing policies on risk management. While both the Resource Persons for the Seminar were officials from the *Banque de France*, officials from several central banks in South and South-East Asia, including from the Reserve Bank participated in the Seminar.

X.18 Three officers were selected during 2007-08 under the Reserve Bank's Golden Jubilee Scholarship Scheme for higher studies abroad. In all, 90 officers have been selected under this scheme since its inception in 1986.

X.19 Three officers availed study leave under different schemes for pursuing higher studies during the year.

Zonal Training Centres

X.20 Zonal Training Centres (ZTCs) of the Reserve Bank conducted programmes on functional areas, information technology and behavioural areas for Class III and IV employees of the Reserve Bank. Apart from regular programmes at their premises, ZTCs also conducted off-site programmes on personnel effectiveness, functions and working of Reserve Bank for Class III staff; and developmental programme for Class IV staff.

Training in Computer Technology

X.21 Four officers were deputed to advanced training programmes in computers and information technology to leading training institutions.

Other Initiatives

X.22 During July-December 2007, 239 employees availed benefits under the incentive scheme for pursuing part time and distance education courses. The major areas of the study were management, information technology, financial analysis and post-graduation in commerce and economics.

X.23 In order to provide its staff an additional avenue of skill enhancement, the Reserve Bank obtained an e-learning module designed by the Indian Institute of Banking and Finance (an affiliate of the Indian Institute of Bankers) exclusively for its employees covering different facets of central banking such as treasury and risk management, and international banking and foreign exchange.

X.24 Carrying forward the Bank's initiatives for self-development of employees, customised e-learning courses on critical work-areas officers were designed through the Indian Institute of Banking and Finance (IIBF) in the area of treasury and risk management, international banking and central banking. The e-learning material on treasury and risk management has been hosted on the IIBF portal. Reserve Bank employees have been given access through separate 'log in ID' and 'password'. In respect of each candidate, the validity of the access would be restricted to four months from the date of activation of the password. At the end of the study period, an on-line self proctored examination would be structured for Level I candidates. The successful candidates along with other eligible candidates could enrol for Level II of the said course. On successful completion of the Level II of the course, candidates would be awarded a Certificate by IIBF. The Bank would bear the entire expenses for this course, including courseware digitalisation expenses and portal hosting charges.

X.25 As part of its capacity building and knowledge management initiatives, the Reserve

Bank had signed a Memorandum of Understanding with the London School of Economics and Political Science (LSE) for creating a LSE India Observatory and IG Patel Chair to be based at the Asia Research Centre at the LSE. The Indian Observatory was launched on October 15, 2007 with an event titled "India at 60 in a Changing World: Next 20 years" in London which was attended by the Union Minister for Commerce and Industry, Government of India, the Governor, Reserve Bank and the Governor, Bank of England, among others. The Indian Observatory is expected to be a focal point for research into contemporary Indian society and economy. It would pool together those in the School who are already working on Indian issues; organise seminars and conferences to raise the profile of that work as well as other related work being undertaken in the United Kingdom and elsewhere in Europe. Professor Lord Nicholas Stern of Brentford has been appointed as IG Patel Chair in Economics and Government and Director of the Indian Observatory.

X.26 The Joint India-International Monetary Fund (IMF) Training Programme (ITP) was established at the National Institute of Bank Management (NIBM) campus in Pune to impart policy-oriented training to nominees of Governments and central banks of the participating SAARC and East African countries, apart from India, in economics and related operational fields. During the year, seven programmes were conducted under the joint training programme (Table 10.4)

X.27 Given the Bank's growing synergy and linkages with other institutions, an External Services and Technical Co-operation Cell was constituted in the Human Resources Development Department (HRDD) recently. During the year, various visits/ attachments were coordinated by the Cell. A team of 16 officials from National Bank of Ethiopia visited the Reserve Bank for exposure in various areas and were attached to different departments. A four-member delegation from Bank of Tanzania visited the Bank for discussions with senior officers of the Bank. Interface sessions were held for officials from National Defense College, New Delhi and College of Naval Warfare, Mumbai.

Senior Management Conference 2007

X.28 With a view to putting in place an effective interface mechanism for Heads of the Regional Offices as well as Central Office departments, the Reserve Bank has been organising the Regional Directors' Conference every year. As the focus of the discussion and debate at the Conference is equally on the Regional Directors and Heads of the Bank's Central Office departments, it was decided to rename this annual meet as "*Senior Management Conference*" from 2007. The Senior Management Conference, 2007 was held at Mumbai from November 22 to 25, 2007. The broad theme for the Conference was "Quest for Organisational Excellence: Issues, Problems and Solutions". Besides the Governor and other Top Executives of the Bank who shared their vision for the organisation, a galaxy of eminent guest speakers also addressed the Conference on a range of interesting and evolving issues. These varied from issues such as empowering rural women and fighting injustices based on gender and other strong social biases to the uniqueness of India as a celebrated democracy and the criticality of having world class urban transport infrastructure in the country. The Guest Speakers at the Senior Management Conference

Table 10.4: Courses Conducted under Joint India-IMF Training Programme - Pune

Sr. No.	Course Title	Duration
1.	Macroeconomic Diagnostics (MDS)	August 20 - 31, 2007
2.	Program and Performance Budgeting (PPB)	October 01 - 05, 2007
3.	Macroeconomic Management and Financial Sector Issues (MMF)	December 03 - 14, 2007
4.	Financial Programming and Policies (FPP)	March 03 - 14, 2008
5.	Seminar on Derivatives in Emerging Markets	March 26 - 28, 2008
6.	Macroeconomic Management and Debt Issues (MDI)	April 14 - 25, 2008
7.	AML/CFT Workshop for Financial Supervisors (AMLF)	May 19 - 23, 2008

2007 were: (i) Dr. A.P.J. Abdul Kalam, former President of India; (ii) Dr. E. Sreedharan, Managing Director of the Delhi Metro Rail Corporation; (iii) Dr. Devi Prasad Shetty, Chairman, Narayana Hrudayalaya, Bangalore; and (iv) Ms. Chetna Gala Sinha, Founder / Chair, Mann Deshi Mahila Sahakari Bank Ltd., Satara, Maharashtra.

X.29 The Bank initiated a regular interface mechanism in the form of knowledge-sharing lectures wherein leaders from the financial and corporate world are invited to share their knowledge and experience with the Bank's officials on a wide range of critical issues. This knowledge-sharing is expected not only to broaden the perspective, but also enable the Bank's officers to reinvent themselves for meeting the dynamics of new roles and functions. Several interactive lectures have been organised by the Bank under the ambit of this series.

X.30 Apart from its own training colleges mentioned earlier, the Reserve Bank has also catalysed the creation of four more training institutions, *viz.,* (i) Indira Gandhi Institute of Development Research (IGIDR), Mumbai; (ii) National Institute of Bank Management (NIBM), Pune; (iii) Indian Institute of Bank Management (IIBM), Guwahati; and (iv) Institute for Development and Research in Banking Technology (IDRBT), Hyderabad. The Reserve Bank extended financial support of Rs.6 crore, Rs.2.9 crore and Rs.29 lakh to IGIDR, NIBM and IIBM respectively, during 2006-07 and Rs.10 crore to IDRBT during 2004-05.

IGIDR Review Committee

X.31 An external Review Committee under the Chairmanship of Dr. Bimal Jalan, Member of Parliament and former Governor of the Reserve Bank was constituted by the Reserve Bank during the year for evaluating the progress made by the Indira Gandhi Institute of Development Research (IGIDR), Mumbai and to suggest a roadmap for the future. The Committee, which submitted the Report in June 2008, attempted to take stock of the Institute's recent performance and current activities for: (i) identifying the roadblocks; (ii) considering how research trends and needs in economics are taking shape in India and across the world; (iii) brainstorming issues around the future of the Institute; and (iv) outlining a blueprint for its makeover. Making use of the aforesaid tools for a comprehensive analysis of the present position in the IGIDR, the Review Committee made out a case for some important initiatives to further improve the functioning and attractiveness of IGIDR as a world-class development research institution. This transition trajectory, recommended by the Review Committee, broadly involves four focus areas, *viz*., (i) governance and other structural issues; (ii) refashioning the Institute's talent management strategy; (iii) expanding the terms and territory of engagement; and (iv) improving the Institute's physical infrastructure. The Report has been considered by the Board of Management of IGIDR and a process to implement it has already been initiated.

Awards for 'Without Reserve'

X.32 The Reserve Bank's in-house journal "Without Reserve" won five awards including one Gold, three Silvers and a Bronze at the Annual Association of Business Communicators of India (ABCI) competition for in-house journals. In a National in-house magazine contest organised by the Trivandrum Press Club, "Without Reserve" was awarded three first prizes for overall excellence in areas of printing, layout, design and editorial content.

Summer Placement

X.33 The Reserve Bank has in place a Summer Placement Scheme which affords an opportunity to domestic and foreign students to expose themselves to an actual managerial environment and apply their knowledge to operational issues in the central bank while doing their internship. Consequent to a review undertaken recently, certain improvements/ modifications were made in the Bank's Summer Placement Scheme with a view to aligning it with the Bank's overall talent attraction strategy and enriching the trainees by offering them interesting and challenging projects. Accordingly, from 2007 onwards, the Reserve Bank would have 20 Summer Trainees every year who would take up suitable projects in various Central Office departments and in some of the regional offices located at the metro centres. In addition, five Summer Trainees would be taken from amongst the desirous candidates studying in reputed institutes abroad.

Industrial Relations

X.34 Industrial relations in the Reserve Bank remained, by and large, peaceful during 2007-08. Periodical meetings were held with the recognised Associations/Federations of workmen employees/

Table 10.5: Recruitment by the Reserve Bank – 2007*

Category	Total Recruitment	*of which* SC	*of which* ST	Percentage SC	Percentage ST
1	2	3	4	5	6
Class I	29	2	9	6.9	31.0
Class III	10	3	1	30.0	10.0
Class IV	-	-	-	-	-
(a) Maintenance Attendant	33	5	0	15.1	-
(b) Others	64	10	3	15.6	4.7
Total	**136**	**20**	**13**	**14.7**	**9.6**

*:January-December.
SC: Scheduled Castes. ST: Scheduled Tribes.

officers on various matters relating to service conditions and welfare measures in the Reserve Bank.

Recruitment

X.35 During 2007 (January-December), the Reserve Bank recruited 136 employees. Of these, 33 belonged to Scheduled Castes (SCs) and Scheduled Tribes (STs) categories, constituting 24.3 per cent of total recruitment (Table 10.5).

Staff Strength

X.36 The total staff strength as on December 31, 2007 was 21,494 as compared with 21,910 a year ago (Chart X.1). Of the total staff, 21.3 per cent belonged to Scheduled Castes and 8.9 per cent to Scheduled Tribes (Table 10.6).

X.37 During 2007 (January-December), four meetings between the management and the representatives of the All India Reserve Bank Scheduled Castes/Scheduled Tribes and the Buddhist Federation were held to discuss issues relating to the implementation of reservation policy in the Reserve Bank. In accordance with the Central Government's policy, the Reserve Bank provided reservation to Other Backward Classes (OBCs) effective September 8, 1993. The number of the OBCs (recruited after September 1993) in the Reserve Bank as on December 31, 2007 was 850. Of these, 255 were in Class I, 93 in Class III and 502 in Class IV. Two meetings were held with the All India Reserve Bank OBC Employees' Welfare Association

Chart X.1: Total Staff Strength of the Reserve Bank

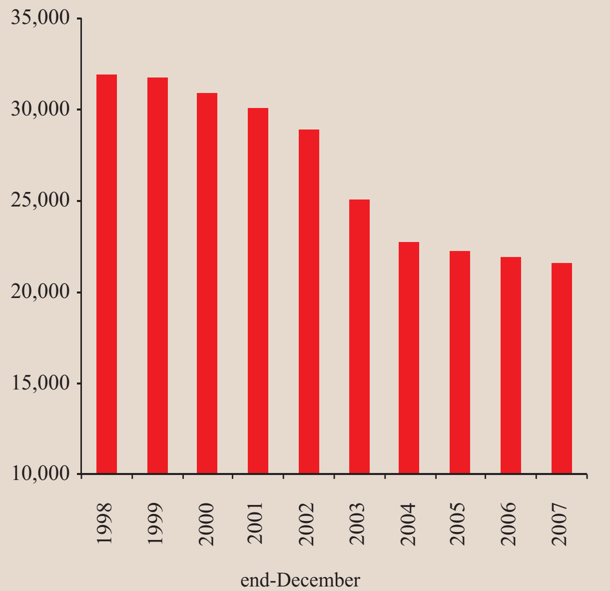


Table 10.6: Staff Strength of the Reserve Bank

Category	Total Strength December 31, 2006	Total Strength December 31, 2007	SC December 31, 2006	SC December 31, 2007	ST December 31, 2006	ST December 31, 2007	Percent to Total Strength SC December 31, 2007	Percent to Total Strength ST December 31, 2007
1	2	3	4	5	6	7	8	9
Class I	6,819	7,760	993	1,145	458	562	14.8	7.2
Class III	7,522	6,268	1,183	1,001	744	623	16.0	9.9
Class IV	7,569	7,466	2,465	2,443	752	728	32.7	9.7
Total	**21,910**	**21,494**	**4,641**	**4,589**	**1,954**	**1,913**	**21.3**	**8.9**

SC: Scheduled Castes. ST: Scheduled Tribes to discuss issues relating to implementation of the reservation policy in the Reserve Bank.

X.38 The total strength of ex-servicemen in the Reserve Bank at end-December 2007 was 1,217 comprising 197 in Class I, 220 in Class III and 800 in Class IV. The number of physically handicapped employees in Class I, Class III and Class IV cadres was 145, 180 and 133, respectively, at end-December 2007.

X.39 Of the total staff, 36.1 per cent was in Class I, 29.2 per cent in Class III and the remaining 34.7 per cent in Class IV (Table 10.7).

X.40 Almost one-fourth of the total staff is involved in the work related to currency management (Table 10.8).

X.41 The Mumbai centre (including the Central Office departments) continued to have the largest staff strength - 29 per cent of total - followed by Kolkata (10 per cent), and Chennai and Delhi (7 per cent each) (Table 10.9).

Opening of New Offices/Departments

X.42 The Reserve Bank opened sub-offices at Shimla and Ranchi on July 2 and November 15, 2007 for the States of Himachal Pradesh and Jharkhand, respectively. The sub-offices initially have only one Department, *viz*., Rural Planning and Credit Department (RPCD) with Financial Inclusion Cell within it. The sub-offices would focus on the issues relating to rural credit and financial inclusion.

X.43 The Press Relations Division was renamed as Department of Communication with effect from March 1, 2008. The Department of Statistical Analysis and Computer Services was renamed as Department of Statistics and Information Management with effect from May 20, 2008.

X.44 The Foreign Exchange Department (FED), Mumbai Regional Office and Panaji Office were delinked from FED, Central Office and brought under the control and supervision of Regional Director, Mumbai Regional Office, for greater efficiency and synergy in operations with effect from December 27, 2007 and April 3, 2008, respectively.

Table 10.7: Category-wise Actual Staff Strength

(As on December 31, 2007)

Class	Actual Strength
1	2
Class I	**7,760**
1. Senior Officers in Grade F	91
2. Senior Officers in Grade E	219
3. Senior Officers in Grade D	355
4. Officers in Grade C	903
5. Officers in Grade B	1,420
6. Officers in Grade A	4,447
7. Treasurers	18
8. Deputy Treasurers	63
9. Assistant Treasurers	244
Class III	**6,268**
1. Clerks Grade I	2,399
2. Clerks Grade II	2,121
3. Stenographers	197
4. Typists	470
5. Tellers	522
6. Others	559
Class IV	**7,466**
1. Peons	1,646
2. Mazdoors	1,735
3. Others	4,085
Total Strength in the Reserve Bank	**21,494**

X.45 The Dehradun Sub-office was attached to Lucknow Office for all administrative and operational activities with effect from December 26, 2007.

X.46 The Rural Planning and Credit Department (RPCD) Cell at Nagpur, which was earlier attached to RPCD, Mumbai Regional Office for its operational requirements and to Nagpur Office for its administrative matters, was attached to Nagpur Regional Office for all matters with effect from December 26, 2007.

Promotion of Hindi

X.47 During 2007-08, the Reserve Bank persevered with its efforts to promote the use of Hindi in its working. In fulfilling the statutory requirements of Rajbhasha Policy involving implementation of the provisions of the Official Languages Act, 1963, the Official Language Rules, 1976 and the Annual Programme issued by the Government of India, Hindi training programmes and other promotional activities such as shield competitions, inter-bank Hindi essay competitions and inter-bank/financial institutions Hindi/bilingual in-house journal competitions were conducted. Many programmes were conducted at the time of Hindi fortnight observed from September 14, 2007.

Table 10.8: Department-wise Staff Strength of the Reserve Bank- As on December 31, 2007

Sr. No.	Department/Office	Class I C.O.	Class I R.O.	Class I Total	Class III C.O.	Class III R.O.	Class III Total	Class IV C.O.	Class IV R.O.	Class IV Total	Grand Total
1.	2	3	4	5	6	7	8	9	10	11	12
1.	Customer Service Department (CSD)	19	51	70	3	32	35	6	114	120	225
2.	Department of Administration and Personnel Management (DAPM)	97	920	1,017	75	881	956	53	2,546	2,599	4,572
3.	Department of Banking Operations and Development (DBOD)	138	0	138	76	0	76	83	0	83	297
4.	Department of Banking Supervision (DBS)	121	609	730	22	123	145	26	115	141	1,016
5.	Department of Currency Management (DCM)	40	1,237	1,277	21	1,722	1,743	17	1,929	1,946	4,966
6.	Department of Economic Analysis and Policy (DEAP)	207	41	248	125	30	155	83	21	104	507
7.	Department of Expenditure and Budgetary Control (DEBC)	75	373	448	70	412	482	35	136	171	1,101
8.	Department of External Investment and Operations (DEIO)	67	0	67	18	0	18	13	0	13	98
9.	Department of Government and Bank Accounts (DGBA)	64	945	1,009	47	1,260	1,307	21	532	553	2,869
10.	Department of Statistics and Information Management (DSIM)*	187	25	212	97	32	129	76	15	91	432
11.	Department of Information Technology (DIT)	78	57	135	7	13	20	15	2	17	172
12.	Department of Non-Banking Supervision (DNBS)	44	247	291	9	79	88	7	61	68	447
13.	Department of Communication (DOC)#	8	0	8	5	0	5	6	0	6	19
14.	Foreign Exchange Department (FED)	97	185	282	78	208	286	52	147	199	767
15.	Financial Markets Department (FMD)	22	0	22	4	0	4	5	0	5	31
16.	Human Resources Development Department (HRDD)	50	8	58	41	3	44	25	1	26	128
16A.	Bankers' Training College, Mumbai	0	32	32	0	28	28	0	93	93	153
16B.	Reserve Bank Staff College, Chennai	0	37	37	0	19	19	0	38	38	94
16C.	Zonal Training Centres	0	20	20	0	6	6	0	5	5	31
16D.	College of Agricultural Banking, Pune	0	64	64	0	26	26	0	90	90	180
17.	Internal Debt Management Department (IDMD)	31	0	31	8	0	8	8	0	8	47
18.	Inspection Department (ID)	51	0	51	15	0	15	11	0	11	77
19.	Legal Department (LD)	34	11	45	14	5	19	17	3	20	84
20.	Premises Department (PD)	44	289	333	38	262	300	49	694	743	1,376
21.	Rural Planning and Credit Department (RPCD)	98	432	530	29	104	133	34	102	136	799
22.	Secretary's Department	48	0	48	12	0	12	42	0	42	102
23.	Urban Banks Department (UBD)	77	383	460	24	112	136	38	59	97	693
24.	Rajbhasha Department	0	34	34	0	28	28	0	9	9	71
25.	Deposit Insurance and Credit Guarantee Corporation (DICGC)	0	50	50	0	34	34	0	25	25	109
26.	Reserve Bank Services Board (RBSB)	13	0	13	11	0	11	7	0	7	31
	Total	**1,710**	**6,050**	**7,760**	**849**	**5,419**	**6,268**	**729**	**6,737**	**7,466**	**21,494**

***** : The Department of Statistical Analysis and Computer Services was renamed as Department of Statistics and Information Management with effect from May 20, 2008.

\# : The Press Relations Division was renamed as Department of Communication with effect from March 1, 2008.

Note:
1. C.O - Central Office. R.O - Regional Office.
2. The staff in Monetary Policy Department (MPD) are not shown separately since the staff are drawn from five other Departments, *viz.*, DEAP, DSIM, DBOD, RPCD and DAPM. The staff strength of MPD in different categories as on December 31, 2007 was 41 in Class I, 17 in Class III and 14 in Class IV.
3. The Department of Payment and Settlement Systems (DPSS) is not shown separately as their staff forms a part of staff strength of DIT.
4. The Banking Codes and Standards Board of India (BCSBI) is not been shown separately as their staff forms part of RPCD.
5. The staff shown against DCM is inclusive of staff employed in Issue Department.
6. The staff shown against DGBA is inclusive of staff employed in Banking Department, Public Accounts Department and Public Debt Offices.

Table 10.9: Office-wise Staff Strength

(As on December 31, 2007)

Office	Class I	Class III	Class IV	Total
1	2	3	4	5
1. Ahmedabad	378	274	299	951
2. Bangalore	449	285	301	1,035
3. Belapur	112	133	233	478
4. Bhopal	169	31	100	300
5. Bhubaneswar	187	116	230	533
6. Chandigarh	199	44	115	358
7. Chennai	501	492	574	1,567
8. Dehradun (Sub-Office)	11	2	3	16
9. Guwahati	172	218	216	606
10. Hyderabad	321	231	316	868
11. Jaipur	247	218	249	714
12. Jammu	102	14	56	172
13. Kanpur	205	346	426	977
14. Kochi	29	64	45	138
15. Kolkata	625	720	773	2,118
16. Lucknow	214	81	137	432
17. Mumbai	776	878	1,315	2,969
18. Nagpur	256	389	307	952
19. New Delhi	521	572	469	1,562
20. Panaji, Goa	6	5	2	13
21. Patna	281	150	307	738
22. Pune (CAB and CRDC)	62	26	87	175
23. Raipur (Sub-Office)	13	0	0	13
24. Ranchi (Sub-Office)*	5	0	0	5
25. Shimla (Sub-Office)#	7	0	0	7
26. Thiruvananthapuram	202	130	177	509
A. **Total (1 to 26)**	**6,050**	**5,419**	**6,737**	**18,206**
B. Mumbai Central Office Departments	1,710	849	729	3,288
Grand Total (A+B)	**7,760**	**6,268**	**7,466**	**21,494**

CRDC: Central Records and Documentation Centre.
* : A sub-office of the Bank was opened at Ranchi, on November 15, 2007.
# : A sub-office of the Bank was opened at Shimla on July 2, 2007.

X.48 In order to promote Hindi, the Reserve Bank continued to bring out its various publications in bilingual form, *i.e.,* both in Hindi and English. The Reserve Bank's Central office publishes bilingual in-house Journal 'Without Reserve'. The Reserve Bank through its Rajbhasha Department further strengthened the use of Hindi in computerisation. The Reserve Bank's training colleges bring out books in Hindi on current banking and other related topics. The Bankers' Training College continued its prestigious Hindi publication named "Banking Chintan-Anuchintan" which is quite popular in the banking sector in India. The regional offices also made attempts to publish regular magazines in Hindi during the year. The Rajbhasha Department started the publication of a quarterly journal, 'Rajbhasha Samachar' with effect from January 2007. The journal is focused on the latest developments in the area of implementation of Official Language policy and the other activities. Understanding new banking concepts is also a part of this publication.

X.49 The Reserve Bank's main website has been linked with its Hindi section. The intranet site of Rajbhasha Department is only in Hindi. The intranet sites of various Offices/Departments are also provided with Hindi section. Translation workshops were conducted for Rajbhasha officers from the Reserve Bank so as to encourage the adaptation of translation work. The training programmes were revamped and a new programme 'Intensive Hindi Workshop' laying emphasis on working in Hindi on computers was started during the year.

X.50 During the year, the Bank decided to implement the use of Hindi Unicode fonts for Bank's correspondence in Hindi as these fonts are based on international standards and promoted by the Government. The use of these fonts would enable the easy inter-transferability of Hindi text irrespective of availability of Hindi software. This would also relieve the task of converting the Hindi text to web fonts as Hindi Unicode fonts can be directly used for the Hindi website. Apart from this, it would also enable sending email in bilingual form. The familiarisation programmes are being arranged by Rajbhasha Department in this regard. The revised sixth edition of Bank's Glossary (English-Hindi) was published. Another noteworthy initiative taken by the Bank is the Online Banking Glossary. This is a type of application software for the Reserve Bank as well as the banking sector which would facilitate the use of English-Hindi Banking Glossary on computer, exactly as the other dictionaries do. This was launched in April 2008. Furthermore, to understand the new concepts used in the banking and financial sector, a working group has also been set up to prepare banking terminology in Hindi- 'Paribhashik Kosh'.

Complaints Redressal Mechanism – Prevention of Sexual Harassment of Women at Workplace

X.51 Pursuant to the guidelines laid down in the Supreme Court Judgment [Vishaka and Others *vs.* State of Rajasthan (1997) SCC 241], a Complaints Redressal Mechanism for prevention of incidence of sexual harassment of women at workplaces was put in place in the Reserve Bank in 1998. Under the system, a Central Complaints Committee (CCC) headed by a lady officer in Grade ‘F’ is functional at Central Office level. In order to provide an easy access to the complaints redressal mechanism for the lady staff working in offices located at various other places, additional Complaints Committees were constituted at six locations in the Reserve Bank’s offices in Mumbai and 20 Regional Offices. These Committees are also headed by senior lady officers. Besides having an NGO member each, the CCC and the Regional Complaints Committees (RCCs) have more than 50 per cent women members. The CCC acts as the focal point for all the Complaints Committees constituted at 20 centres of the Reserve Bank as well as for the six committees constituted in various premises of the Reserve Bank in Mumbai. During 2007-08 (July-April), one complaint of alleged harassment was received, which is being investigated. A complaint received prior to this period is at the final stage, awaiting the decision of the Competent Authority.

X.52 A two-day seminar (second in the series) on Prevention and Redressal of Sexual Harassment of women at workplace was arranged in November 2007 at Shillong for the members of Complaints Committees functioning at various Offices. In all, 34 Chairpersons/members of complaints committees participated in the seminar. The seminar covered topics such as Supreme Court Guidelines, facts and figures of sexual harassment, constitution of complaints committees, preventive measures, redressal mechanism and disciplinary procedures, among others.

Customer Service and Grievance Redressal System in the Reserve Bank

X.53 The Reserve Bank renders services to members of the public, banks, Central and State Governments and financial institutions in areas covering currency management, Government receipts and payments, including tax collections, public debt management, clearing and remittance of funds and foreign exchange. In order to further improve the delivery of customer service, a Customer Service Department was set up in July 2006 by bringing in various customer service activities handled by different departments of the bank under a single roof. The Complaints Redressal Cell (CRC) of the Customer Service Department coordinates with different departments of the Bank which have direct dealings with the public for prompt disposal of complaints against the services rendered by the Reserve Bank to the satisfaction of the common public. Complaints by the members of public/Bank’s constituents pointing out deficiencies in the services rendered by the various departments of the Bank at various centres, including Central Office departments, fall within the ambit of the CRC. The CRC covers all service-oriented departments of the Bank and in particular, the Banking Department [Public Accounts Department (PAD), Deposits Accounts Department (DAD), and Public Debt Office (PDO)], Foreign Exchange Department and Issue Department.

X.54 CRCs have been established at all Offices/ Central Office departments. Advertisements, giving wide publicity about the functioning of the CRC at various Centers and also at the Central Office are simultaneously published on a half-yearly basis, on first Sunday of January and July every year. Advertisements are published in the leading English and regional dailies. The Citizens’ Charter specifying the timeframe for each of the customer related activities of the Banking Department is prominently displayed in the Banking Department for the benefit of the customer/members of the public visiting the Reserve Bank’s premises for availing of various kinds of services. Due publicity to the Citizens’ Charter is also given through the Reserve Bank’s website and hard copies of the same are made available to the customers/members of public over the counter. The CRC obtains Monthly Status Reports on the receipt and disposal of complaints from all offices/ departments. The CRC also receives Quarterly Reports based on the feedback received in writing from the Bank’s customers on Citizens’ Charter. As per the implementation plan of the recommendations of CPPAPS, the Regional Offices are required to assess the level of customer service every quarter. The CRC analyses these reports to assess the level of customer service. The issues relating to the customer service and redressal of complaints are discussed at the Branch Level Management Committee meetings. Offices also arrange periodical meetings with the customers, *viz*., commercial banks, urban co-operative banks, Government agencies/ departments and members of public and submit reports thereon to the CRC. Customer service complaints/grievances, both against the Reserve Bank and commercial banks were brought within the purview of Local Boards. During 2007 (April-December), the Local Boards in their quarterly meetings reviewed 317 complaints against the Reserve Bank offices, of which 306 were against the Issue/Cash Department.

X.55 Regional Offices initiated several measures to improve customer service such as placing of Citizens' Charter at prominent places in the banking hall, holding regular workshops for authorised dealers to enhance their knowledge/competence levels, installing coin vending machines, entering into agreements with post offices for distribution of coins, using ISO standardised customer feedback forms, displaying posters showing features of genuine notes, organising workshops on Reserve Bank (Note Refund) Rules for the officials of commercial banks, Government and Insurance Companies, providing information kiosks in banking halls and undertaking visits by Senior Officers to the Banking hall.

X.56 An IT enabled initiative taken during the year enables complainants to directly send their complaints to the Regional Offices using the weblinks provided on the Reserve Bank's website under 'Contact Us' and 'Complaints against Reserve Bank' under the webpage 'For Common Person'.

X.57 As was announced in the Mid-Term Review of the Annual Policy Statement for 2007-08 in October 2007, the Reserve Bank set up a Committee, comprising external members to look into customer services in the Reserve Bank. The Committee was required (i) to evaluate the efforts for improving public services to common persons undertaken by the Reserve Bank directly or through banks/institutions since adoption of CPPAPS recommendation; (ii) offer advice on improving the quality of such services; and (iii) to review the existing policies and procedures with a view to rationalising them, keeping in view the technological and other developments since adoption of CPPAPS recommendation. The Committee submitted its report on April 15, 2008. Its recommendations covering aspects affecting the common person in areas of currency, foreign exchange and Government transactions are under the consideration of the Reserve Bank.

X.58 During 2007-08, regional offices undertook various customer friendly initiatives, mainly towards increasing awareness in the areas of banking, currency management, foreign exchange management, payment system and evaluation of customer satisfaction. Training programmes/ workshops/meetings were conducted to educate officials of State and Central Government undertakings, authorised foreign exchange dealers, representatives of major NGOs, professors and farmers' organisations.

X.59 Dissemination of material prepared to financially educate the common person received a major boost through initiatives at the Regional Offices. They collaborated with State Level Bankers' Committees (SLBCs) and district level Government officials for dissemination of financial education material in local language. Participation in exhibitions/ fairs/numismatic fairs through educational displays/ exhibits/interactive games was the most successful outreach programme undertaken by Regional Offices. Ahmedabad, Chandigarh, Chennai, Bangalore, Hyderabad, Guwahati Kanpur, Nagpur and Thiruvanthapuram Offices put up stalls in trade exhibitions/numismatic fairs in the area of their jurisdiction. At exhibitions and camps, visitors showed a great deal of interest in currency issues, such as, exchanging soiled and mutilated notes for fresh notes and coins, learning about security features of currency notes and coin vending machines reinforcing the fact that the most visible and recognised part of the Reserve Bank to the common person is currency notes and coins. Information was disseminated about no-frills bank accounts, general banking, Banking Ombudsman Scheme, electronic banking, the Reserve Bank's clean note policy, foreign exchange facilities, exercising caution while placing deposits with NBFCs.

Premises Department

X.60 Premises Department frames policy and acts as back-office for Regional Offices in the matter of creation, maintenance, renovation of physical assets/ infrastructure of the Reserve Bank and its management in general. The Department, in coordination with the various Estate Offices across the country, has provided modern infrastructural facilities for communication, data transfer, security and safety equipments in all offices. With the ageing of buildings, changes in the work culture and in the external environment, the Department's present emphasis is on modernisation, rehabilitation, renovation (and retrofitting) of existing buildings and modernisation/replacement of its utilities. At the same time, the Department continues to focus on improvement and re-engineering of its existing work-processes and on adoption of global best practices.

X.61 While providing, maintaining and managing office space, the Department has focused on use of environment-friendly materials/systems in consonance with the Energy Conservation Building Code (ECBC) introduced in May 27, 2007 and the country's energy and environment policies. Several measures were initiated for conservation of energy in line with the ECBC for commercial buildings having a connected load of 500 KW and above, with the objective to bring down the energy consumption through efficient design and use of energy efficient/ eco-friendly equipments. During the year, various steps were initiated as part of the Department's continuing efforts for conservation of energy in the Reserve Bank's office buildings, which resulted in savings in energy consumption up to 10 per cent in terms of Kilo Watt Hour (KWH). As a concerted effort to put in place a system of water conservation, water audit was introduced in the Bank and the first such water audit is proposed to be completed by December 2008.

Inspection of Offices/Departments in the Reserve Bank

X.62 The Management Audit & Systems Inspection (MA&SI), Information Systems Audit, Concurrent Audit (CA) and Control Self-Assessment Audit (CSAA) of the Offices/departments of the Reserve Bank are undertaken at prescribed intervals. The focus of the MA&SI is on three 'E's, *i.e.*, efficiency, economy and effectiveness of the system. The MA&SI evaluates the adequacy and reliability of existing systems and procedures to ensure that laws, regulations, internal policy guidelines and instructions are meticulously followed. Aspects relating to organisational goals, delegation of power and customer service in the department/Office and management efficacy are also looked into under Management Audit. During 2007-08, Systems Inspections, including Information Systems Audits of twelve Regional Offices (ROs), eleven Central Office Departments (CODs) and two Training Establishments were completed. In addition, Management Audits of Banking Ombudsman at New Delhi and Mumbai were also taken up and completed. The compliance position in respect of major findings of MA&SI Reports continues to be monitored by the Executive Directors' Committee (EDC) under the overall supervision and guidance of the Inspection and Audit Sub-Committee (IASC) of the Central Board. During 2007-08, four meetings of the IASC, four meetings of the Executive Directors' Committee and twelve meetings of CGMs' Committee were held.

X.63 In order to automate the process of the compliance monitoring and follow-up of inspection reports on Regional Offices/Central Office Departments, a simple online Compliance Monitoring and Reporting System (COMORS) was put in place and integrated with the Department's website. The main objective of COMORS is to make the processing of compliance and follow-up more accurate and efficient. In due course, the COMORS will be developed to serve as an effective MIS system based on the repository of Inspection Findings (RIF) gathered in the data base over a period. The system enabled the reduction in the compliance monitoring cycle from 10-15 days to 3-4 days and viewing of the status of compliance by auditees online. Central Office Departments can also access pending paragraphs marked to them in a consolidated manner any time.

X.64 The monitoring of the efficacy of the Concurrent Audit and Control Self Assessment Audit prevailing at various ROs/CODs continued to be undertaken through an off-site Audit Monitoring Arrangement and on-site snap audits of offices (ROs and CODs). During 2007-08, snap audits of 20 Regional Offices, 22 Central Office Departments and three Training Establishments were conducted. During the year, a Workshop was organised by the Inspection Department in January 2008 with a view to apprising the concurrent auditors, based at Mumbai, of their role and to make them aware of Reserve Bank's expectations in this regard.

X.65 Technology audits of critical application systems were undertaken by involving external experts in the field of Information Systems Audit.

During the year, technology audit of RTGS and CPAD systems were conducted. Pre-launch audit of Cheque Truncation System (CTS) was also conducted with external assistance. Applications like CCIL and IAS have also been identified for technology audits.

X.66 In keeping with the recommendations of the CPPAPS, the project for obtaining ISO 9001-2000 Certification in select work areas/departments was taken up in phases in the Reserve Bank. ISO 9001-2000 is a generic management standard providing an internationally accepted framework for establishing quality management systems with customer focus and continual improvement as the key elements (Box X.1).

X.67 As a part of the Reserve Bank's continuing initiatives to adopt and adhere to the international

Box X.1
Quality Management System (QMS):ISO 9001-2000 Standards

Quality Management System (QMS) is a framework comprising a set of policies, processes and procedures required for planning and execution in the core business area of an organisation aimed at process optimisation through integration of best practices into operating system, management focus and discipline of management thinking. It enables the organisation to identify, measure, control and improve various business processes for better achievement of its business objectives. In December 2000, International Organisation for Standardisation (ISO) introduced a set of Quality Management standards, labeled as 9001-2000 Standards, based on a process model, with emphasis on measuring customer satisfaction. The Standards are generic in nature and flexible enough to be implemented in any kind and size of organisation. These Standards have 'Plan, Do, Check, Act' cycle as operating principle and 'continual improvement' as a key element (Exhibit A).

Exhibit A

	***Plan -*** *Analyse organisation's situation, establish overall objectives, set interim targets and develop plans to achieve them.* ***Do -*** *Do what was planned.* ***Check -*** *Measure results.* ***Act -*** *Correct and learn from mistakes to improve plans in order to achieve better results next time.*	***Breakthroughs*** *are improvements in one giant leap.* ***Continuous improvement*** *is a gradual never-ending change.* ***Continual improvement*** *is incremental change, about 'getting better all the time', through measurable improvement which will deliver the right combination of better, faster, cheaper for a particular organisation and its stakeholders.*

It was decided to implement these Standards across select functions and locations in the Reserve Bank in phases; through coordination by Inspection Department (Table). Hyderabad and Kolkata Regional Offices as well as Department of Currency Management and Department of Government and Banking Accounts, which were certified earlier, successfully faced third party Surveillance (sustenance) Audits during the year. Certified work areas benefitted from implementation of standards by way of continual improvement through measurable quality objectives, particularly in areas of house-keeping, record management and customer service; re-emphasized calibration system of measuring/processing devices, especially CVPS, among others. A target has been set to cover Issue and Banking Departments at all the Offices of the Reserve Bank under such Certification by the year 2009 as also a few other departments.

Table

Name of the Departments / Offices which are certified under ISO - 9001-2000	Name of the Departments / Offices which are under process for certification under ISO - 9001-2000
1. Department of Government and Bank Accounts, Central Office	1. Department of Economic Analysis and Policy, Central Office
2. Department of Currency Management , Central Office	2. Department of Administration and Personnel Management, Central Office
3. Hyderabad (Issue and Banking)	3. Human Resources Development Department, Central Office
4. Kolkata (Issue and Banking)	4. Ahmedabad (Issue and Banking)
5. Jaipur (Issue and Banking)	5. Bhopal (Issue and Banking)
6. New Delhi (Issue and Banking)	6. Nagpur (Issue and Banking)
7. Chennai (Issue and Banking)	7. Thiruvananthapuram including Kochi (Issue and Banking)
8. Bangalore (Issue and Banking)	

Box X.2

Information Security Management System (ISMS) : ISO 27001:2005 Standards

An Information Security Management System (ISMS) is a systematic approach to managing sensitive information. It encompasses people, processes and Information Management systems. ISO 27001:2005 (adapted from BS 7799-2:2002) is an internationally accepted standard, setting out the requirements for an ISMS. The Standard provides a framework for selection of adequate security controls proportionate to the criticality of the information processed/ stored and business process risks in a particular work area/ domain by alignment of business processes and information security needs. It is implemented through the process of information system asset inventorisation, risk identification and documentation of management and information security policies as well as control procedures for effective risk mitigation.

Considering the large volume of sensitive information being handled, it was decided to implement the above Standards in select work areas of the Reserve Bank, in phases. Assistance from external experts/consultants was obtained for aligning the existing ISMS with the requirements of the Standards, while Inspection Department was entrusted with the job of coordinating the process across domains and locations. Implementation and Third Party Certification has been taken-up department-wise, in view of the diverse functionality, multiple information processing systems and varying levels of criticality of information across departments. Implementation Approach is designed to complement and enhance the Bank-wide Information Security Policy by catering to the Department Specific Information Security requirements. During 2007-08, the Standards were implemented in a few departments (Table). Department of External Investment Operations and Internal Debt Management Department, which were certified earlier, have sustained the certification by successfully facing the Surveillance (sustenance) Audit. These departments have benefitted from implementation of Standards by way of increased security awareness at all levels, documented incident reporting system, dynamic IS risk assessment and treatment, as periodic reviews and internal audits coupled with third party surveillance were mandated under Certification.

Table

Name of the Departments / Offices which are certified under ISO -27001-2005	Name of the Departments / Offices which are under process for certification under ISO -27001-2005
1. Internal Debt Management Department, Central Office	1. Department of Banking Operations and Development, Central Office
2. Department of External Investment and Operations, Central Office	2. Financial Markets Department, Central Office
3. Department of Banking Supervision, Central Office	3. Central Accounts Section, Nagpur

best practices and standards, the project of obtaining Information Security Management System (ISMS) certification (ISO 27001) in work areas was also undertaken in a phased manner (Box X.2).

X.68 In keeping with the international best practices, the Reserve Bank took up the task of introducing Risk Based Internal Inspection for replacing the existing Systems Inspection (Box.X.3).

Department of Expenditure and Budgetary Control

X.69 The Department of Expenditure and Budgetary Control (DEBC) prepares the Reserve Bank's Annual Budget and also provides establishment related services to the Bank's own staff. The Department has operationalised the Integrated Establishment System (IES). It is a three-tier application software with browser based access, secured by passwords and covers the entire range of establishment related activities, including salary processing/ disbursement. It aims at providing a common Oracle platform with standard processes/ rules and ensures data security. It comprises of twelve modules of which seven relate to salary (including increments, promotion, leave, loans and advances) and remaining five pertain to bills, budget, expenditure, fund and final settlement. All the modules are now operationalised in the Department and their usage is gradually being extended to other Central Office Departments/Regional Offices. The usage so far has shown that the software is user friendly and has simplified the processing of salary/ establishment related payments. Besides, it has facilitated the online generation of important returns, particularly those relating to income tax, *viz*., Form 16 and Form 12B and 24Q.

Box X.3

Risk-Based Internal Audit

The Reserve Bank has a strong internal audit function, which has evolved over the years and includes Management Audit and Systems Inspection (MA&SI), Concurrent Audit (CA), Control Self-Assessment Audit (CSA), Snap Audit cum Monitoring System (SNAM). The function handled by Inspection Department encompasses Quality Assurance through Compliance and Control Checks, Information Systems Audit and Externally Assisted Technology Audits. Consulting Role of the Audit, by way of suggestions to the Line Management, is also undertaken. However, considering the shift in the role of Internal Audit, as understood internationally, from Compliance to Risk Assurance, a review of the current systems inspection methodology was undertaken. It was perceived that the present internal inspection in the Bank was implicit in its approach to risk assessment as its major focus was control and compliance, resulting in strengthening of internal controls which may lead to creation of layer upon layer of controls, building a type of "organisational plaque" having the potential to slow down business processes, besides making communication more difficult. In comparison, the Risk Based Internal Audit (RBIA) provides assurance that risks are being managed within the organisation's risk appetite. It applies to any risk that threatens the achievement of the organisation's objectives whether internal to the organisation or external. The benefits that accrue from the RBIA's explicit approach to risk assessment and assurance were perceived to be: (a) optimal allocation of limited resources, efficiencies and quality audit in the immediate term; (b) risk awareness, setting risk appetite, and focus on risk and control assessment in the medium term; and (c) scientific audit aligned to the objectives of the Reserve Bank; development of incident/event database and audit opinion on the entire risk management framework in the long-term.

In view of the above, it was decided to move towards risk-based internal audit/inspection. In order to attain this shift in the audit focus and methodology, several steps were taken. First, an internal task force was constituted in the Inspection Department with the objective of evolving a framework for a risk-based internal audit. The task force prepared inherent risk profiles of all the work areas in the Reserve Bank at activity/sub-process level, through consultative and iterative process. Second, a 'pilot' was undertaken with external assistance to refine the 'profiles' to map controls, control assessment and residual risk in the form of risk registers. Third, outputs from the 'pilot' and 'report' by external experts were reviewed in consultation with the Institute of Internal Auditors (IIA) to arrive at a roadmap for RBIA, first phase of which was approved by the Inspection and Audit Sub-Committee (IASC). Action has been initiated in that direction by customising an internal application *viz*., COMORS (Compliance Monitoring and Reporting System) to map 'incidents' across locations through MA&SI. Fourth, a 'draft approach paper' for setting up a Risk Management (RM) was prepared, covering aspects such as objectives of RM, framework, organisational structure, taxonomy, approach and methodology. A sample event based risk assessment at inherent as well as residual risk level was also prepared. A methodology for 'risk score aggregation' by incorporating risk categorisation and factor weight assignment is being tested/validated.

Dissemination Policy

X.70 The Reserve Bank continued to disseminate information through press releases, notifications, master circulars, publications, speeches, frequently asked questions and advertisements. During the year ended June 30, 2008, the Reserve Bank issued 1,686 press releases and 388 notifications, including 79 master circulars. It organised meetings, workshops and seminars to interact with special audiences. Members of the public continued to send their queries relating to banking, foreign exchange, economy, customer service through e-mail/ telephone/fax to the helpdesks set up in various Departments and Regional Offices. These queries were over and above the queries received under the Right to Information Act.

X.71 With accent on transparency and accountability, the Reserve Bank has been making increasing use of its website (URL: *http://www.rbi.org.in*) for two-way communication with external audiences. The site is used not only to disseminate information emanating from the Reserve Bank, but also to seek feedback on policies. During 2007-08, seven draft reports and 12 draft guidelines were placed on the website for feedback. The size of the website increased from 10 MB in 1996 to 38 GB in July 2008. The number of users, who register themselves for receiving information available on the Reserve Bank's website through email, increased two-fold during the year. As many as 7,845 users registered themselves in 2007-08 taking the total number of registered users to 15,008.

X.72 For the third year in succession, the Reserve Bank enabled the regional press to interact with the Governor during the press conferences held to explain the stance of monetary policy. The interaction was facilitated through video conference between Mumbai and Ahmedabad, Bangalore, Chennai, Hyderabad, Jaipur, Kolkata, and New Delhi. The webcasts of the Governor's press conferences to announce the monetary policy continued to be a significant part of the Reserve Bank's communication policy (Box X.4). The webcast of Mid-Term Review of the Annual Policy announced in October 2007 was accessed by 465 persons and that of Annual Policy in April 2008 by 1,803 persons.

X.73 The Reserve Bank arranged two interactive workshops for press persons. The workshops were arranged in the College of Agricultural Banking, Pune. The objective of these two-and-a-half day workshops was to familiarise the press persons with the international best practices in central banking with special reference to the Reserve Bank. 53 press persons took advantage of the opportunity. The success of these workshops encouraged the Reserve Bank to extend its outreach to the

Box X. 4

Communication Policy of the Reserve Bank of India

A great change has taken place over the last ten to fifteen years in the importance being given by leading central banks to their communication policy and practices. The main reasons for this change are:

- Increasing central bank autonomy or attainment of independence has imposed a great demand for accountability of central banks which has necessitated greater emphasis on effectiveness and transparency in communication.
- Monetary policy transmission is now done mainly through changes in policy interest rates and their effects on money, credit and financial markets. Hence, effective communication is integral to the efficacy of monetary policy. Many central banks have also formed monetary policy committees and have started publishing their minutes.
- The innovations in information and communication technology have made the speed and form of communication from central banks quite revolutionary. In addition to traditional challenges provided by the print medium and television, websites of central banks and continuous communication through wire agencies have made central bank communication real time on a global basis.

Consequently, a number of central banks have articulated and adopted formal policies on communication.

As the Reserve Bank moved away from direct credit controls and other quantitative direct instruments and as financial markets deepened in the late 1980s and 1990s, effective communication of central bank policy objectives, instruments and action gained prominence. Faced with such multiple tasks and complex mandate – from monetary policy and financial stability to banking regulation, debt management, government debt market regulation and currency issue – there is a necessity of clearer communication on the part of the Reserve Bank of India.

The Reserve Bank of India has had well established communication practices. However, in recognition of the growing importance of communication, it was felt necessary to codify the communication policy and practices. The codified policy and practices were placed before the Central Board of Directors of the Reserve Bank at its meeting held in July 2008.

The principal goals of the Reserve Bank's communication strategy are:

- Transparency for strengthening accountability and credibility
- Clarity on the Reserve Bank's role and responsibilities with regard to its multiple objectives; managing inherent complementarities/ contradictions and transition
- Managing expectations and promoting two-way flow of information/ perceptions
- Dissemination of information, statistics and research at various frequencies

The Policy has also outlined Principles of Communication. These are:

- The Reserve Bank's approach to communicating the policy stance is to explain the stance with rationale, information and analysis and to refrain from explicit forward guidance with a preference for market participants and analysts to draw their own inferences;
- The content of communication relates to monetary policy, financial regulation and supervision, external sector management, currency management and public debt management covering policy changes as well as the path of structural reforms;
- Communication is combined with policy measures and administrative strategies;
- Coherence, clarity and credibility in articulation through speeches, formal structured and periodic statements, statutory/ non-statutory publications and committee reports as well as in reporting/dissemination of information;
- Communication is sensitive to the target audience – researchers, analysts, academics, media, regulated entities, other central banks, rating agencies, multilateral institutions, market participants, Government agencies and the common person including urban and rural population, women, senior citizens, defence personnel, school children – and therefore different types of communication instruments are used;
- Dissemination of information through the official website on real time basis;
- Pre-announced periodicity of standard communication instruments in order to enhance timeliness; advance release calendars and review cycles;

The Communication Policy of Reserve Bank of India would be reviewed annually and placed on the RBI website by way of a master circular.

neighbouring countries. Accordingly, a three-day workshop was conducted for a team of 16 press persons from Nepal at the College of Agricultural Banking, Pune. The objective of this workshop was to explain the basic central banking concepts to them with reference to Nepal and India. The workshop included a visit to Mumbai to see the Mint, the Reserve Bank's Monetary Museum, the Real Time Gross Settlement, Currency Verification and Processing System Centres and National Clearing Cell, where cheques are processed.

X.74 With the objective of giving an insight into its role and functions, the Reserve Bank, in 2006, embarked on a programme of encouraging school/ college students and other interest groups of the public to visit the Reserve Bank. Under this programme, nearly 600 students and teachers visited the Central Office in Mumbai alone during 2007-08. Significantly, groups of less privileged children, such as, those supported by NGOs like Pratham (engaged in education of street children) and Prerna (children of municipal schools) also visited the central bank. The programme in Mumbai includes interactive sessions between students and the Reserve Bank officials on issues relating to central banking and economy and a visit to the Monetary Museum as well as to the National Clearing Cell.

Project Financial Literacy

X.75 The Reserve Bank launched Project Financial Literacy during 2007-08 with a view to creating awareness, especially among the common persons, on matters relating to banking, finance and central banking. The Project is guided by a Steering Group headed by an Executive Director. The Steering Group includes representatives of two regional offices and select Central Office Departments. The Steering Group screens the ideas and material for financial education. For the purpose of giving relevant information to various target groups, the Reserve Bank has divided them into various segments, such as, children in the age group of 8-12 years, young students in the age group of 12-16 years, senior citizens, defence personnel, women in rural and urban areas.

X.76 The Project was initiated in July 2007 with a launch of a multi-lingual site for empowering the common person (*www.rbi.org.in/commonman*) with information about his rights to receive efficient banking services at reasonable cost. The site gives, among other things, information on the Reserve Bank's regulations to banks, service charges of banks, their lending rates and cheque collection policy, frequently asked questions on various subjects and also on Banking Ombudsman Scheme. The basic objective of this site is to empower the common person with information on banking subjects. This site is available in 11 regional languages, apart from Hindi and English, so that the common person can receive and understand useful banking related information in his own language. To mark the Children's Day, on November 14, 2007, the Reserve Bank released a micro site (*www.rbi.org.in/financialeducation*) especially dedicated to financial education for children of different age groups. The site explains banking and central banking concepts in comic format and through games. Two characters have been specially created for this purpose – 'Raju' who learns all about banking and shares his learning with his friends in the village, and 'Money Kumar' who explains, especially to children, subjects relating to central banking, such as, monetary policy, bank regulations and currency notes. The micro site also has films explaining security features of currency notes and is available in 11 regional languages in addition to Hindi and English.

X.77 To generate interest among school children in banking and finance, the Reserve Bank conducted State level essay competition through its Regional Offices. The competition evoked enormous response with many children participating in the competition. Apart from cash prizes, the children were invited by some offices to visit the Reserve Bank. The award winning essays were placed on the Reserve Bank's website for wider dissemination.

X.78 A Young Scholars Awards Scheme designed at giving college-going students an opportunity to work as interns in the Reserve Bank also generated tremendous response (Box X.5). Over 33,000 students applied for the examination conducted in 91 centres across the country. Out of these, the Reserve Bank selected 150 scholars to work in the Reserve Bank for two months during summer vacation. The essay competition as well as the Young Scholar Award examination were conducted in 11 regional languages, besides Hindi and English.

Box:X.5
Reserve Bank of India Young Scholars Scheme

Some of the key initiatives taken by the Reserve Bank in recent years focused on affording greater access to financial services to the vast hitherto unreached segment of the population, as well as the associated issue of bridging the extant knowledge gap in financial education and literacy in the country. Taking this forward, a need was felt to explore the potential for integrating financial education and literacy into the Bank's overall endeavour for financial inclusion by proactively encouraging young scholars from across the country to know more about the Reserve Bank and also providing them with an opportunity to work with the Reserve Bank on a short-term basis. The Bank, therefore, launched the 'Reserve Bank of India Young Scholars Scheme' for students between 18 and 23 years of age and studying in undergraduate classes at various institutions across the country. A countrywide selection test was conducted in all scheduled languages for the purpose and 150 young scholars were selected for being located at various Reserve Bank's offices spread across India.

These young scholars are expected to emerge as potentially important instruments in broadly facilitating financially inclusive growth. The students are also expected to share their learning and experience with much wider constituencies, thereby sensitising those segments of the population, which otherwise have limited resources and skills to appreciate the complexities of financial dealings with financial intermediaries. This initiative is thus expected to contribute to (i) spreading awareness about the economy and banking system in general and the Reserve Bank in particular; (ii) building a culture of inclusion; (iii) dissemination of financial literacy; (iv) bringing in a fresh perspective and a workplace ambience of collaborative learning; and (v) setting off project-based work initiatives.

The Right to Information Act, 2005

X.79 The Right to Information Act, 2005 was enacted on June 15, 2005 and came into effect from October 12, 2005. The Reserve Bank has a centralised system for providing information under the Act. Shri V. S. Das, Executive Director, has been designated as the Central Public Information Officer (CPIO) and Shri H.R. Khan, Executive Director as the Alternate CPIO. Dr. Rakesh Mohan, Deputy Governor, is the Appellate Authority (AA) and Shri V. Leeladhar, Deputy Governor is the Alternate AA. With a view to assisting members of public to submit requests for information, senior officers have been designated as Central Assistant Public Information Officers (CAPIO) at each office of the Bank.

X.80 Increased awareness of the Act resulted in a rise in the number of requests for information from 2,959 as on June 30, 2007 to 5,414 as on June 30, 2008. Almost 96 percent of the requests were resolved. The requests in respect of which, the information was fully disclosable and hence disclosed, rose from 54 per cent as at the end of June 30, 2007 to 68 per cent as at the end of June, 30 2008. During the year, a total of 493 appeals, against the decision of CPIO /non-disclosure of information, were received by the Bank's Appellate Authority. While 48 applicants appealed to the Central Information Commission (CIC), during the period, CIC has so far given decisions in 69 appeals (including decisions on cases pertaining to earlier period) (Table 10.10). The Commission upheld the decisions of the first Appellate Authority in the Bank in 45 cases and gave further directions in 24 cases.

Table 10.10: Right to Information Act, 2005 – Requests Received and Resolved during the Year

Item	(July-June) 2006-07	2007-08
1	2	3
A. 1) Requests pending as on June 30, 2007	**94**	**207**
2) Requests received during the year	**2,163**	**2,455**
3) Requests resolved during the year	**2,050**	**2,466**
of which:		
i) Requests met fully	1,062	2,051
ii) Requests met partly	329	62
iii) Requests declined	270	92
iv) Resolved in other manner	389	261
4) Under consideration	**214**	**196**
B. 1) Appeals pending as on June 30, 2007	**18**	**96**
2) Appeals received by the Bank's Appellate Authority (AA) during the year	**393**	**493**
of which:		
i) Appeals under consideration	96	49
ii) Number of appeals disposed off	287	540
of which:		
a) Number of appeals which were partially allowed/where general directions to furnish additional information were issued by AA	127	223
b) Appeals where Central Public Information Officer's (CPIO) decisions were upheld	178	317
C. 1) Appeals pending with Central Information Commission as on June 30, 2007	**3**	**29**
2) Appeals referred to Central Information Commission during the year	**46**	**48**
3) Orders issued	**24**	**69**
i) Appeals partially allowed	7	24
ii) Appeals where CPIO/AA's decisions were upheld	17	45
4) Under consideration	**25**	**8**

Box X.6

Select Major Decisions of Central Information Commission (CIC)

1) **Collection and furnishing of information from banks regulated by the Reserve Bank:** "The Reserve Bank of India could not be directed to collect information from banks regulated by it and furnish the information to requestors under the Act.'' *Decision of the Central Information Commission in Shri Pravin Kamble vs. Reserve Bank of India (August 10, 2007, F.No .PBA /07/ 618).*

2) **Furnishing of information available in material form:** "As far as Right to Information Act, 2005 is concerned, the appellant could only seek information which is held by a public authority and which is available in material form.'' *Decision of the Central Information Commission in Shri D.S. Rachappa vs. Reserve Bank of India (August 28, 2007, Appeal No.847/ICPB/2007).*

3) **Preservation of records beyond 20 years:** "Under the RTI Act, 2005 it is not mandatory for the public authority to preserve all records for 20 years.'' *Decision of the Central Information Commission in Shri T. Srinivasan vs. Reserve Bank of India (November 5, 2007, Appeal 1094/ICPB/ 2007).*

4) **Names of account holders and staff details in Fraud Monitoring Reports not to be disclosed:** The Commission agreed with the stand taken by the Reserve Bank of India that "though copies of Fraud Monitoring Reports submitted by banks could be disclosed under the Act, the names of the account holders and details of the staff involved should not be disclosed, as these are personal details (received in confidence).'' *Decision of the Central Information Commission in Shri D. Marimuthu vs. Reserve Bank of India (June 20, 2008, Appeal No.2234/ICPB/2008).*

5) **BRBNMPL is a Public Authority:** "BRBNMPL is a Public Authority as it is a subsidiary of Reserve Bank of India, which is a Public Authority.'' *Decision of the Central Information Commission in Shri Venkata Revati Batchu vs. Bharatiya Reserve Bank Note Mudran P Ltd. (September 10, 2007 (Appeal No.873/ICPB/2007).*

6) **Redressal of grievances does not come under the Act:** "There is no provision in the Act to redress issues such as unsatisfactory service rendered by banks.'' *Decision of the Central Information Commission in Brig. B.K.Bhandari vs. Central Bank of India (January 3, 2008, Appeal No. 1278 / ICPB / 2007).*

7) **General queries:** "Queries which are not specific and are too general in nature, cannot be replied under the Right to Information Act, 2005." *Decision of the Central Information Commission in Shri Amresh Kumar Srivastava vs. Central Bank of India (June 13, 2008, No.2180/ICPB/2008).*

Some of the important decisions by the Central Information Commission are summarised in Box X.6.

X.81 Majority of the requests for information that were received during the year pertained to the Reserve Bank's regulatory and supervisory functions. Besides these, there were also several requests pertaining to other areas, such as currency management, foreign exchange facilities, customer service and personnel management. Information, which is exempt from disclosure under the provisions of the Act, was not furnished. Certain requests seeking opinions, views, reasons, interpretations or grievance redressal were outside the scope of the Act and dealt with accordingly. A 'Disclosure Log' summarising disclosures of general interest has also been placed on the Reserve Bank's website.

Research Activities

X.82 Like other major central banks, the Reserve Bank has developed its own research capabilities in the field of economics and statistics, which contribute to a better understanding of the functioning of the economy. In view of the ongoing structural changes in the Indian economy brought out by deregulation, liberalisation and increasing external integration of the economy, the importance of timely and adequate analytical inputs for the formulation of the Reserve Bank's policies - monetary and regulatory - has assumed greater importance. Against this backdrop, the Research Departments, *viz.*, Department of Economic Analysis and Policy (DEAP) and Department of Statistics and Information Management (DSIM)[1], provided analytical research on various aspects of the Indian economy in the conduct and formulation of policies by the Reserve Bank.

Department of Economic Analysis and Policy

X.83 The Department of Economic Analysis and Policy conducts policy oriented research relating to various aspects of the economy. It also provides inputs on various policy matters concerning the

1 : The Department of Statistics and Information Management (DSIM) was earlier known as the Department of Statistical Analysis and Computer Services (DESACS).

Reserve Bank. The statutory reports prepared in the Department and released during the year were the Reserve Bank's Annual Report, 2006-07, and the Report on Trend and Progress of Banking in India, 2006-07. The Report on Currency and Finance, 2006-08 covering the theme “The Banking Sector in India: Emerging Issues and Challenges’’ would be released shortly. The focus of the Report is on delineating various existing and emerging challenges faced by the banking sector and suggesting measures to address them. “State Finances - A Study of Budgets of 2007-08’’ was published during the year, which carried a special theme on “Fiscal Transfers to the State Governments". The Report of the “Seventh Survey of Foreign Collaboration in Indian Industry’’ for the period 1994-95 to 2000-01 was also published during the year. In order to reach out to a wider audience, the Department took up the initiative of getting the Summary of the Bank's Annual Report for 2006-07 translated into different local languages. This task was handled by the various Regional Offices and the translated Summary was distributed to academic and research institutions, public libraries, industry and trade associations and chambers of commerce in the regions.

X.84 The Department released the “Macroeconomic and Monetary Developments’’ on a quarterly basis during 2007-08 along with the Governor's Annual Policy Statement/Mid-term/ Quarterly Reviews. Presentations on macroeconomic and monetary developments were made by the Department before the Technical Advisory Committee on Monetary Policy at each of its quarterly meetings during the year.

X.85 The Department is the primary source of the data on balance of payments of the country, released at the end of each quarter with a lag of one quarter. The quarterly data on external debt are compiled by the Department for two quarters (end-March and end-June), while the data for the remaining two quarters (end-September and end-December) are compiled by the Government. The Department also compiles the index of Nominal and Real Effective Exchange Rate (36-country) for India. All these data are disseminated through the Bank's Monthly Bulletin. Besides, the Department is entrusted with the responsibility of compiling data on monetary aggregates, consolidated State finances, combined finances of Central and State Governments, flow of funds accounts, household financial savings and primary capital issues (including private placements). Detailed time-series statistical information covering various sectors of the Indian economy - real, monetary, fiscal, external and financial markets - continued to be released through the publication “Handbook of Statistics on the Indian Economy, 2006-07’’ for the use by researchers. The publication provides annual data (in many cases from 1950-51 onwards), quarterly/monthly data (from 1990-91 onwards) as well as daily data in the case of many financial variables for the last few years. The Department also disseminated information on key parameters of the Indian economy in the Reserve Bank’s Monthly Bulletin and its Weekly Statistical Supplement.

X.86 The Department also disseminated the various economic indicators under the Special Data Dissemination Standards of the International Monetary Fund (IMF). The Department served as the nodal point for the work relating to multilateral institutions such as IMF and Bank for International Settlements (BIS) and tracked developments in these institutions. The Department coordinated the work relating to the visit of the IMF Team to India in connection with discussions under Article IV of the IMF's Articles of Agreement.

X.87 The various articles published in the monthly Bulletin during the year, among others were: (i) Finances of State Governments - 2007-08: Highlights; (ii) Union Budget 2008-09: Review and Assessment; (iii) Railway Budget 2008-09: Review and Assessment; (iv) Monthly Review on India's Foreign Trade; (v) Invisibles in India's Balance of Payments: An Analysis of Trade in Services, Remittances and Income; (vi) India's External Debt as at end-June 2007 and (vii) Flow of Funds Accounts of the Indian Economy 1994-95 to 2000-01. During the year a quarterly article on ‘‘Indian Investment Abroad in Joint Ventures and Wholly Owned Subsidiaries” and an annual article on “Industrial Production in India: 2007-08’’ were introduced in the Bulletin.

X.88 During 2007-08, the Department prepared the Weekly Financial and Commercial Report for the Committee of the Central Board/Central Board Meeting and the Annual Memorandum on Current Economic Situation for Central Board Meeting.

X.89 The Department also provided inputs for the work relating to Committee on Financial Sector Assessment. A draft Report of the Working Group on Banking Penetration in India was prepared in the Department. The Department provided secretarial support to the Working Group on Savings for the Eleventh Five Year Plan (Chairman: Dr. Rakesh Mohan) and the High Level Committee on Estimation of Saving and Investment (Chairman: Dr. C. Rangarajan). The Department also provided secretarial support to the Internal Working Group constituted by the Bank to review recommendations of the National Commission for Enterprises in the Unorganised Sector (NCEUS) report on conditions of work and promotion of livelihood in the unorganised sector. It also provided technical inputs to other Departments and participated in several Inter-Departmental Groups, *viz*., Inter-Departmental Group on Growth and Inflation, Internal Working Group on Impact of Oil Prices on Inflation and Inter-Departmental Group on Seasonal Movements in Inflation. The Department provided secretarial support to the Working Group on Real Sector and prepared the report on projection of GDP growth one year in advance, which is used as input for the formulation of monetary policy.

X.90 The Department carried out analytical research covering a range of areas such as banking, prices, monetary sector, fiscal sector, capital markets, industrial sector, agriculture and rural sector, balance of payments, international trade, international monetary and financial system. The various research notes prepared by the Department during the year for use by the top management and the Government, *inter alia,* included: (i) Impact of Fuel Price Hike; (ii) Inflation Forecast; (iii) Cross-country Study on Impact of Monetary Policy Framework; (iv) Commodity Price Movements; (v) Strategies for Containing the Prices of Wheat, Pulses, Edible Oils and Sugar; (vi) Rise in Food and Fuel Prices; (vii) Performance of Capital Goods Sector: Some Trends; (viii) Recent Performance of the Consumer Goods Sector in India: Some Fact-finding; (ix) Monthly Industrial Production Trends; (x) A Study of Trends in Employment and Unemployment in India; (xi) Estimates of FII Inflows and their Impact on Financial Stability; (xii) Competitiveness of the Indian Equity Market *vis-à-vis* Developed Equity Markets; (xiii) Recent Volatility in Stock Markets; (xiv) Global Financial and Currency Crises; and (xv) Holding Companies: Some Issues.

X.91 The Department organised a series of seminars/lectures by foreign dignitaries and experts from India. The Department organised the Thirteenth C. D. Deshmukh Memorial Lecture “Fasten Your Seatbelts! Monetary Policy Challenges in Turbulent Times’’ on November 2, 2007. The lecture was delivered by Mr. T. T. Mboweni, Governor, South African Reserve Bank. Mr. Jean-Claude Trichet, President, European Central Bank, delivered the Tenth L. K. Jha Memorial Lecture on November 26, 2007 on “The Growing Importance of Emerging Economies in the Globalised World and its Implications for the International Financial Architecture’’. During 2007-08, the Department published a commemorative volume of the lectures delivered under the L.K. Jha Memorial Lecture series, which covered issues in macroeconomic management, globally as well as in the Indian context, since the 1990s. To commemorate Silver Jubilee of the RBI Archives, the Department organised the Foundation Day Lecture on October 5, 2007. Prof. Marvin Goodfriend, Tepper School of Business, delivered a lecture on “Elements of Effective Central Banking: Theory, Practice and History’’ on the occasion.

X.92 The regional offices of the Department also continued to contribute to the research efforts of the Reserve Bank. Regular monthly/quarterly reviews pertaining to the specific States/regions were prepared. In addition, various studies on areas covering economic, banking and fiscal sectors were also undertaken by the regional offices.

X.93 Analytical studies in the areas concerning the Indian economy were published in the Reserve

Bank of India Occasional Papers and various other journals by the staff members of the Reserve Bank, particularly from the Research Departments, *viz.*, DEAP and DSIM (Annex III).

X.94 The Development Research Group (DRG) was constituted in the Reserve Bank in November 1991 with the objective to undertake quick and effective policy-oriented research, backed by strong analytical and empirical work. DRG continued to serve as a platform for collaborative research between outside experts/academics and pool of research talent available within the Reserve Bank. DRG has published 27 studies since its inception on a wide range of subjects relating to real, monetary, fiscal, banking, agriculture, external and social sectors. During 2007-08, seven studies were initiated: (i) Rural Credit in India; (ii) Agricultural Growth in India since 1991; (iii) Monetary Policy, Feedback and Markets under Uncertainty; (iv) Forecasting the Rupee/Dollar Exchange Rate; (v) An Outline of a Post-2009 FRBM Fiscal Architecture of the Union Government in the Medium-Term; (vi) Strengthening Decentralisation-Augmenting the Consolidated Fund of the States by the Thirteenth Finance Commission: A Normative Approach; and (vii) Introducing Expenditure Quality in Inter-Governmental Transfers: A Triple-E Framework. At present, 19 studies are in progress which, *inter alia,* include: (i) Dutch Disease Phenomenon in Brazil, Nigeria, Malaysia and Russia with Lessons for India’s Trade Policy; (ii) Credit Risk of Banks in India; and (iii) Nature and Causes of Deposit Growth.

X.95 The Department also looks after the Endowment Scheme of the Bank. Under the scheme, financial support is provided to various institutions for the purpose of research and training in areas of interest to the Reserve Bank. The financial support is provided through corpus funds. At present, there are 22 corpus funds, with a total corpus of around Rs.26 crore. During the year 2007-08, the National Institute of Advanced Studies, Bangalore was also included among the various institutes receiving support under the scheme. Besides the Endowment Scheme, the Reserve Bank also grants financial support to institutions/universities for funding research projects, publication of specialised journals and holding of conferences/seminars/workshops. In order to widen the scope of research within the Reserve Bank, it is proposed to invite distinguished visitors to the Bank for DRG studies, lecture/seminar series or for very short-term research projects.

X.96 To further increase the spread of research activities in the country, an expert committee has been constituted to review the mission, objectives, scope and modalities of the Reserve Bank's research funding policy and to suggest changes to provide greater clarity and effectiveness of the programme. The Expert Committee is chaired by Dr. Bimal Jalan, Honourable Member of the Rajya Sabha and former Governor of the Reserve Bank. Other members of the Committee include Prof. V.S. Vyas, Prof. D.M.Nachane, Dr. Subir Gokarn and Dr. Rakesh Mohan, Deputy Governor, Reserve Bank.

Library

X.97 The Central Library of the Reserve Bank attached to the Department of Economic Analysis and Policy plays an important role in the collection, storage and dissemination of information in the fields of economics, banking and finance. The Library has a comprehensive collection of books, journals, working papers, reports, CD-ROMs and other documents. It maintains electronic database of all these documents through OPAC(Online Public Access Catalogue), which can be accessed through Intranet in the Central Office Building and from all other offices of the Reserve Bank. The Library subscribes to various online services, *viz*., Bankscope, CenralBankNews.com, JSTOR Business and Legal collections, ECONLIT, Proquest Business Periodicals Database (covering 2,900 journals), Elsevier Science Direct online (41 journals), DATASTREAM, ISI Emerging Markets Online, Lexis-Nexis Online, and Springer Online Journals (95 journals) and discussion papers and special papers of major international research organisations. Other online services provided by the Library include PROWESS, CAPEX, State Analysis Service and World Bank eLibrary. The Library has a collection of about 64,686 books, 25,938 Government publications, 4,425 Working Papers and 12,633 back volumes of journals. It also maintains an online database of 29,148 journal articles and receives 368 technical journals. The Library also provides information services and technical support to training colleges and libraries in other offices of the Reserve Bank.

Department of Statistics and Information Management

X.98 The Department of Statistical Analysis and Computer Services (DESACS) was renamed as Department of Statistics and Information Management (DSIM) with effect from May 20, 2008, as indicated earlier, in recognition of the changes in its job role and to reflect its main functions. The Department provides high quality statistical service which encompasses collection, compilation, analysis and dissemination of information relating to various sectors of the economy. The Department has been entrusted with managing electronic data dissemination platform through Database on Indian Economy, data warehouse of the Reserve Bank. Providing technical support to other Departments in statistical analysis and large-scale data management in specific areas also form the core activities of the Department.

X.99 During 2007-08, the Department conducted the following surveys: (a) quarterly Industrial Outlook Survey, providing insight into the performance and prospects of the private corporate sector engaged in manufacturing activities; (b) quarterly Inflation Expectations Survey of Households covering 4000 households in 12 cities to gauge inflation expectations of the household sector; (c) Survey of Small Borrowal Accounts (each with credit limit Rs.2 lakh or below) with March 31, 2006 as the reference period; (d) Survey of Inventories, Order Books and Capacity Utilisation, 2006-07 providing quarterly information on key parameters of business cycle analysis. The Department also extended help in conducting a study on services to depositors and small borrowers in rural and semi-urban areas. In order to ensure improvement in data quality of inflation expectations survey, the Department conducted training programs for investigators and also made field-visits.

X.100 Several central banks conduct ‘Survey of Professional Forecasters’ on major macroeconomic indicators of short to medium term economic developments so as to gain from the professional expertise and experience of these forecasters. The Department introduced such a survey from the second quarter ended September 2007 covering component-wise detailed forecasts of GDP growth, inflation, savings, capital formation, consumption expenditure, exports, imports, interest rates, money supply, credit growth, stock market movements and corporate profit, among others. The results of this survey are disseminated on the RBI website.

X.101 ‘House starts’ is considered to be one of the leading economic indicators. The house prices are traditionally looked into for an assessment of operative asset price channel of monetary policy. However, construction of house starts also provides additional and supplementary information about the impact of monetary policy impulses on housing investments. Keeping in view the importance of such an indicator for the central bank, the Reserve Bank constituted a Technical Advisory Group (TAG) on Development of Housing Start Up Index (Chairman: Prof. Amitabh Kundu). The TAG comprises officials from the Reserve Bank, CSO, NSSO, NHB, NBO, HUDCO, SBI, four State Directorates of Economic and Statistics (DES) and renowned academicians in the field. This is for the first time that the compilation of Housing Start Up Index is being considered in India. The TAG is working on formulating a feasible methodology for the construction of Housing Start Up Index in the Indian context and would be submitting the final report giving the road map soon.

X.102 The Department undertook two different surveys/studies to identify the real estate price movements in Mumbai. The first one used the official data on all the transactions in Greater Mumbai collected from the Department of Registration and Stamps, Government of Maharashtra, to develop a quarterly house price index for Greater Mumbai. The second one was initiated at the instance of the Board of Financial Supervision (BFS) for conducting a sample survey on real estate price movements in Greater Mumbai in January 2004, January 2005, January 2006, January 2007, May 2007 and November 2007. This sample survey covered prices of residential and commercial properties, including rent and sale/resale transactions of six zones in Greater Mumbai and eight adjacent municipalities. The study developed separate price indices for sale/resale prices and rent of commercial and residential properties. The results indicate that the rent and sale/resale prices of residential properties in Mumbai showed a sharp increase over the last four years.

X.103 The Department has been entrusted with managing electronic data dissemination platform through Database on Indian Economy: Reserve Bank's Data Warehouse. As per the recommendation of the Standing Advisory Group (Chairman: Dr. R.B. Barman) and Technical Committee on CDBMS (Chairman: Dr. K.S.R. Rao), a common site called Database on Indian Economy: RBI's Data Warehouse, for both intranet and internet users has been implemented effective February 29, 2008 (Box X.7). In addition to the existing pre-formatted reports and simple querying, two more features – advanced querying and data definitions – have been introduced to help the users to extract the data required by them. In order to enable the senior management of the Reserve Bank in tracking latest developments on Indian Economy, dashboards were implemented in the RBI's Data Warehouse. These dashboards help in the analysis of data using growth rates, trends and charts which, in turn, help in identifying early warning signals. Furthermore, in order to facilitate cross-country comparison, some of the dashboards have been built using data of other countries as available in the Reserve Bank's Data Warehouse and sourced from BIS Data Bank.

X.104 The Department co-ordinated the work relating to implementation of on-line returns filing system (ORFS). Several returns received in different Departments of the Reserve Bank such as Department of Banking Operations and Development, Department of Banking Supervision, Monetary Policy Department, Foreign Exchange Department, Department of Payment and Settlement Systems and Department of Statistics and Information Management are being brought under the ORFS. With the objective of standardising the entire process of data submission by banks, the Reserve Bank took the initiative to implement an XBRL ("eXtensible Business Reporting Language") enabled ORFS. In order to oversee its implementation, a High Level Steering Committee was constituted (Chairman: Shri V. Leeladhar)

Box X.7

Database on Indian Economy (DBIE): RBI's Data Warehouse – Release of Common Site for both Intranet and Internet Users

The Reserve Bank extended certain functionalities of its Data Warehouse site, *viz,*. Database on Indian Economy (DBIE): RBI's Data Warehouse, to internet users which were earlier available to its internal users only. This was achieved by creating a common site from February 2008 for the Reserve Bank's Data Warehouse for both intranet and internet users. It is accessible from the 'Database' page of the Reserve Bank website (*http://www.rbi.org.in*) or, alternatively, through the URL *https://reservebank.org.in*.

The revamped site provides facilities such as sophisticated Homepage, improved search option, discussions on any report and advanced query. An important development was the introduction of data marts to the users for creating their desired report. Thus, in addition to standard reports, data could be accessed through *Adhoc Query* mode, *i.e*., 'Simple Query' (previously known as 'Data Query') and 'Advanced Query' (new feature). Through the 'Advanced Query' feature, user can create new reports in their desired format based on the available data marts. Users can select appropriate universe as per their choice from the list of universes. Using Graphics User Interface (GUI) tool, user can drag and drop required items. To select data for the select period, user need to specify values/value range for the respective Time Dimension Object using the tool. These reports also provide options to the users to download the report into their local computer in the form of Excel/CSV/PDF file format.

A number of additional data series on various subject areas, including financial sector, real sector, financial market, external sector, public finance and corporate finance, have been added since its inception. At present there are 194 static reports, arranged both according to subject area-wise and frequency-wise. In addition, there are 74 data query reports subject area-wise and 53 data query templates frequency-wise, and 38 data mart universes which can be utilised to create user defined reports using a web browser. These reports are released along with their metadata (*i.e*. business terms and notes on tables).

Box X.8

Technological Innovations for Data Reporting by Banks

With the objective of easing reporting burden of banks, the Reserve Bank initiated an Online Returns Filing System (ORFS) for a few returns, such as Form A. The ORFS obviates the need for paper-based data submission. It also removes submission of multiple copies of the same return to various Departments of the Reserve Bank, thus simplifying the data reporting process both for banks and the Reserve Bank. ORFS has been built on the networking backbone of the Indian financial sector, *i.e.*, the INFINET, although it can be used on the internet too. By adopting XML ("extensible markup language") for data reporting, ORFS helps in ensuring data quality to a large extent.

At the same time, there has been an international initiative on business reporting using the XBRL ("extensible business reporting language"), led by a consortium of government agencies, major companies and organisations. The main objective of this consortium is to bring in open standards in business reporting across the globe which are computer readable and which allow data quality assurance and "straight through processing". XBRL International Inc. (XII), a non-profit organisation is leading the movement.

Efforts to form an XBRL jurisdiction in India are taken by the Institute of Chartered Accounts of India. Regulators such as the Reserve Bank, Securities and Exchange Board of India and Insurance Regulatory and Development Authority are actively participating in the effort. For the banking sector, the Reserve Bank has taken the lead, by forming a High Level Steering Committee (Chairman: Shri V. Leeladhar) to steer the implementation of XBRL-based data reporting by banks to the Reserve Bank.

The Committee decided to implement the project in phases over a period of three years. The first phase, which is expected to be completed by March 2009, will cover the newly introduced Basel II returns, a few returns already covered under the ORFS and financial statements. During this phase, XBRL taxonomies would be developed for these returns and published by the Reserve Bank. The system would be implemented as an extension of the already functioning ORFS. The long-term objective of the project is to build an XBRL-repository for the banking sector.

Review of Financial Sector Technology Vision Document, published by the Reserve Bank in June 2007, identifies XBRL standards as a key development in the coming years.

(Box X.8). As part of the XBRL implementation process, the Committee took up the work relating to rationalisation of all returns submitted by banks. It is expected that such rationalisation would reduce reporting burden of commercial banks.

X.105 The BIS system of quarterly compilation of International Banking Statistics (IBS) was implemented by the Reserve Bank in December 1999. The data on IBS of India comprising 18 statements on locational banking statistics (LBS) and 5 statements on consolidated banking statistics (CBS) are being supplied to the BIS beginning March 2001. The BIS has been including the IBS of India in their publications since December 2001. During the year, LBS and CBS statements in the prescribed format, based on IBS data for the four quarters from end-June 2007 to end-March 2008 were supplied to the BIS.

X.106 With a view to reviewing the present position regarding receipt and compilation of data by the Reserve Bank and NABARD on bank credit to agriculture and other priority sectors, so as to ensure consistency and accuracy, a Working Group on Rationalisation of Returns furnished by scheduled commercial banks to the Reserve Bank and NABARD was constituted in the DSIM.

X.107 Data on various characteristics of credit and deposits are collected from offices of scheduled commercial banks through the Basic Statistical Returns (BSR) 1 and 2, under the BSR system. These provide data on distributional aspects of deposits and credit on parameters such as spatial distribution of place of sanction of place of utilisation of credit, type of account, organisation, interest rate, bank groups and population groups. The BSR 1 return was revised and implemented with effect from March 2008 survey. There are several salient features in the revision. First, new types of account such as kisan credit cards (KCC), general credit cards (GCC) and other credit cards were included. Second, the organisation codes of the borrower were restructured. Financial and non-financial organisations were separately defined under public, private and co-operative sectors. Separate codes were included for self- help groups (SHGs)/micro-finance institutions (MFIs). Third, the BSR occupation/activity codes are designed in line with national industrial classification (NIC), which is based on international standard industrial classification (ISIC). The occupation codes in the BSR were re-structured as per the changes that have taken place in other related system. Lastly, classification of 'category of borrowers' was introduced, which is based on the size of the borrowing unit, for manufacturing and service enterprises as micro, small and medium enterprises following the new guidelines. A revised Handbook of Instructions, March 2008, Seventh Edition was also published providing guidelines on the revised returns. In order to ensure improvement in quality/coverage of the BSR system and IBS data, the Department continued to conduct workshops/training programmes for officials of participating banks at the colleges and various centres of the Reserve Bank and other banks.

X.108 As per the recommendation of the Technical Group on Statistics for International Trade in Banking Services, comprising members from the Ministry of Finance, Ministry of Commerce and the concerned Departments of the Bank, a survey was launched in January 2008 for collecting information on trade in banking services, from foreign banks operating in India and the Indian banks having branches abroad. In all 112 Indian bank branches operating abroad and 25 foreign banks operating in India responded to the survey and the data are being processed. In addition, on acceptance of the recommendations of the Technical Group on Computer Services Exports (comprising members from National Association of Software and Services Companies (NASSCOM), Software Technology Parks of India (STPI) and the Reserve Bank) by the Reserve Bank, a comprehensive survey is being launched to collect information on computer/software services exports from the companies dealing in computer software/ information technology (IT) and IT enabled services. The group was setup to examine the compilation issues regarding software exports and to suggest appropriate modifications in the data collection procedure through the comprehensive survey on IT services exports with a view to bringing it in line with the International Monetary Fund (IMF) guidelines as laid down in the Balance of Payments Manual, 5th Edition (BPM5).

X.109 The Department provided technical support to four States, *viz*., Uttarakhand, Jharkhand, Assam and Karnataka for implementation of CSDRMS 2000+ package for management of their domestic debt and other contingent liabilities. The Department has been assisting/providing technical support to Foreign Exchange Department, Central Office for development of data management system in respect of overseas direct investments. It has been envisaged that the Department will ultimately manage this system after its development and implementation. In addition, with effect from April 2007 onwards, the Department took over collection/compilation/ processing of Stat Returns (non-resident deposits) from the Foreign Exchange Department of the Bank.

X.110 The information on the performance of the corporate sector is an important input to policy formulation. Since the past several years, the domestic economy is passing through a robust growth phase and the Indian corporate sector is getting increasingly integrated with the global markets. Against this backdrop, the Department made concerted efforts to expand the scope of studies on the corporate sector and made attempts at cross-country scenario on corporate performance.

X.111 The Department undertook various research initiatives covering both policy and operational issues during 2007-08. Some of the issues include: (i) estimation of potential output; (ii) inventory management of currency; (iii) agricultural credit and production; (iv) evaluation studies for survey data; (v) vulnerability of urban banks; (vi) vulnerability of portfolio of commercial banks; (vii) market risk measurement in securities market; (viii) senior loan officers' opinion survey; (ix) corporate savings; (x) determinants of external commercial borrowings of corporates in India; (xi) structural time series model-based forecasting and policy simulation; (xii) rural credit–a changing pattern, 1970-71 to 2002-03; (xiii) macroeconomic forecasting using dynamic factor models; (xiv) forecasting of growth/inflation using Bayesian VAR models; and (xv) stress testing and financial vulnerability of Indian banks.

X.112 To commemorate the birth anniversary of Professor P.C. Mahalanobis, which has been designated as 'Statistics Day' by the Government of India, the Department organised the second 'Annual Conference on Financial Statistics' on July 1, 2008. The programme was inaugurated by Dr. Rakesh Mohan, Deputy Governor, Reserve Bank. Eminent speakers, including Professor Suresh Tendulkar, Chairman, National Statistical Commission and Professor D.M. Nachane, Director, IGIDR delivered lectures at the conference.

X.113 During the year, the Department introduced lecture series on various advanced topics relevant to the working of the Bank. The topics included: (i) Bayesian Methods for Financial Analysis and Forecasting; (ii) Linear Algebra and Linear Modeling; (iii) Risk Measurement and Basel II; (iv) Re-sampling/ Bootstrap Techniques; (vi) Advanced Time Series Analysis; (vii) National Account Statistics; and (viii) Measurement of Efficiency and Productivity. Around 65 officers across various Departments attended the lecture series on a regular basis.

X.114 The Department opened three more Regional offices at Ahmedabad, Bangalore and Lucknow during 2007-08.

CENTRAL BOARD AND ITS COMMITTEES

X.115 Seven meetings of the Central Board were held during the year ended June 30, 2008. Of these, four meetings were held at traditional centres (New Delhi, Kolkata, Chennai and Mumbai) and three were held at non-traditional centres (Ranchi, Lucknow and Shillong). Forty-five weekly meetings of the Committee of the Central Board were held during the year at Mumbai. Three Committees, *viz*., Committee of the Central Board, Board for Financial Supervision, and Board for Regulation and Supervision of Payment and Settlement Systems and three Sub-Committees, *viz*., Inspection and Audit Sub-Committee, Staff Sub-Committee, and Building Sub-Committee were constituted to assist the Central Board in steering the affairs of the Reserve Bank. The Committee of the Central Board, as usual, attended to the regular business of the Bank, including approval of the Reserve Bank's weekly accounts pertaining to the Issue and the Banking Departments. The discussions at the meetings of the Central Board broadly covered matters pertaining to general superintendence and direction of the Reserve Bank's affairs, in which the Directors, with their vast experience in diverse fields, actively contributed to important decisions pertaining to currency management, information technology, human resource development, banking regulation and supervision, monetary and credit policy, the Reserve Bank's accounting policy and internal debt management policy, among others. The deliberations of the Board also focused on the critical assessment of the percolation of benefits of growth to the poorer sections of the society and on agriculture and rural areas in general.

X.116 The 500th meeting of the Central Board was held on October 11, 2007 at Ranchi. As a follow-up of decision taken in the Central Board meeting, it was decided to open a small sub-office in Jharkhand. Consequent to the presentation of the Union Budget 2008-09 in the Parliament, the Union Finance Minister met the Directors during the Central Board meeting held at New Delhi on March 6, 2008 and discussed the Budget proposals.

X.117 In addition to the above, four meetings of the Inspection and Audit Sub-Committee (IASC), one meeting of the Staff Sub-Committee and two meetings of the Building Sub-Committee were held during the year. These Sub-Committees of the Central Board have been constituted to assist the Central Board in direction of the affairs of the Reserve Bank. The Building Sub-Committee advised the Reserve Bank on various matters, including construction of staff quarters, renovation of office and residential buildings. The Sub-committee also reviewed the utilisation of capital budget for the year 2007-08. The Inspection and Audit Sub-Committee examined the critical areas emanating from the

Table 10.11: Awards Conferred on Members of the Central Board of the Reserve Bank

Name	Award	Area
1	2	3
Shri Suresh Neotia	Padma Bhushan	Trade and Industry and Social Work
Shri Ratan Tata*	Padma Vibhushan	Trade and Industry
Shri N.R. Narayana Murthy*	Padma Vibhushan	Trade and Industry
Shri P.N. Dhar*	Padma Vibhushan	Public Affairs
Shri D.R. Mehta@	Padma Bhushan	Social Work

* Former Central Board Director. @: Former Deputy Governor

Management and Systems Inspection of Central Office Departments and Regional Offices of the Reserve Bank. The Staff Sub-Committee reviews manpower planning in the Bank and gives necessary approval for addition/upgradation of posts.

Directors/Members of the Central Board/Local Boards

X.118 Five distinguished present and former Members of the Central Board were conferred Padma Bhushan and Padma Vibhushan Awards on Republic Day 2008 (Table 10.11).

X.119 Dr. M.V. Hate, former Deputy Governor of the Reserve Bank passed away on June 3, 2008.

X.120 Shri. S. Ramachander, Member, Local Board (Southern Area) passed away on June 14, 2008.

X.121 Shri P.R. Nangia, former Deputy Governor of the Reserve Bank passed away on August 8, 2008.

Appointment/Retirement of Executives

X.122 Shri P. K. Biswas, Executive Director retired from the Bank's service at the close of business on October 4, 2007.

X.123 Shri G. Gopalakrishna and Shri H.R. Khan were appointed as Executive Directors with effect from December 3, 2007.

X.124 Shri C. Krishnan, Executive Director was appointed as full time Chief Vigilance Officer of the Reserve Bank with effect from December 4, 2007.

Foreign Dignitaries

X.125 A number of foreign delegations visited the Reserve Bank during the year and interacted with top management (Annex IV). These included Governors of central banks of Maldives, Sri Lanka, South Africa, Malaysia, Zimbabwe, Israel, Mauritius, Switzerland; Parliamentary delegations from Finland, Germany, Japan, Sweden; ministerial delegations from United States of America, United Kingdom, Singapore, Australia, Germany, Japan, and Switzerland; and top functionaries from the International Monetary Fund, the Asian Development Bank and the World Bank. Mr. Jean-Claude Trichet, President, European Central Bank also visited the Reserve Bank and delivered the 10th L.K. Jha Memorial Lecture.

XI THE RESERVE BANK'S ACCOUNTS FOR 2007-08

XI.1 The key financial results of the Reserve Bank's operations during the year 2007-08 are presented in this Chapter.

INCOME AND EXPENDITURE

XI.2 The gross income, expenditure, appropriations and net disposable income of the Reserve Bank for the last five years are furnished in Table 11.1.

Surplus Transferable to the Government of India

XI.3 The surplus transferable to the Government of India for the year 2007-08 amounted to Rs.15,011.00 crore, inclusive of Rs.1,699.00 crore towards the interest differential on special securities converted into marketable securities for compensating the Government for the difference in interest expenditure which the Government had to bear consequent on conversion of such special securities.

INCOME

XI.4 The gross income of the Reserve Bank for the year 2007-08 was Rs.57,750.79 crore as against the gross income of Rs.41,039.73 crore (excluding profit on sale of shares in SBI) in the year 2006-07 and registered an increase of 40.7 per cent over the previous year. This was mainly on account of increase in income from the foreign sources. Income from the domestic sources decreased by 0.3 per cent during the year (Table 11.2 and Chart XI.1).

XI.5 The share of transfer to the Contingency Reserve, Asset Development Reserve and surplus transferred to the Government as a percentage to the total income is given in Table 11.3.

Earnings from Foreign Sources

XI.6 The Reserve Bank's earnings from the deployment of foreign currency assets and gold increased by Rs.16,730.28 crore (47.6 per cent) from Rs.35,152.99 crore in 2006-07 to Rs.51,883.27 crore in 2007-08 (Table 11.4). This was mainly on account of increase in the level of foreign currency assets. Before accounting for mark-to-market depreciation on securities, the rate of earnings on foreign currency assets and gold was 5.1 per cent in 2007-08 as against 4.7 per cent in 2006-07. The rate of earnings on foreign currency

Table 11.1: Trends in Gross Income, Expenditure and Net Disposable Income

(Rupees crore)

Item	2003-04	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5	6
Total Income (Gross)	**14,323.70**	**19,028.28**	**26,320.31**	**41,039.73** **(75,348.33) #**	**57,750.79**
Less transfer to :					
(i) Contingency Reserve	969.47	6,125.92	10,936.42	20,488.97	33,430.74
(ii) Asset Development Reserve	188.09	687.09	1,126.79	1,971.51	3,207.92
Total (i + ii)	1,157.56	6,813.01	12,063.21	22,460.48	36,638.66
Total Income (Net)	13,166.14	12,215.27	14,257.10	18,579.25 (52,887.85) #	21,112.13
Total Expenditure	**7,762.14**	**6,811.27**	**5,849.10**	**7,164.25**	**6,097.13**
Net Disposable Income	5,404.00	5,404.00	8,408.00	11,415.00 (45,723.60) #	15,015.00
Less : Transfer to Funds *	4.00	4.00	4.00	4.00	4.00
Transfer of surplus to the Government	5,400.00	5,400.00	8,404.00	11,411.00 (45,719.60) #	15,011.00

: Figures in parentheses indicate amounts including profit on sale of shares of the State Bank of India (SBI) divested on June 29, 2007.

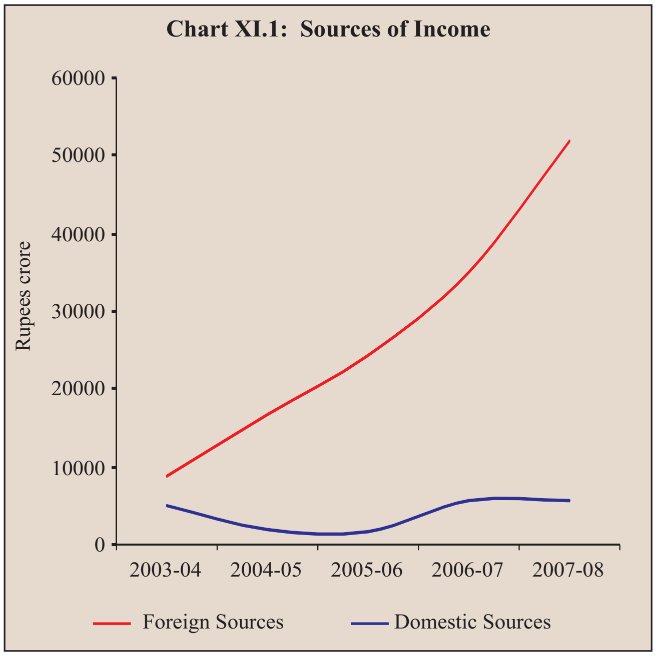
* : An amount of Rupees one crore each transferred to the National Industrial Credit (Long Term Operations) Fund, National Rural Credit (Long Term Operations) Fund, National Rural Credit (Stabilisation) Fund and National Housing Credit (Long Term Operations) Fund during each of the five years.

Table 11.2: Gross Income

(Rupees crore)

Item	2003-04	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5	6
A. Foreign Sources					
Interest, Discount, Exchange	9,103.50	16,979.47	24,538.03	35,152.99	51,883.27
B. Domestic Sources					
(i) Interest	4,872.41	1,607.34	1,207.04	5,144.52	4,958.35
(ii) Profit on sale of investment in shares of SBI	-	-	-	34,308.60	-
(iii) Other Earnings	347.79	441.47	575.24	742.22	909.17
Total : [(i)+(ii)+(iii)]	5,220.20	2,048.81	1,782.28	40,195.34 (5,886.74)	5,867.52
C. Total Income (Gross) (A+B)	**14,323.70**	**19,028.28**	**26,320.31**	**75,348.33** **(41,039.73)**	**57,750.79**

Note: Figures in parentheses indicate the amount excluding profit on sale of shares in SBI of Rs.34,308.60 crore.



assets and gold, after accounting for depreciation, increased from 4.6 per cent in 2006-07 to 4.8 per cent in 2007-08.

Income from Domestic Sources

XI.7 The income from domestic sources in 2007-08 at Rs.5,867.52 crore was similar to last year's level at Rs.5,886.74 crore (excluding profit on sale of shares in SBI to the Government of India). The head 'Interest on Securities' includes (i) interest on domestic securities, dividend and interest on LAF operations which together decreased from Rs.5,234.58 crore in 2006-07 to Rs.4,533.87 crore in 2007-08 and (ii) depreciation on securities which increased from Rs.5,570.03 crore to Rs.7,048.06 crore (Table 11.5).

Table 11.3: Contingency and Asset Development Reserves and Surplus Transfer to the Government

(Rupees crore)

Item	2003-04	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5	6
Total Income (Gross)	14,323.70	19,028.28	26,320.31	41,039.73*	57,750.79
Transfer to Contingency Reserve	969.47 (6.8)	6,125.92 (32.2)	10,936.42 (41.6)	20,488.97 (49.9)	33,430.74 (57.9)
Transfer to Asset Development Reserve	188.09 (1.3)	687.09 (3.6)	1,126.79 (4.3)	1,971.51 (4.8)	3,207.92 (5.6)
Transfer of surplus to the Government	5,400.00 (37.7)	5,400.00 (28.4)	8,404.00 (31.9)	11,411.00* (27.8)	15,011.00 (26.0)

* : Excluding profit on account of sale of shares of SBI.

Note : Figures in parentheses indicate proportion to the total income.

Table 11.4: Earnings from Foreign Sources

(Rupees crore)

Item	As on		Variation	
	June 30, 2007	June 30, 2008	Absolute	Per cent
1	2	3	4	5
Foreign Currency Assets (FCA)	8,39,878.79	12,98,552.05	4,58,673.26	54.6
Gold	27,655.43	39,548.32	11,892.89	43.0
Special Drawing Rights (SDR)	5.78	47.57	41.79	723.0
Reserve Position in the IMF**	1,875.16	2,268.53	393.37	21.0
Total Foreign Exchange Reserves (FER)	8,69,415.16	13,40,416.47	4,71,001.31	54.2
Average FCA	7,70,814.47	10,75,984.86	3,05,170.39	39.6
Earnings (Interest, Discount, Exchange gain/loss, Capital gain/loss on securities)	36,142.11	54,715.15	18,573.04	51.4
Depreciation on Securities	(-) 989.12	(-) 2,831.88	(-) 1,842.76	186.3
Earnings Net of Depreciation	35,152.99	51,883.27	16,730.28	47.6
Memo:				
Unrealised appreciation on Securities	312.26	2,122.72	1,810.46	579.8
Earnings as percentage of Average FCA	4.7	5.1	-	-
Earnings (net of depreciation) as percentage of Average FCA	4.6	4.8	-	-

** : Reserve Position in the International Monetary Fund (IMF), which was shown as a memo item from May 23, 2003 to March 26, 2004 has been included in the reserves from the week ended April 2, 2004.

EXPENDITURE

XI.8 Total expenditure of the Reserve Bank decreased by Rs.1,067.12 crore (14.9 per cent) from Rs.7,164.25 crore in 2006-07 to Rs.6,097.13 crore in 2007-08 (Table 11.6 and Chart XI.2). No interest is payable to the scheduled banks on eligible cash

Table 11.5: Earnings from Domestic Sources

(Rupees crore)

Item	As on		Variation	
	June 30, 2007	June 30, 2008	Absolute	Per cent
1	2	3	4	5
Domestic Assets	1,62,058.59	1,64,431.13	2,372.54	1.5
Weekly Average of Domestic Assets	1,10,226.68	1,06,412.90	(-)3,813.78	(-)3.5
Earnings	**5,886.74***	**5,867.52**	**(-)19.22**	**(-)0.3**
of which:				
Interest and Other Income	5,144.52	4,958.35	(-)186.17	(-)3.6
(i) Profit on Sale of Securities	5,059.74	7,089.80	2,030.06	40.1
(ii) Interest on Securities [a - b]	(-)335.45	(-) 2,514.19	(-) 2,178.74	649.5
of which:				
(a) Interest on Domestic Securities, LAF operations and Dividend	5,234.58	4,533.87	(-) 700.71	(-) 13.4
(b) Depreciation on Securities	5,570.03	7,048.06	1478.03	26.5
(iii) Interest on Loans and Advances	371.41	325.60	(-) 45.81	(-) 12.3
(iv) Other Interest Receipts	48.82	57.14	8.32	17.0
Other Earnings	742.22	909.17	166.95	22.5
(i) Discount	-	-	-	-
(ii) Exchange	0.03	0.01	(-)0.02	(-) 66.7
(iii) Commission	449.67	521.19	71.52	15.9
(iv) Rent realised and others	292.52	387.97	95.45	32.6
Memo:				
Earnings (excluding profit on sale of shares of SBI) in percentage terms (on average domestic assets)	5.3	5.5	-	-

*: Excluding profit on sale of shares of SBI.

reserve ratio (CRR) balances with effect from the fortnight beginning March 31, 2007. The expenditure, excluding interest on CRR balances, increased marginally by Rs.65.83 crore from Rs.6,029.40 crore in 2006-07 to Rs.6,095.23 crore in 2007-08. The establishment expenditure also included provision for medical benefits of retiring employees for Rs.6.32 crore and provision towards unavailed LFC for Rs.1.35 crore.

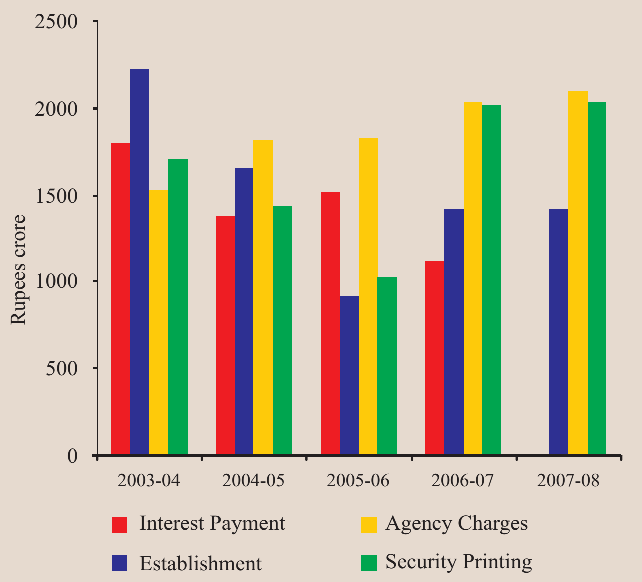
Interest Payment

XI.9 Pursuant to amendment to Reserve Bank of India Act, 1934, interest payable on eligible CRR balances was withdrawn with effect from fortnight beginning March 31, 2007. Hence, interest payment, which mainly consisted of interest on CRR balances, decreased by Rs.1,132.80 crore (99.8 per cent) from Rs.1,135.38 crore in 2006-07 to Rs.2.58 crore in 2007-08. Out of this, Rs.1.90 crore was paid towards interest on CRR balances relating to the previous year.

Establishment Expenditure

XI.10 The establishment expenditure increased marginally by Rs.5.06 crore from Rs.1,425.81 crore in 2006-07 to Rs.1,430.87 crore in 2007-08 due to normal yearly increase on account of increments, promotion, DA revision, *etc.* The establishment expenditure during 2007-08 comprised salary (30.4 per cent), allowances (21.4 per cent), funds (18.8 per cent) and miscellaneous expenditure (29.4 per cent).

Chart XI.2: Major Items of Expenditure



Non-Establishment Expenditure

XI.11 The expenditure incurred on security printing (cheque, note forms, *etc.*) charges in 2007-08 (July-June) increased by Rs.11.34 crore (0.6 per cent) to Rs.2,032.23 crore from Rs.2,020.89 crore in 2006-07. Although the supply of banknotes in 2007-08 increased by 1,146.34 million pieces as compared with 2006-07, the increase in expenditure was only marginal because of the reduction in printing charges. The amount of agency charges paid during 2007-08 was Rs.2,111.14 crore as against Rs.2,042.50 crore during 2006-07. The increase of Rs.68.64 crore

Table 11.6: Expenditure

(Rupees crore)

Item		2003-04	2004-05	2005-06	2006-07	2007-08
1		2	3	4	5	6
I.	**Interest Payment**	**1,808.48**	**1,386.28**	**1,524.41**	**1,135.38**	**2.58**
	of which:					
	Scheduled Banks	1,323.23	1,276.83	1,523.72	1,134.85	1.90
II.	**Establishment**	**2,232.99**	**1,653.17**	**919.88**	**1,425.81**	**1,430.87***
III	**Non-Establishment**	**3,720.67**	**3,771.82**	**3,404.81**	**4,603.06**	**4,663.68**
	of which:					
	a) Agency charges	1,539.12	1,824.17	1,833.55	2,042.50	2,111.14
	b) Security printing	1,709.56	1,443.57	1,034.86	2,020.89	2,032.23
Total [I+II+III]		**7,762.14**	**6,811.27**	**5,849.10**	**7,164.25**	**6,097.13**

* : Includes provision towards Gratuity and Superannuation Fund and Leave Encashment Fund of Rs.221.02 crore (previous year Rs.453.01 crore).

during 2007-08 is mainly attributed to the rise in volume of Government transactions conducted by the agency banks.

BALANCE SHEET

LIABILITIES

National Industrial Credit (Long Term Operations) Fund

XI.12 There were no operations in the National Industrial Credit (Long Term Operations) Fund (established under Section 46 C of the Reserve Bank of India Act, 1934) during 2007-08 except the credit of Rs.1.00 crore to the Fund out of the Reserve Bank's income.

National Housing Credit (Long Term Operations) Fund

XI.13 The National Housing Credit (Long Term Operations) Fund was established by the Reserve Bank in terms of Section 46 D(1) of the Reserve Bank of India Act, 1934 in January 1989. A token contribution of Rs.1.00 crore was made to the Fund out of the Reserve Bank's income during 2007-08.

Deposits - Banks

XI.14 'Deposits - Banks' represent balances maintained by banks in their current accounts with the Reserve Bank mainly for maintaining CRR and as working funds for clearing adjustments.

Deposits - Others

XI.15 'Deposits - Others' include deposits from financial institutions, employees' provident fund deposits and sundry deposits.

Other Liabilities

XI.16 'Other Liabilities' include the internal reserves and provisions of the Reserve Bank, surplus earmarked pending transfer to the Government and net credit balance in the RBI General Account. These liabilities increased by Rs.1,93,768.08 crore (150.0 per cent) from Rs.1,29,200.02 crore as on June 30, 2007 to Rs.3,22,968.10 crore as on June 30, 2008 mainly on account of increase in the level of Currency and Gold Revaluation Account (CGRA).

XI.17 The reserves, *viz.*, Contingency Reserve, Asset Development Reserve, Currency and Gold Revaluation Account and Exchange Equalisation Account reflected in 'Other Liabilities' are in addition to the 'Reserve Fund' of Rs.6,500.00 crore held by the Reserve Bank as a distinct balance sheet head.

Currency and Gold Revaluation Account (CGRA) and Exchange Equalisation Account (EEA)

XI.18 Gains/losses on valuation of foreign currency assets and gold due to movements in the exchange rates and/or prices of gold are not taken to the Profit and Loss Account but instead booked under a balance sheet head named as the Currency and Gold Revaluation Account (CGRA). The balance represents accumulated net gain on valuation of foreign currency assets and gold. During 2007-08, there was an accretion of Rs.1,41,488.31 crore in CGRA, thus increasing its balance from Rs.21,723.52 crore as on June 30, 2007 to Rs.1,63,211.83 crore as on June 30, 2008. The balance in CGRA at the end of June 2008 was equivalent to 12.2 per cent of foreign currency assets and gold holdings of the Reserve Bank as compared with 2.5 per cent at the end of June 2007. The increase was on account of depreciation of the US dollar against other currencies, depreciation of the Indian Rupee against US dollar and increase in the price of gold. The balance in the Exchange Equalisation Account (EEA) represents provision made for exchange losses arising out of forward contracts. As on June 30, 2008, there was no balance in EEA as revaluation of forward contracts resulted in net gain which was ignored. The balances in CGRA and EEA are grouped under 'Other Liabilities' in the balance sheet (Table 11.7).

Contingency Reserve and Asset Development Reserve

XI.19 The Reserve Bank maintains a Contingency Reserve (CR) to enable it to absorb unexpected and unforeseen contingencies. The balance in CR increased from Rs.93,770.07 crore as on June 30, 2007 to Rs.1,27,200.81 crore as on June 30, 2008 with transfer of Rs.33,430.74 crore to CR during 2007-08 from the Reserve Bank's income. The balance in CR is sufficient to meet contingent liabilities.

Table 11.7: Balances in Currency and Gold Revaluation Account and Exchange Equalisation Account

(Rupees crore)

As on June 30	Currency and Gold Revaluation Account	Exchange Equalisation Account
1	2	3
2004	62,283.04	5.65
2005	26,906.21	0.50
2006	86,789.18	3.28
2007	21,723.52	9.68
2008	1,63,211.83	-

XI.20 In order to meet the internal capital expenditure and make investments in its subsidiaries and associate institutions, the Reserve Bank had created a separate Asset Development Reserve (ADR) in 1997-98, with the aim of reaching one per cent of the Reserve Bank's total assets within the overall indicative target of 12 per cent set for CR. In the year 2007-08, an amount of Rs.3,207.92 crore was transferred from income to ADR raising its level from Rs.9,564.33 crore as on June 30, 2007 to Rs.12,772.25 crore as on June 30, 2008. CR and ADR together constituted 9.6 per cent of total assets of the Bank as on June 30, 2008 (Table 11.8).

ASSETS

Foreign Currency Assets

XI.21 The foreign currency assets comprise foreign securities held in the Issue Department, balances held abroad and investments in foreign securities held in the Banking Department. Such assets rose from Rs.8,39,878.79 crore as on June 30, 2007 to Rs.12,98,552.05 crore as on June 30, 2008. The increase in the level of foreign currency assets was mainly on account of net purchases of US dollars from the market, interest and discount received and revaluation gains (Table 11.9 and Chart XI.3).

Investment in Government of India Rupee Securities

XI.22 Investment in Government of India Rupee Securities, which was Rs.89,079.66 crore as on June 30, 2007, increased by Rs.7,095.67 crore (8.0 per cent) to Rs.96,175.33 crore as on June 30, 2008. The increase was on account of purchase of Oil Bonds under the Special Market Operations and the Liquidity Adjustment Facility (LAF) operations.

Investments in Shares of Subsidiaries and Associate Institutions

XI.23 There was no change in the Reserve Bank's investments in the shares of its subsidiaries and associate institutions during the year (Table 11.10).

Other Assets

XI.24 'Other Assets' comprise mainly fixed assets, gold holdings in the Banking Department, amounts spent on projects pending completion and staff advances. The level of 'Other Assets' increased by Rs.3,561.44 crore (13.1 per cent) from Rs.27,244.51 crore as on June 30, 2007 to Rs.30,805.95 crore as on June 30, 2008.

Table 11.8 : Balances in Contingency Reserve and Asset Development Reserve

(Rupees crore)

As on June 30	Balance in CR	Balance in ADR	Total	Percentage to total assets
1	2	3	4	5
2004	56,218.76	5,778.94	61,997.70	10.2
2005	62,344.68	6,466.03	68,810.71	10.1
2006	73,281.10	7,592.82	80,873.92	10.0
2007	93,770.07	9,564.33	1,03,334.40	10.3
2008	1,27,200.81	12,772.25	1,39,973.06	9.6

Table 11.9: Outstanding Foreign Currency and Domestic Assets

(Rupees crore)

As on June 30	Foreign Currency Assets	Domestic Assets
1	2	3
2004	5,24,865.01	84,872.74
2005	5,75,863.66	1,06,952.94
2006	7,18,701.18	90,106.99
2007	8,39,878.79	1,62,058.59
2008	12,98,552.05	1,64,431.13

Chart XI.3: Trends in Foreign Currency and Domestic Assets (as at the end of June)

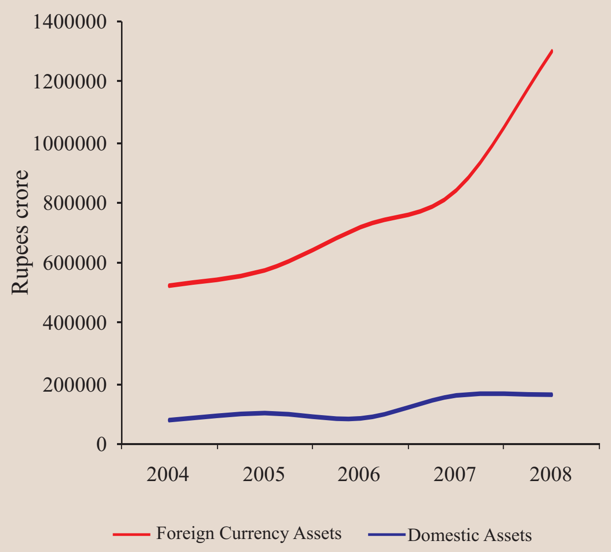


Table 11.10 : Investments in Shares of Subsidiaries/Associate Institutions

(Rupees crore)

Institution	Book value of shares held as on	
	June 30, 2007	June 30, 2008
1	2	3
1. Deposit Insurance and Credit Guarantee Corporation	50.00	50.00
2. National Bank for Agriculture and Rural Development	1,450.00	1,450.00
3. National Housing Bank	450.00	450.00
4. Bharatiya Reserve Bank Note Mudran (Pvt.) Ltd.	800.00	800.00
Total	**2,750.00**	**2,750.00**

Auditors

XI.25 The accounts of the Reserve Bank for the year 2007-08 were audited by M/s. Kalyaniwalla & Mistry, Mumbai and M/s. Mukund M. Chitale & Co., Mumbai as the statutory central auditors. The branch offices were audited by the statutory branch auditors, namely, M/s. Walker, Chandiok & Co., New Delhi, M/s. K.K. Mankeshwar & Co., Nagpur, M/s. Karra & Co., Chennai and M/s. K.C. Sarkar & Co., Kolkata. The auditors were appointed by the Central Government.

RESERVE BANK OF INDIA
BALANCE SHEET AS AT 30TH JUNE 2008
ISSUE DEPARTMENT

(Rupees thousands)

2006-07	LIABILITIES		2007-08	2006-07	ASSETS		2007-08
	Notes held in the				**Gold Coin and Bullion:**		
16,99,84	**Banking Department**	**16,22,71**		22592,97,15	(a) Held in India	**32308,81,20**	
506545,30,17	**Notes in Circulation**	**612323,93,51**		-	(b) Held outside India	-	
				482800,79,66	**Foreign Securities**	**578878,86,61**	
506562,30,01	**Total Notes Issued**		**612340,16,22**	505393,76,81	**Total**		**611187,67,81**
				122,10,20	**Rupee Coin**		**106,05,41**
				1046,43,00	**Government of India Rupee Securities**		**1046,43,00**
				-	**Internal Bills of Exchange and other Commercial Paper**		-
506562,30,01	**Total Liabilities**		**612340,16,22**	506562,30,01	**Total Assets**		**612340,16,22**

BANKING DEPARTMENT

2006-07	LIABILITIES	2007-08	2006-07	ASSETS	2007-08
5,00,00	**Capital paid-up**	**5,00,00**	16,99,84	**Notes**	**16,22,71**
6500,00,00	**Reserve Fund**	**6500,00,00**	3,84	**Rupee Coin**	**3,57**
16,00,00	**National Industrial Credit (Long Term Operations) Fund**	**17,00,00**	3,82	**Small Coin**	**6,23**
190,00,00	**National Housing Credit (Long Term Operations) Fund**	**191,00,00**			
	Deposits			**Bills Purchased and Discounted:**	
	(a) Government		-	(a) Internal	-
81236,85,31	(i) Central Government	**191626,05,59**	-	(b) External	-
41,18,09	(ii) State Governments	**41,31,39**	-	(c) Government Treasury Bills	-
	(b) Banks				
206613,01,42	(i) Scheduled Commercial Banks	**298809,97,22**			
2620,36,50	(ii) Scheduled State Co-operative Banks	**4122,66,68**	329695,08,67	**Balances Held Abroad**	**688343,34,97**
3475,30,34	(iii) Other Scheduled Co-operative Banks	**5186,27,25**			
50,70,07	(iv) Non-Scheduled State Co-operative Banks	**63,20,69**	118166,19,46	**Investments**	**129208,79,55**
5774,86,24	(v) Other Banks	**8699,14,56**			
59249,57,87	**(c) Others**	**12110,22,52**		**Loans and Advances to:**	
			19421,00,00	(i) Central Government	-
			174,40,00	(ii) State Governments	-
419,19,77	**Bills Payable**	**319,29,20**		**Loans and Advances to:**	
			580,53,00	(i) Scheduled Commercial Banks	**2102,14,00**
			10,00,00	(ii) Scheduled State Co-operative Banks	-
			-	(iii) Other Scheduled Co-operative Banks	-
			-	(iv) Non-Scheduled State Co-operative Banks	-
			-	(v) NABARD	-
			33,28,48	(vi) Others	**132,68,98**
129200,02,09	**Other Liabilities**	**322968,10,34**		**Loans, Advances and Investments from National Industrial Credit (Long Term Operations) Fund:**	
				(a) Loans and Advances to:	
			-	(i) Industrial Development Bank of India	-
			-	(ii) Export Import Bank of India	-
			-	(iii) Industrial Investment Bank of India Ltd.	-
			-	(iv) Others	-
				(b) Investments in bonds/ debentures issued by:	
			-	(i) Industrial Development Bank of India	-
			-	(ii) Export Import Bank of India	-
			-	(iii) Industrial Investment Bank of India Ltd.	-
			-	(iv) Others	-
				Loans, Advances and Investments from National Housing Credit (Long Term Operations) Fund:	
			50,00,00	(a) Loans and Advances to National Housing Bank	**50,00,00**
			-	(b) Investments in bonds/debentures issued by National Housing Bank	-
			27244,50,59	**Other Assets**	**30805,95,43**
495392,07,70	**Total Liabilities**	**850659,25,44**	495392,07,70	**Total Assets**	**850659,25,44**

Significant Accounting Policies and Notes to the Accounts as per the Annex.

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 30TH JUNE 2008

(Rupees thousands)

2006-07	INCOME		2007-08
52887,85,08	**Interest, Discount, Exchange, Commission,** *etc.*[1]		**21112,12,68**
52887,85,08	**Total**		**21112,12,68**
	EXPENDITURE		
1135,38,41	**Interest**		**2,58,19**
1425,81,16	**Establishment**		**1430,86,61**
1,50,46	**Directors' and Local Board Members' Fees and Expenses**		**1,79,12**
21,22,84	**Remittance of Treasure**		**30,56,42**
2042,49,63	**Agency Charges**		**2111,13,56**
2020,89,24	**Security Printing (Cheque, Note forms,** ***etc.*****)**		**2032,23,04**
17,49,52	**Printing and Stationery**		**16,29,01**
34,87,24	**Postage and Telecommunication Charges**		**38,60,16**
60,05,12	**Rent, Taxes, Insurance, Lighting,** ***etc.***		**69,17,25**
1,81,82	**Auditors' Fees and Expenses**		**2,01,16**
1,76,95	**Law Charges**		**2,13,64**
181,40,07	**Depreciation and Repairs to Bank's Property**		**156,16,54**
219,52,25	**Miscellaneous Expenses**		**203,57,98**
7164,24,71	**Total**		**6097,12,68**
45723,60,37	**Available Balance**		**15015,00,00**
	Less: Contribution To:		
	National Industrial Credit (Long Term Operations) Fund	1,00,00	
	National Rural Credit (Long Term Operations) Fund [2]	1,00,00	
	National Rural Credit (Stabilisation) Fund [2]	1,00,00	
	National Housing Credit (Long Term Operations) Fund	1,00,00	
4,00,00			**4,00,00**
45719,60,37	**Surplus payable to the Central Government**		**15011,00,00**

1. After making the usual or necessary provisions in terms of Section 47 of the Reserve Bank of India Act, 1934 amounting to Rs.36638,65,84 thousands (2006-07: Rs.22460,47,52 thousands).
2. These funds are maintained by the National Bank for Agriculture and Rural Development (NABARD).

S.V. Raghavan	**Usha Thorat**	**Shyamala Gopinath**	**V. Leeladhar**	**Rakesh Mohan**	**Y.V. Reddy**
Chief General Manager	Deputy Governor	Deputy Governor	Deputy Governor	Deputy Governor	Governor

REPORT OF THE AUDITORS

TO THE PRESIDENT OF INDIA

We, the undersigned auditors of the Reserve Bank of India (hereinafter referred to as the Bank), do hereby report to the Central Government upon the Balance Sheet of the Bank as at June 30, 2008 and the Profit and Loss Account for the year ended on that date.

We have examined the Balance Sheet of the Bank as at June 30, 2008 and the Profit and Loss Account of the Bank for the year ended on that date and report that where we have called for information and explanations from the Bank, such information and explanations have been given to our satisfaction.

These financial statements include the accounts of nineteen Accounting Units of the Bank which have been audited by the Statutory Branch Auditors. The branch audit reports have been furnished to us which we have considered in preparing our report.

These financial statements are the responsibility of the Bank's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion and according to the best of our information and explanations given to us and as shown by the books of account of the Bank, the Balance Sheet read with Significant Accounting Policies and Notes to the Accounts is a full and fair Balance Sheet containing all necessary particulars and is properly drawn up in accordance with the Reserve Bank of India Act, 1934 and Regulations framed thereunder so as to exhibit a true and correct view of the state of the Bank's affairs in conformity with the accounting principles generally accepted in India.

For Kalyaniwalla & Mistry	For Mukund M.Chitale & Co.
Chartered Accountants	Chartered Accountants
Daraius Z. Fraser	Mukund M.Chitale
Partner	Partner
(M. No. 42454)	(M.No. 14054)

Dated August 14, 2008

ANNEX

RESERVE BANK OF INDIA

SIGNIFICANT ACCOUNTING POLICIES AND NOTES TO THE ACCOUNTS FOR 2007-08

SIGNIFICANT ACCOUNTING POLICIES

1. CONVENTION

The financial statements are prepared in accordance with the Reserve Bank of India Act, 1934 and the notifications issued thereunder and in the form prescribed by the Reserve Bank of India General Regulations, 1949 and are based on historical cost, except where it is modified to reflect revaluation.

The accounting practices and policies followed in the financial statements are consistent with those followed in the previous year unless otherwise stated.

2. REVENUE RECOGNITION

Income and expenditure are recognised on accrual basis except penal interest and dividend, which are accounted for on receipt basis. Only realised gains are recognised.

Balances unclaimed and outstanding for more than three consecutive years in certain transitory accounts including Drafts Payable Account, Payment Orders Account, Sundry Deposits Account, Remittance Clearance Account and Earnest Money Deposit Account are reviewed and written back to income. Claims in this respect are considered and charged against income in the year of payment.

Income and expenditure in foreign currency are recorded at the exchange rates prevailing on the last business day of the preceding week / preceding month/year-end rates as applicable.

3. GOLD AND FOREIGN CURRENCY ASSETS AND LIABILITIES

(a) Gold

Gold is revalued at the end of the month at 90 per cent of the daily average price quoted at London for the month. The rupee equivalent is determined on the basis of the exchange rate prevailing on the last business day of the month. Unrealised gains / losses are adjusted to the Currency and Gold Revaluation Account (CGRA).

(b) Foreign Currency Assets and Liabilities

All foreign currency assets and liabilities are translated at the exchange rates prevailing on the last business day of the week as well as on the last business day of the month.

At the year end, assets and liabilities in foreign currencies are translated at the exchange rates prevailing on the last business day except in cases where rates are contractually fixed. Foreign Securities other than Treasury Bills are valued at lower of book value or market price prevailing on the last business day of each month. The depreciation is adjusted against current income. Foreign Treasury Bills are valued at cost. Forward exchange contracts are evaluated half-yearly and net loss, if any, is provided for.

Exchange gains and losses arising from translation of foreign currency assets and liabilities are accounted for in the Currency and Gold Revaluation Account and remain adjusted therein.

4. RUPEE SECURITIES

Rupee securities, other than Treasury Bills, held in the Issue and Banking Departments, are valued at lower of book value or market price. Where the market price for such securities is not available, the rates are derived based on the yield curve prevailing on the last business day of the month. The depreciation in the value, if any, is adjusted against current interest income.

Treasury Bills are valued at cost.

5. SHARES

Investments in shares are valued at cost.

6. FIXED ASSETS

Fixed Assets are stated at cost less depreciation.

Depreciation on computers (including software costing Rs. 1 lakh and above), motor vehicles, office equipments, furniture and electrical fittings, *etc.*, is provided on straight-line basis.

Depreciation on other assets including premises and fixtures is provided on written-down value basis.

Software costing less than Rs.1 lakh and other Fixed Assets costing less than Rs.10,000 are charged to the Profit and Loss Account in the year of acquisition.

Depreciation is provided on year end balances of the Fixed Assets.

7. EMPLOYEE BENEFITS

The liability on account of long-term employee benefits is provided based on an actuarial valuation.

8. CONTINGENCY RESERVE AND ASSET DEVELOPMENT RESERVE

Contingency Reserve represents the amount set aside on a year-to-year basis for meeting unexpected and unforeseen contingencies including depreciation in value of securities, exchange guarantees and risks arising out of monetary/ exchange rate policy compulsions.

In order to meet the internal capital expenditure and make investments in subsidiaries and associate institutions, a further sum is provided and credited to the Asset Development Reserve.

NOTES TO THE ACCOUNTS

1. SURPLUS TRANSFER TO GOVERNMENT OF INDIA

Surplus transferable to the Government includes Rs.1,699.00 crore (previous year Rs.1,914.00 crore) representing interest differential pertaining to the period April 1, 2007 - March 31, 2008 on account of conversion of Special Securities into marketable securities.

2. EARMARKED SECURITIES

The Reserve Bank has earmarked certain Government securities having a book value of Rs.7,202.24 crore (previous year Rs.7,287.41 crore) from its Investments Account in order to cover the liabilities in the Provident Fund, Gratuity and Superannuation Fund and Encashment of Ordinary Leave.

3. RESERVE FUND

Reserve Fund comprises initial contribution of Rs.5.00 crore made by the Government of India and appreciation of Rs.6,495.00 crore on account of revaluation of Gold up to October 1990. Subsequent gains / losses on monthly revaluation of Gold are taken to the Currency and Gold Revaluation Account (CGRA).

4. DEPOSITS

4.1 Deposits of Central Government include Rs.1,74,432.56 crore (previous year Rs.81,136.77 crore) on account of operations under the Market Stabilisation Scheme (MSS). Deposits of State Governments include balance of Government of the Union Territory of Puducherry.

4.2 DETAILS OF DEPOSITS - OTHERS

(Rupees crore)

Particulars	As on June 30	
	2007	2008
1	2	3
I. Rupee Deposits from Foreign Central Banks and Foreign Financial Institutions	4,682.19	4,266.24
II. Deposits from Indian Financial Institutions	1,327.36	253.61
III. Accumulated Retirement Benefits	6,950.57	7,149.68
IV. Surplus transferable to Government of India@	45,719.60	-
V. Miscellaneous	569.86	440.70
Total	**59,249.58**	**12,110.23**

@: Included in 'Other Liabilities' from 2007-08.

5. DETAILS OF OTHER LIABILITIES

(Rupees crore)

Particulars	As on June 30	
	2007	2008
1	2	3
I. Contingency Reserve		
Balance at the beginning of the year	73,281.10	93,770.07
Add: Accretion during the year	20,488.97	33,430.74
Balance at the end of the year	**93,770.07**	**1,27,200.81**
II. Asset Development Reserve		
Balance at the beginning of the year	7,592.82	9,564.33
Add: Accretion during the year	1,971.51	3,207.92
Balance at the end of the year	**9,564.33**	**12,772.25**
III. Currency and Gold Revaluation Account		
Balance at the beginning of the year	86,789.18	21,723.52
Add: Net Accretion (+) /	-	1,41,488.31
Net Depletion (-) during the year	(-)65,065.66	-
Balance at the end of the year	**21,723.52**	**1,63,211.83**
IV. Exchange Equalisation Account		
Balance at the beginning of the year	3.28	9.68
Transfer from Exchange Account	14.86	21.69
Add: Net Accretion (+) /		
Net Utilisation (-) during the year	(-) 8.46	(-) 31.37
Balance at the end of the year	**9.68**	**-**
V. Provision for Outstanding Expenses	**1,558.32**	**1,759.01**
VI. Surplus transferable to Government of India #	**-**	**15,011.00**
VII. Employee Benefits Transitory Reserve	**-**	**346.89**
VIII. Miscellaneous	**2,574.10**	**2,666.31**
Total (I to VIII)	**1,29,200.02**	**3,22,968.10**

#: Included in 'Other Deposits' in 2006-07.

6. EMPLOYEE BENEFITS

In accordance with the Accounting Standard (AS) 15 - Employee Benefits (Revised), the liability for long term employee benefits has been ascertained under the 'Projected Unit Credit' method as against the 'Aggregate' method of valuation used up to the previous year. As a result, the excess provision of Rs.346.89 crore after providing for medical and LFC benefits has been transferred to the 'Employee Benefits Transitory Reserve' and the same is disclosed under 'Other Liabilities' in the Balance Sheet.

7. RBI GENERAL ACCOUNT

'Other Liabilities' include Rs.61.49 crore (previous year Rs.922.45 crore) in respect of inter-office transactions and balances under reconciliation which are at various stages of reconciliation and necessary adjustments are being effected as and when reconciled.

8. RUPEE INVESTMENTS

Securities purchased (Repo) and sold (Reverse Repo) under the Liquidity Adjustment Facility (LAF) are added to and reduced from 'Investments', respectively. As at the year end, the outstanding Repos and Reverse Repos amounted to Rs.22,805.00 crore (previous year Rs.9,895.00 crore) and Rs.300.00 crore (previous year Rs.1,000.00 crore), respectively.

9. DETAILS OF FOREIGN CURRENCY ASSETS

(Rupees crore)

Particulars	As on June 30	
	2007	2008
1	2	3
I. Held in Issue Department	4,82,800.80	5,78,878.87
II. Held in Banking Department -		
a) Included in Investments	27,382.90	31,329.83
b) Balances Held Abroad	3,29,695.09	6,88,343.35
Total	**8,39,878.79**	**12,98,552.05**

Note : Uncalled amount on partly paid shares of the Bank for International Settlements (BIS) as at June 30, 2008 was Rs.84.49 crore (SDR 1,20,41,250). The amount was Rs.74.37 crore (SDR 1,20,41,250) in the previous year.

10. DETAILS OF OTHER ASSETS

(Rupees crore)

Particulars	As on June 30	
	2007	2008
1	2	3
I. Fixed Assets (net of accumulated depreciation)	430.67	479.75
II. Gold	5,062.46	7,239.51
III. Income accrued but not received	16,008.77	22,203.28
IV. Miscellaneous	5,742.61	883.41
TOTAL	**27,244.51**	**30,805.95**

11. INTEREST, DISCOUNT, EXCHANGE, COMMISSION, *etc.*

Interest, Discount, Exchange, Commission, *etc.* include the following:

(Rupees crore)

Particulars	Year ended	
	June 30, 2007	June 30, 2008
1	2	3
I. Profit on sale of Foreign and Rupee Securities	5,314.24	7,823.52
II. Net profit on sale of Bank's Property	9.43	25.10
III. Dividend from Subsidiaries & Associate Institutions@	440.07	440.07
IV. Profit on sale of investment in shares of SBI*	34,308.60	-

@ : Dividend in respect of Bank's holding in the equity of SBI for the years ended June 2006 and 2007, respectively, accounted on cash basis.

* : Bank's entire equity holding in State Bank of India of 31,43,39,200 shares (book value Rs.1,222.73 crore) was transferred to the Government of India on June 29, 2007.

12. Previous year's figures have been regrouped / reclassified, wherever necessary, to conform to current year's presentation.

ANNEX I

LIST OF SPEECHES BY GOVERNOR AND DEPUTY GOVERNORS: APRIL 2007 TO AUGUST 2008

Sr. No.	Title of Speech	Speech by	Month*
1	2	3	4
1.	Regulators' Eyes on Financial Institutions	Dr. Y. V. Reddy, Governor	April 2007
2.	Globalisation and Monetary Policy : Some Emerging Issues	Dr. Y. V. Reddy, Governor	April 2007
3.	Economic Outlook: Some Thoughts on Asia and India	Dr. Y. V. Reddy, Governor	April 2007
4.	Monetary Policy Transmission in India	Dr. Rakesh Mohan, Deputy Governor	April 2007
5.	Indian Financial Sector Reforms	Shri V. Leeladhar, Deputy Governor	April 2007
6.	Role of Monetary Policy in Attaining Growth with Stability: The Indian Experience	Dr. Y. V. Reddy, Governor	May 2007
7.	Deputy Governor's Statement at the IMF	Dr. Rakesh Mohan, Deputy Governor	May 2007
8.	Special Features of Financial Sector Reforms in India	Smt. Shyamala Gopinath, Deputy Governor	May 2007
9.	The Indian Economy: Review and Prospects	Dr. Y. V. Reddy, Governor	June 2007
10.	Select Aspects of the Indian Economy	Dr. Y. V. Reddy, Governor	June 2007
11.	India - Perspective for Growth with Stability	Dr. Y. V. Reddy, Governor	June 2007
12.	Development of Financial Markets in India	Dr. Rakesh Mohan, Deputy Governor	June 2007
13.	The Growing Influence of the Emerging World	Dr. Y. V. Reddy, Governor	July 2007
14.	Indian Economy: Review, Prospects and Select Issues	Dr. Y. V. Reddy, Governor	July 2007
15.	Random Thoughts on Statistics and Surveys	Dr. Y. V. Reddy, Governor	July 2007
16.	Risk Management in an Open Market Economy	Dr. Rakesh Mohan, Deputy Governor	July 2007
17.	Capital Account Liberalisation and Conduct of Monetary Policy: The Indian Experience	Dr. Rakesh Mohan, Deputy Governor	July 2007
18.	Statistical System of India: Some Reflections	Dr. Rakesh Mohan, Deputy Governor	July 2007
19.	Financial Inclusion - The Indian Experience	Smt. Usha Thorat, Deputy Governor	July 2007
20.	Glimpses of Indian Economy and its Financial Sector	Dr. Y. V. Reddy, Governor	August 2007
21.	First Quarter Review of Monetary Policy: Underlying Macroeconomics	Dr. Rakesh Mohan, Deputy Governor	August 2007
22.	Monetary Policy Developments in India: An Overview	Dr. Y. V. Reddy, Governor	October 2007
23.	India: Development and Reform Experience and Prospects	Dr. Y. V. Reddy, Governor	October 2007
24.	The Reserve Bank and the State Governments: Partners in Progress	Dr. Y. V. Reddy, Governor	October 2007
25.	Recent Financial Market Developments and Implications for Monetary Policy	Dr. Rakesh Mohan, Deputy Governor	October 2007
26.	India's Preparedness for Basel II Implementation	Shri V. Leeladhar, Deputy Governor	October 2007
27.	Basel II and Credit Risk Management	Shri V. Leeladhar, Deputy Governor	October 2007
28.	Forex Reserves, Stabilisation Funds and Sovereign Wealth Funds: Indian Perspective	Dr. Y. V. Reddy, Governor	November 2007
29.	India at 60 in a Changing World: Next 20 Years	Dr. Y. V. Reddy, Governor	November 2007
30.	Some Perspectives on the Indian Economy	Dr. Y. V. Reddy, Governor	November 2007
31.	Policy Panel at the NBER Conference on International Dimensions of Monetary Policy Monetary Management in Emerging Market Economies: Concerns and Dilemmas	Dr. Rakesh Mohan, Deputy Governor	November 2007

Sr. No.	Title of Speech	Speech by	Month*
1	2	3	4
32.	Customer Centricity and the Reserve Bank	Shri V. Leeladhar, Deputy Governor	November 2007
33.	Indian Derivatives Market - A Regulatory and Contextual Perspective	Smt. Shyamala Gopinath, Deputy Governor	November 2007
34.	Evolving Role of the Reserve Bank of India: Recent Developments	Dr. Y. V. Reddy, Governor	December 2007
35.	Developing Debt Markets in India: Review and Prospects	Dr. Y. V. Reddy, Governor	December 2007
36.	Financial Sector Policies for Growth and Employment	Dr. Y. V. Reddy, Governor	December 2007
37.	Global Developments and Indian Perspectives: Some Random Thoughts	Dr. Y. V. Reddy, Governor	December 2007
38.	Urbanisation and Globalisation in the Twenty First Century: Emerging Challenges	Dr. Rakesh Mohan, Deputy Governor	December 2007
39.	India's Financial Sector Reforms: Fostering Growth while Containing Risk	Dr. Rakesh Mohan, Deputy Governor	December 2007
40.	The Evolution of Banking Regulation in India - A Retrospect on Some Aspects	Shri V. Leeladhar, Deputy Governor	December 2007
41.	The Rise of Asia - Implications for the Global Economy	Dr. Y. V. Reddy, Governor	January 2008
42.	Central Banking and Academia	Dr. Y. V. Reddy, Governor	January 2008
43.	Some Comments on Macro-Stability in Indian Economy	Dr. Y. V. Reddy, Governor	February 2008
44.	Management of the Capital Account in India: Some Perspectives	Dr. Y. V. Reddy, Governor	February 2008
45.	The Growth Record of the Indian Economy, 1950-2008: A Story of Sustained Savings and Investment	Dr. Rakesh Mohan, Deputy Governor	March 2008
46.	Development through Planning, Markets or De-centralisation	Smt. Shyamala Gopinath, Deputy Governor	March 2008
47.	Inclusive Growth - The Role of Banks in Emerging Economies	Smt. Usha Thorat, Deputy Governor	March 2008
48.	Financial Globalisation, Growth and Stability: An Indian Perspective	Dr. Y. V. Reddy, Governor	April 2008
49.	The Indian Economy and the Reserve Bank of India: Random Thoughts	Dr. Y. V. Reddy, Governor	April 2008
50.	Innovation and Growth: Role of the Financial Sector	Dr. Rakesh Mohan, Deputy Governor	April 2008
51.	Government-owned Investment Vehicles and Capital Flows: Indian Perspective	Dr. Y. V. Reddy, Governor	May 2008
52.	India: The Global Partner	Dr. Y. V. Reddy, Governor	May 2008
53.	Consolidation in the Indian Financial Sector	Shri V. Leeladhar, Deputy Governor	May 2008
54.	Banks' Relationship with Customers - Evolving Perspectives	Smt. Shyamala Gopinath, Deputy Governor	May 2008
55.	Indian Economy: Prospects for Growth with Stability	Dr. Y. V. Reddy, Governor	June 2008
56.	Fiscal Policy and Economic Reforms	Dr. Y. V. Reddy, Governor	July 2008
57.	Agriculture: Emerging Issues and Possible Approaches	Dr. Y. V. Reddy, Governor	July 2008
58.	The Virtues and Vices of Talking about Monetary Policy: Some Comments	Dr. Y. V. Reddy, Governor	July 2008
59.	Inclusive Financial System for the Aged	Smt. Usha Thorat, Deputy Governor	July 2008
60.	Ensuring Dignity for Indian Customer: Task Ahead for Indian Banks	Smt. Usha Thorat, Deputy Governor	July 2008
61.	Monetary and Regulatory Policies: How to Get the Balance with Markets Right	Dr. Y. V. Reddy, Governor	August 2008
62.	Global Financial Turbulence and Financial Sector in India: A Practitioner's Perspective	Dr. Y. V. Reddy, Governor	August 2008

* : The issue of the Reserve Bank of India Monthly Bulletin in which the speech is published.

ANNEX II

LIST OF REPORTS OF GROUPS/COMMITTEES SUBMITTED: APRIL 2007 TO AUGUST 2008

Sr. No.	Title	Chairman/Convenor	Date
1	2	3	4
1.	Report of the Working Group on Modalities for the Implementation of Credit Information Companies (Regulation) Act, 2005 and the Rules and Regulations made thereunder	Shri Prashant Saran	April 2007
2.	Working Group to Examine Procedures and Processes for obtaining Agricultural Loans	Shri C.P. Swarnkar	April 2007
3.	National Settlement Systems	Dr. R.B. Barman	May 2007
4.	Report of the Working Group on Savings for the Eleventh Five Year Plan (2007-08 to 2011-12)	Dr. Rakesh Mohan	May 2007
5.	Committee on Modalities of Workers' Remittances between India and Nepal	Dr. R.B. Barman	June 2007
6.	Report of the Technical Group set up to Review Legislations on Money Lending	Shri S.C. Gupta	June 2007
7.	Report of the Working Group on Preparing Guidelines for Access to the Payment System	Shri R. Gandhi	September 2007
8.	Working Group on Financing of Factoring Companies by Banks	Shri P. Vijaya Bhaskar	September 2007
9.	Working Group on Improvement of Banking Services in Himachal Pradesh	Dr. J. Sadakkadulla	September 2007
10.	Introduction of Risk Based Internal Audit in the Bank (Road Map)	Shri Karunasagar	December 2007
11.	Internal Working Group on Principles-based Regulation	Shri Prashant Saran	November 2007
12.	Working Group on Improvement of Banking Services in the State of Jharkhand	Shri V.S. Das	January 2008
13.	Working Group on Improvement of Banking Services in Lakshadweep Islands	Shri S. Ramaswamy	January 2008
14.	Internal Working Group on Risk Management in the Reserve Bank of India	Shri Prashant Saran	January 2008
15.	Working Group on Interest Rate Futures	Shri V.K. Sharma	February 2008
16.	Working Group in Connection with Estimation of Expenditure Pertaining to Repayment of Debt and Interest Payment	Shri B.K. Mishra	February 2008
17.	Internal Working Group on Impact of Oil Prices on Inflation	Dr. A. S. Ramasastri	March 2008
18.	Report of the Internal Technical Group on Seasonal Movements in Inflation	Dr. Balwant Singh	March 2008
19.	Working Group on Auction Process of Government of India Securities	H.R. Khan	March 2008
20.	Internal Working Group on Currency Futures	Shri Salim Gangadharan	April 2008
21.	Electronic Benefit Transfer (EBT)	Dr. R.B. Barman	April 2008
22.	Working Group on Rehabilitation of Sick SMEs	Dr. K.C. Chakraborty	April 2008
23.	Working Group on Defraying Cost of ICT Solutions for RRBs	G. Padmanabhan	April 2008
24.	Internal Working Group to Examine the Recommendations of the Radhakrishna Expert Group on Agricultural Indebtedness	Shri V.S. Das	April 2008

Sr. No.	Title	Chairman/Convenor	Date
1	2	3	4
25.	Committee on Customer Service in Reserve Bank	Shri H. Prabhakar Rao	April 2008
26.	Report on Fast Transfer of Money Using Satellite E-connectivity	Dr. R. B. Barman	April 2008
27.	Technical Group on Computer Services Exports	Dr. Balwant Singh	May 2008
28.	Report of the Internal Working Group to Study the Recommendations of the NCEUS Report	Shri K.U.B. Rao	May 2008
29.	Report of The RBI-SEBI Standing Technical Committee on Exchange Traded Currency Futures	Reserve Bank of India-Securities and Exchange Board of India	May 2008
30.	Technical Advisory Group on Development of Housing Start Up Index in India	Prof. Amitabh Kundu	July 2008
31.	Report of the Sub-Committee on Estimation of Savings in the Household Sector (constituted by the High Level Committee on Estimation of Savings and Investment)	Shri K.U.B. Rao	July 2008
32.	Report of the Sub-Committee on Estimation of Savings in the Private Corporate Sector (constituted by the High Level Committee on Estimation of Savings and Investment)	Dr. A.S. Ramasastri	July 2008
33.	Working Group on Rationalisation of Returns Furnished by Scheduled Commercial Banks to RBI and NABARD	Dr. Amal Kanti Ray	August 2008
34.	Working Group on Technology Upgradation of Regional Rural Banks	Shri G.Srinivasan	August 2008

ANNEX III

LIST OF PUBLICATIONS BY THE STAFF OF THE RESERVE BANK: APRIL 2007 TO AUGUST 2008

Sr. No.	Title of the Paper/Article	Author/s	Publication/Journal	Date
1.	Financial Liberalisation and Monetary Policy	D.M.Nachane and Nishita Raje	Margin: The Journal of Applied Economic Research, Vol.1(1)	April 2007
2.	Labour-use Efficiency in Indian Banking: A Branch-level Analysis	Abhiman Das, Subhash C. Ray and Ashok Nag	Omega-International Journal of Management Science, Vol.37(2) *	May 2007 (available online)
3.	The Fundamental Equilibrium Real Exchange Rate in India: An Approach to Estimation and Measurement of Misalignment	Himanshu Joshi	RBI Occasional Papers- Winter - 2006 Vol.27(3)	October 2007
4.	Non Deliverable Foreign Exchange Forward Market: An Overview	Sangita Misra and Harendra Behera	-do-	-do-
5.	Monetary Conditions Index for India	R. Kannan, Siddhartha Sanyal and Binod Bihari Bhoi	-do-	-do-
6.	A Review of Trends in Banking Indicators in North Eastern Region of India	Amarendra Sahoo and J.K. Khundrakpam	-do-	-do-
7.	Bancassurance: A Feasible Strategy for Banks in India? (Special Notes)	A. Karunagaran	-do-	-do-
8.	Regulation of Informal Financial Institutions: A Study of Money Lenders in Kerala	P. D. Jeromi	RBI Occasional Papers- Summer - 2007	February 2008
9.	Competitiveness of India's Manufacturing Sector: An Assessment of Related Issues	L. Lakshmanan, S. Chinngaihlian and Raj Rajesh	-do-	-do-
10.	Current Issues in Agriculture Credit in India: An Assessment	Ramesh Golait	-do-	-do-
11.	A Comparative Study on Private Consumption Expenditure Estimates in India	Joice John	-do-	-do-
12.	Monetary Policy Committee: What Works and Where	Michael Debabrata Patra and Amaresh Samantaraya	RBI Occasional Papers - Monsoon - 2007	February 2008
13.	Commodity Derivatives and Price Risk Management: An Empirical Anecdote from India	S.M. Lokare	-do-	-do-
14.	Regional Cooperation in Asia: Status and Issues	Rajiv Ranjan, Rajeev Jain and Atri Mukherjee	-do-	-do-
15.	Revisiting Bank-linked Self Help Groups (SHGs) - A Study of Rajasthan State	Navin Bhatia	-do-	-do-
16.	Municipal Finance in India - An Assessment	P. K. Mohanty, B. M. Misra, R. Goyal and P. D. Jeromi	DRG Study No. 26	December 2007
17.	Agricultural Growth in India since 1991	Pulapre Balakrishnan, Ramesh Golait and Pankaj Kumar	DRG Study No.27	June 2008
18.	How Do We Assess Monetary Policy Stance? Characterisation of a Narrative Monetary Measure for India	Indranil Bhattacharyya and Partha Ray	Economic and Political Weekly (Money, Banking and Finance), Vol.42(13)	March 31- April 6, 2007
19.	India's Potential Economic Growth: Measurement Issues and Policy Implications	Rajiv Ranjan, Rajeev Jain and S.C. Dhal	Economic and Political Weekly, Vol.42(17)	April 28- May 4, 2007

Sr. No.	Title of the Paper/Article	Author/s	Publication/Journal	Date
20.	A User's Perspective on the Database of Services Sector in Indian Economy	D.P. Rath, P.K. Nayak, L. Lakshmanan, K.Mandal, Raj Rajesh and V. Fanai	Economic & Political Weekly Vol.42(37)	September 15-21, 2007
21.	Banking Sector's Output in National Accounts: Measurement Issues	A. B. Chakraborty and Abhiman Das	Economic and Political Weekly, Vol.42(37)	September 15-21, 2007
22.	Revival in Agricultural Credit in the 2000s: An Explanation	Pallavi Chavan and R. Ramakumar	Economic and Political Weekly, Vol.42(52)	December 29,07-January 4, 2008
23.	Financial Stability in Asian Economies	S. Subbaiah and Mukul G. Ashar	Economic and Political Weekly, Vol.43(10)	March 8-14, 2008
24.	Issues before the Thirteenth Finance Commission: Correction of Horizontal and Vertical Imbalances	Kumudini Hajra, Rakhe P.B. and Dhirendra Gajbhiye	Economic and Political Weekly, Vol.43(12 and 13)	March 22-April 4, 2008
25.	Have Economic Reforms Affected Exchange rate Pass-through to Prices in India ?	J .K. Khundrakpam	Economic and Political Weekly, Vol.43(16)	April 19-25, 2008
26.	Banking Sector's Output in National Accounts: Measurement Issues in the Light of SNA Revision	A. B. Chakraborty and Abhiman Das	The Journal of Income and Wealth, Vol.27(1&2)	2007
27.	Central Banks Output in GDP: Issues and Measurement	Abhiman Das	The Journal of Income and Wealth, Vol.27(1&2)	2007
28.	State-wise Estimates of Financial Savings of Household Sector: An Exploratory Study	K. S. Ramachandra Rao, Abhiman Das and Ramesh Jangili	The Journal of Income and Wealth, Vol.28(1)	2007
29.	Growth of Basal Area Against Age and MAI of Azadirachta Indica in Arid Areas	Puneet Verma	The Journal of Income and Wealth, Vol.28(1)	2007
30.	Direct Estimation of Household Saving - An Overview of Issues	D.P. Rath	The Journal of Income and Wealth Vol. 29(2)	2007
31.	GDP Deflator *vis-à-vis* other Price Indices in India: An Exploratory Study	Abhiman Das and Manjusha Senapati	The Journal of Income and Wealth, Vol.29(1)	2008
32.	How Effective are Monetary Policy Signals in India	Indranil Bhattacharyya and Rudra Sensarma	Journal of Policy Modeling*, Vol.30(1)	2008
33.	Estimating Output Gap for the Industrial sector for the Indian Economy: A Multivariate Unobserved Component Approach	A.K Tripathi and S. Bordoloi	Statistics and Applications, Vol.5(1 & 2), New Series	2007
34.	Modelling Exchange Rate Volatility: The Indian Experience	R. B. Barman and S. Bordoloi	Proceedings of the UGC Sponsored National Seminar on Role of Statistics in Physical and Social Sciences	2007
35.	Financial Deregulation and Efficiency: An Empirical Analysis of Indian Banks during the Post Reform Period	Abhiman Das and Saibal Ghosh	Review of Financial Economics*, Vol.15(3)	2007
36.	Estimation of Stable Fertility Rate of Indian States: An Application of Population Evolution Model	Abhiman Das	Demography India, Vol.35(4)	2007
37.	Scale Economies, Cost Complementarities and Technical Progress in Indian Banking: Evidence from Fourier Flexible Functional Form	Abhiman Das and Sangeeta Das	Applied Economics*, Vol.39(5)	2007
38.	Demographic Statistics in India: Why Shall We Take the Electoral Roll Seriously?	Kaushik Bhattacharya, Abhiman Das and Anujit Mitra	Demography India, Vol.36(1)	2007

Sr. No.	Title of the Paper/Article	Author/s	Publication/Journal	Date
39.	Measurement of Social Development: An International Comparison	Amal Kanti Ray	Social Indicator Research*, Springer, Vol.86(1)	2008
40.	Determinants of Credit Risk in Indian State-owned Banks: An Empirical Investigation	Abhiman Das and Saibal Ghosh	Economic Issues*, Vol.12(2)	2008
41.	Forecasting Interest Rates in India	Pami Dua, Nishita Raje and Satyananda Sahoo	Margin -The Journal of Applied Economic Research, Vol.2(1)	2008
42.	India's Demand for Gold	R. Kannan and S.C.Dhal	Indian Journal of Economics and Business, Vol. 7(1)	2008
43.	Relationship Between Exchange Rate Volatility and Central Bank Intervention : An Empirical Analysis for India	Harendra Behera, Vathsala Narasimhan and K. N. Murty	South Asian Economic Journal*, SAGE Publication, Vol. 9(1)	2008

*: Foreign Journal.

ANNEX IV

VISITS OF FOREIGN DELEGATIONS TO THE RESERVE BANK

Sr. No.	Date of Meeting	Delegation led by	Officials met
1	2	3	4
1.	July 26, 2007	Mr. Liqun Jin, Vice President, Asian Development Bank	Dr. Rakesh Mohan, Deputy Governor, Smt. Shyamala Gopinath, Deputy Governor, Shri V.K. Sharma, Executive Director and other senior officials
2.	August 29, 2007	Mr. Heng Swee Keat, Managing Director, Monetary Authority of Singapore	Dr.Y.V. Reddy, Governor
3.	September 11, 2007	Mr. Y. Googoolye, First Deputy Governor, Bank of Mauritius	Shri V. Leeladhar, Deputy Governor, Dr. R.B. Barman, Executive Director and senior officials
4.	September 13, 2007	Mr. Abdulla Jihad, Governor, Maldives Monetary Authority	Shri V. Leeladhar, Deputy Governor and Shri V. K. Sharma, Executive Director
5.	Sept ember13, 2007	Mr. Ajith Nivard Cabraal, Governor, Central Bank of Sri Lanka	Dr. Rakesh Mohan, Deputy Governor,
6.	September 27, 2007	Mr. Jouko Skinnar, Commerce Committee of the Parliament of Finland	Smt. Shyamala Gopinath, Deputy Governor, Shri Anand Sinha, Executive Director and senior officials
7.	September 27, 2007	Lord Digby Jones, UK Minister for Trade and Investment	Dr.Y.V. Reddy, Governor
8.	October 29, 2007	Mr. Henry Paulson, US Treasury Secretary	Dr.Y.V. Reddy, Governor and Deputy Governors
9.	October 29, 2007	Mr. Lee Kuan Yew, Minister Mentor of Singapore	Dr.Y.V. Reddy, Governor, Deputy Governors, Executive Directors and other senior officials
10.	November 1, 2007	German Delegation led by Dr.Bernd Pfaffenbach	Dr.Y.V. Reddy, Governor, Deputy Governors, Executive Directors and other senior officials
11.	November 1, 2007	Mr.Robert B.Zoellick President, The World Bank Group	Dr.Y.V. Reddy, Governor, Deputy Governors, Executive Directors and other senior officials
12.	November 1 and 2, 2007	Lord Nicholas Stern, IG Patel Professor, India Observatory, London School of Economics (LSE) UK	Dr. Rakesh Mohan, Deputy Governor and senior officials
13.	November 2, 2007	Mr. Mboweni, Governor, South African Reserve Bank visited the Bank and delivered the 13th C.D. Deshmukh Memorial Lecture	Dr.Y.V. Reddy, Governor, Deputy Governors and Executive Directors
14.	November 11 and 12, 2007	Dr. Zeti Akhtar Aziz, Governor, Bank Negara Malaysia	Dr.Y.V. Reddy, Governor, Deputy Governors and Executive Directors
15.	November 26, 2007	Mr. Trichet, President, European Central Bank visited the Bank and delivered the 10th LK Jha Memorial Lecture	Dr.Y.V. Reddy, Governor, Deputy Governors and Executive Directors
16.	November 29, 2007	Dr. G.Gono, Governor of Reserve Bank of Zimbabwe	Dr.Y.V.Reddy, Governor
17.	December 4, 2007	Mr.Creon Butler, Deputy High Commissioner and Chief Economist for the Foreign and Commonwealth Office and Mr.Jeff Glekin, Deputy Head of Mission, Western Region of the British Deputy High Commission	Shri V. Leeladhar and Smt. Shyamala Gopinath, Deputy Governors
18.	December 18, 2008	Mr. SU Ning, Deputy Governor, People's Bank of China	Mr.V. Leeladhar, Deputy Governor and other senior officials
19.	January 4, 2008	Mr. K. Okada, Ex-Chairman of Democratic Party (Opposition Party which controls the upper house of Japan)	Dr. Rakesh Mohan, Deputy Governor, Shri V.K. Sharma, Executive Director, other senior officials
20.	January 11, 2008	Swedish Parliamentary Standing Committee on Finance	Shri V. Leeladhar, Deputy Governor
21.	January 16, 2008	Mr. Jonathan Morduch, Prof. of Public Policy and Economics, New York University	Smt.Usha Thorat, Deputy Governor
22.	January 16, 2008	Mr. Simon Crean, Minister of Trade, Australia	Dr. Rakesh Mohan, Deputy Governor, Shri Anand Sinha, Executive Director and other senior officials
23.	January 23, 2008	Mr. Philipp Hildebrand, Vice Chairman of the Governing Board, Swiss National Bank	Dr.Y.V. Reddy, Governor
24.	January 23, 2008	German Delegation led by Dr. Hans-Joachim Henckel, Chairman of the IMC, Foreign Exchange Department, Ministry of Economics and Technology	Shri V. Leeladhar, Deputy Governor, Shri G. Gopalakrishna, Executive Director and other senior officials
25.	January 24, 2008	Prof. Stanley Fischer, Governor, Bank of Israel	Dr.Y.V. Reddy, Governor, Deputy Governors and Executive Directors
26.	January 25, 2008	Ms. Belinda Fraser-Scott (ANC) Finance and Economic Development and Public Accounts Committees of the KZN Parliament, South Africa	Dr. Rakesh Mohan, Deputy Governor, Executive Directors and other senior officials

Sr. No.	Date of Meeting	Delegation led by	Officials met
1	2	3	4
27.	January 28, 2008	Dr. Atsushi Mizuno, Policy Board Member of Bank of Japan	Dr. Y.V. Reddy, Governor and Dr. Rakesh Mohan, Deputy Governor
28.	February 01, 2008	Chinese Delegation headed by Mr. LIU Mingkang, Chairman, China Banking Regulatory Commission	Dr. Y.V. Reddy, Governor, Shri V. Leeladhar, Deputy Governor, Executive Directors and other senior officials
29.	February 05, 2008	Mr. Jean-Pierre Roth, Chairman of the Governing Board, Swiss National Bank	Dr. Y.V. Reddy, Governor, Deputy Governors and Executive Directors
30.	February 11, 2008	Mr. Dominique Strauss Kahn, Managing Director, International Monetary Fund	Dr. Y.V. Reddy, Governor, Local Central Board of Directors, Deputy Governors and Executive Directors
31.	February 11, 2008	Students from Institut d'Etudes Politiques de Paris (Sciences Po), Paris	Dr. Rakesh Mohan, Deputy Governor and other senior officers
32.	February 12, 2008	Swiss Bankers Association's delegation led by Mr. Pierre Mirabaud	Smt. Shyamala Gopinath, Deputy Governor, Shri Anand Sinha, Executive Director and other senior officials
33.	February 12, 2008	Mr. Charles Ward III, President and Mr. Gerd Hausier, Vice Chairman, Lazard International	Dr. Rakesh Mohan, Deputy Governor
34.	February 13, 2008	British delegation headed by Mr. James Sassoon, President FATF	Shri V. Leeladhar, Deputy Governor, Shri Anand Sinha, Executive Director and other senior officials
35.	February 26, 2008	Dr. Ranee Jayamaha, Deputy Governor, Central Bank of Sri Lanka	Shri V. Leeladhar, Deputy Governor
36.	February 28, 2008	Mr. Ole Lonsmann Paulsen, Ambassador of Denmark	Dr. Y.V. Reddy, Governor
37.	March 14, 2008	Mr. Rundheersing Bheenick, Governor, Bank of Mauritius delivered a lecture to the Reserve Bank officers	Dr. Y.V. Reddy, Governor
38.	March 27, 2008	Ms. Diane Farrell, Director, US Eximbank	Smt. Shyamala Gopinath, Deputy Governor and other senior officials
39.	March 27, 2008	Lord Nicholas Stern, IG Patel Professor, India Observatory, London School of Economics (LSE) UK	Dr. Rakesh Mohan, Deputy Governor
40.	March 27, 2008	Prof. Martin Feldstein, National Bureau of Economic Research delivered a lecture to the Reserve Bank officers	Presided by Dr. Y.V. Reddy, Governor and attended by Deputy Governors and Executive Directors
41.	March 31, 2008	ISI delegation from USA headed by Mr. Alan Rosling	Dr. Rakesh Mohan, Deputy Governor
42.	April 01, 2008	Mr. Bill Brummitt, General Manager of International Division in the Macroeconomic Group of the Australian Treasury	Dr. Rakesh Mohan, Deputy Governor and Executive Directors
43.	April 15, 2008	Rt. Hon. Lord Mayor of the City of London, Alderman David R.T. Lewis	Dr. Rakesh Mohan, Deputy Governor, Smt. Usha Thorat, Deputy Governor, Executive Directors and other senior officials
44.	April 17, 2008	Mr. Jorgen Holmquist, European Commission Director General Shri Anand Sinha, Executive Director	Smt. Shyamala Gopinath, Deputy Governor and other senior officials
45.	April 22, 2008	Mr. David McCormick, Undersecretary for International Affairs, US Department of Treasury	Dr. Rakesh Mohan, Deputy Governor Smt. Shyamala Gopinath, Deputy Governor, Shri Anand Sinha, Executive Director and other senior officials
46.	April 25, 2008	Australia Asia Young Leaders Programme	Smt. Shyamala Gopinath, Deputy Governor, Shri Anand Sinha, Executive Director and other senior officials
47.	April 30, 2008	Ms. Yuxiaoping, General Manager of China Development Bank	Shri V. Leeladhar, Deputy Governor, Shri Anand Sinha, Executive Director and other senior officials
48.	May 02, 2008	Mrs. Doris Leuthard, Swiss Federal Councillor (Minister for Economic Affairs) and her delegation	Shri V. Leeladhar, Deputy Governor, Smt. Usha Thorat, Deputy Governor, Executive Directors and other senior officials
49.	May 05, 2008	Mrs. Rose Coorey, Asst.Governor, Central Bank of Sri Lanka	Smt. Usha Thorat, Deputy Governor
50.	May 13, 2008	Mr. James H. Lambright, Chairman and President of the Export Import Bank of the US	Dr. Rakesh Mohan, Deputy Governor Shri Anand Sinha, Executive Director and other senior officials
51.	June 03, 2008	Mr. Hisham Okasha, Deputy Chairman, National Bank of Egypt and his delegation	Smt. Usha Thorat, Deputy Governor, Shri V.S. Das, Executive Director and other senior officials

ANNEX V

CHRONOLOGY OF MAJOR POLICY ANNOUNCEMENTS: APRIL 2007-JULY 2008

Date of Announcement		POLICY ANNOUNCEMENTS
		I. MONETARY POLICY MEASURES
2007 April	**12**	• Validity of the interest rate ceiling stipulated at BPLR minus 2.5 per cent on pre-shipment Rupee export credit up to 180 days and post-shipment export Rupee credit up to 90 days extended to October 31, 2007.
	24	• Fixed repo rate and reverse repo rate under the LAF kept unchanged at 7.75 per cent and at 6.0 per cent, respectively.
		• Ceiling Interest rate on FCNR (B) deposits reduced by 50 basis points to LIBOR/SWAP rates minus 75 basis points for respective currency/maturities.
		• Ceiling Interest rate on NR(E)RA deposits reduced by 50 basis points to LIBOR/SWAP rates for US dollar of corresponding maturity.
July	**31**	• Fixed repo rate and reverse repo rate under the LAF kept unchanged at 7.75 per cent and at 6.0 per cent, respectively.
		• Withdrawal of the ceiling of Rs. 3,000 crore on daily reverse repo under the LAF with effect from August 6, 2007.
		• The second LAF which was introduced from November 28, 2005 was withdrawn with effect from August 6, 2007.
		• CRR increased by 50 basis points to 7.0 per cent with effect from the fortnight beginning August 4, 2007.
Oct.	**30**	• Fixed repo rate and reverse repo rate under the LAF kept unchanged at 7.75 per cent and at 6.0 per cent, respectively.
		• CRR increased by 50 basis points to 7.5 per cent effective fortnight beginning November 10, 2007.
2008 Jan.	**29**	• Fixed repo rate and reverse repo rate under the LAF kept unchanged at 7.75 per cent and at 6.0 per cent, respectively.
		• CRR was kept unchanged at 7.5 per cent.
April	**17**	• CRR increased by 25 basis points twice to 7.75 per cent with effect from the fortnight beginning April 26, 2008 and to 8.0 per cent with effect from the fortnight beginning May 10, 2008.
	29	• Fixed repo rate and reverse repo rate under the LAF kept unchanged at 7.75 per cent and at 6.0 per cent, respectively.
		• CRR increased by 25 basis points to 8.25 per cent with effect from the fortnight beginning May 24, 2008.
June	**11**	• Repo rate increased by 25 basis points with effect from June 12, 2008.
	24	• Repo rate increased by 50 basis points effective from June 25, 2008.
		• CRR raised by 50 basis points in two stages, 25 basis points each, with effect from fortnight beginning July 5 and July 19, 2008 respectively.
July	**29**	• Repo rate increased by 50 basis points to 9.0 per cent effective from June 30, 2008.
		• CRR raised by 25 basis points with effect from fortnight beginning August 30, 2008.
	31	• Second LAF was re-introduced on Reporting Fridays with effect from August 1, 2008.
		II. INTERNAL DEBT MANAGEMENT POLICIES
2007 May	**21**	• Odd lot trading commenced on NDS-OM with a view to encourage retail trading.
	24	• The limit for ways and means advance (WMA) for the Government of India fixed at Rs.20,000 crore for the first half of the year 2007-08 (April to September) and Rs. 6,000 crore for the second half of the year (October to March).
	25	• Qualified CSGL constituents permitted to trade on NDS-OM through their custodians.
June	**29**	• The Reserve Bank transferred its entire share holding in the State Bank of India to the Government of India.
July	**31**	• All primary dealers (PDs) were required to report their secondary market transactions in corporate bonds done in the over-the-counter (OTC) market, on FIMMDA's reporting platform with effect from September 1, 2007.
Aug.	**23**	• All banks and PDs were required to report all their interest rate swaps (IRS)/forward rate agreements (FRA) trades on the reporting platform developed by Clearing Corporation of India Limited (CCIL) which would capture the transactions in OTC interest rate derivatives.
Nov.	**14**	• The underwriting scheme for Government of India auctions was reviewed and it was decided that the minimum bidding requirement for each PD in the additional competitive underwriting (ACU) auction would henceforth be equal to the amount of minimum underwriting commitment (MUC) announced by the Reserve Bank.

Date of Announcement		POLICY ANNOUNCEMENTS
2007		**II. INTERNAL DEBT MANAGEMENT POLICIES** *(Contd.)*
Nov.	**27**	• Systemically Important Non-Deposit taking NBFCs (NBFC-ND-SI) were included as a 'qualified entity' for accessing the negotiated dealing system-order matching (NDS-OM) using the constituents' subsidiary general ledger (CSGL) route. With the above addition, qualified entities for accessing NDS-OM through the CSGL route included deposit taking NBFCs, NBFC-ND-SIs, provident funds, pension funds, mutual funds, insurance companies, cooperative banks, regional rural banks and trusts.
Dec.	**6**	• The Reserve Bank entered into an agreement with the Government of Union Territory of Puducherry, effective from December 17, 2007, to carry on its general banking business, manage rupee public debt and to act as the sole agent for investment of the Government's funds.
2008		
Jan.	**1**	• The cover leg of short-sale/when-issued (WI) transactions were permitted to be undertaken even outside the NDS-OM platform. In other words, the transactions to cover short positions in government securities were allowed to be undertaken either on or outside the NDS-OM platform, *i.e.*, the telephone market or through purchases in primary issuance.
March	**25**	• The aggregate Normal WMA limits of State Governments including the Union Territory of Puducherry were retained at Rs.9,925 crore for 2008-09.
	28	• The arrangement regarding WMA to the Central Government was reviewed in consultation with the Government of India and the WMA limits were fixed on a half-yearly basis. Accordingly, the WMA limits for 2008-09 were placed at Rs.20,000 crore and Rs.6,000 crore for the first and second half of the year, respectively. The Reserve Bank retained the flexibility to revise the limits in consultation with the Government of India. The interest rate on WMA is to be at the repo rate and that on overdraft to be at repo rate *plus* two percentage points.
May	**27**	• Indirect access to the NDS-OM was extended to other segments of investors, such as, other non-deposit taking NBFCs, corporates and foreign institutional investors (FIIs). These entities were allowed to place orders on NDS-OM through direct NDS-OM members *viz.,* banks and PDs using the CSGL route.
June	**2**	• A system of 'Multi Modal Settlements' (MMS) in Government securities market was put in place to facilitate the settlement of Government security transactions undertaken by the non-bank/non-PD NDS members. Under this arrangement, the funds leg of the transactions shall be settled through the fund accounts maintained by these entities with select commercial banks chosen as 'designated settlement banks' (DSB).
		III. FINANCIAL SECTOR MEASURES
2007		
April	**4**	• With the enactment of the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 and its notification on October 2, 2006, the definition of micro, small and medium enterprises engaged in manufacturing/production or providing/ rendering of services was modified and required to be implemented by the banks along with other policy measures. Banks' lending to medium enterprises would not be included for the purpose of reckoning under the priority sector. The boards of banks may review the existing guidelines/instructions and formulate a comprehensive and liberal policy in respect of loans to micro, small and medium sectors and adopt the same at the earliest. Similar guidelines were issued to UCBs on April 18, 2007.
		• NBFCs advised to explicitly state in their advertisements issued in print/electronic media (including web-sites)/statement in lieu of advertisement that the Reserve Bank does not accept any responsibility or guarantee about the financial soundness of the company or for the correctness of any of the statements or representations made or opinions expressed by the company and for repayment of deposits/discharge of the liabilities by the company.
	5	• SCBs (excluding RRBs) advised to generally insist that the person opening a deposit account makes a nomination. They were also advised to explain the advantages of nomination facility if the person declined to do so. If the person opening the account still did not want to nominate and declined to give a letter to the effect, the bank should record the fact on the account opening form and proceed with opening of the account, if otherwise found eligible. Under no circumstances can a bank refuse to open an account solely on the ground that the person opening the account refused to nominate. Similar guidelines were issued to StCBs/DCCBs on April 12, 2007, to RRBs on April 13, 2007 and to UCBs on April 19, 2007.
	12	• SCBs (excluding RRBs) advised to ensure that the date of completion of the infrastructure projects financed by them should be clearly spelt out at the time of financial closure of the project and to treat such accounts as sub-standard if the date of commencement of commercial production extended beyond a period of one year after the date of completion of the project as originally envisaged. The revised instructions came into force with effect from March 31, 2007.
	13	• Guidelines on KYC Norms/AML Standards/Combating of Financing of Terrorism (CFT) – Wire Transfers issued to SCBs. Similar guidelines were issued to StCBs and DCCBs on May 18, 2007, to RRBs on May 21, 2007, to UCBs on May 25, 2007 and to NBFCs on April 23, 2008.

Date of Announcement		POLICY ANNOUNCEMENTS
2007		**III. FINANCIAL SECTOR MEASURES** *(Contd.)*
April	**17**	• Fresh guidelines on various aspects relating to safe deposit lockers/safe custody articles issued to SCBs for easy operation of lockers based on the recommendations of the Committee on Procedures and Performance Audit on Public Services (CPPAPS). Similar guidelines issued to StCBs/DCCBs on May 18, 2007 and to UCBs on June 21, 2007.
	18	• SCBs (excluding RRBs) advised that for the purpose of segment reporting under AS-17, the 'other banking business' segment should be divided into three categories: corporate/wholesale banking, retail banking and other banking operations. Accordingly, banks were required to adopt the following business segments for public reporting purposes, from March 31, 2008: a) treasury; b) corporate/wholesale banking; c) retail banking; and d) other banking business. The geographical segments would remain unchanged as 'domestic' and 'international'.
	20	• Comprehensive guidelines on derivatives issued to banks enunciating the major requirements for undertaking any derivative transaction from the regulatory perspective. The guidelines also cover extant instructions relating to rupee interest rate derivatives.
		• Final guidelines on compliance function in banks issued to SCBs for implementation. SCBs were advised that as compliance function in banks is one of the key elements in the banks' corporate governance structure, it has to be adequately enabled and made sufficiently independent. Banks should organise their compliance function and set priorities for the management of the compliance risks in their organisation to suit their requirement.
	24	• The maximum interest rate payable on public deposits by NBFCs/miscellaneous non-banking companies (chit fund companies) revised to 12.5 per cent per annum. The new rate of interest would be applicable to fresh public deposits and renewals of matured public deposits.
	25	• Banks advised to ensure that none of their bank branches/staff refuse to accept lower denomination notes and/or coins. Stern action would have to be taken in the event of refusal/non-compliance by any staff member. Similar guidelines were issued to RRBs on May 10, 2007.
	27	• Prudential Guidelines on Capital Adequacy and Market Discipline – Implementation of the New Capital Adequacy Framework finalised for implementation.
		• Systemically Important NBFCs – ND advised to put in place a system for submission of an annual statement of capital funds, risk asset ratio *etc*., as at end-March every year in Form NBS-7. The first such return would be submitted for the year ending March 31, 2007. The return would be submitted within a period of three months from the close of the financial year, every year.
		• SCBs advised to monitor credit flow to minorities in 103 minority concentration districts, which have at least 25 per cent minority population. On July 16, 2007, the number of minority concentrated districts for monitoring credit flow was revised to 121.
	30	• SCBs (including RRBs) to immediately dispense with the requirement of "no dues" certificate for small loans up to Rs.50,000 to small and marginal farmers, share-croppers and the like and, instead, obtain self-declaration from the borrower. Furthermore, banks may accept certificates provided by local administration/*Panchayati Raj* Institutions regarding the cultivation of crops in case of loans to landless labourers, share-croppers and oral lessees.
		• The risk weight on loans up to Rs.1 lakh against gold and silver ornaments reduced to 50 per cent from 125 per cent in the case of UCBs with immediate effect.
		• Relaxed prudential guidelines on income recognition, asset classification and provisioning norms for UCBs extended by one year.
		• Revised guidelines on lending to priority sector issued to SCBs (excluding RRBs).
May	**3**	• RRBs permitted to take up corporate agency business, without risk participation, for distribution of all types of insurance products, including health and animal insurance, subject to specified guidelines.
		• Risk weight in respect of housing loans extended by banks up to Rs. 20 lakh to individuals against the mortgage of residential housing properties reduced from 75 per cent to 50 per cent. Similarly, the risk weight for banks' investment in mortgage backed securities, which are backed by housing loans and are issued by the housing finance companies regulated by the National Housing Bank, reduced from 75 per cent to 50 per cent. The reduced risk weights would be reviewed after one year keeping in view the default experience and other relevant factors. Similar guidelines were issued to UCBs on May 4, 2007.
	7	• SCBs advised to lay out appropriate internal principles and procedures so that usurious interest, including processing and other charges, were not levied by them on loans and advances. Similar guidelines were issued to RRBs on May 15, 2007, to StCBs/DCCBs on May 16, 2007, to UCBs on May 18, 2007 and to NBFCs on May 24, 2007.

Date of Announcement		POLICY ANNOUNCEMENTS
2007		**III. FINANCIAL SECTOR MEASURES** *(Contd.)*
May	**7**	• SCBs advised to scale up their financial inclusion efforts by utilising appropriate technology. Banks were also advised to ensure that the solutions developed are highly secure, amenable to audit and follow widely accepted open standards to allow inter-operability among the different systems adopted by different banks. Similar guidelines were issued to StCBs/ DCCBs on May 18, 2007 and to RRBs on May 21, 2007.
		• UCBs registered in States that have entered into MoUs with the Reserve Bank or registered under the Multi State Co-operative Societies Act, 2002 permitted to undertake insurance agency business as corporate agents without risk participation, provided that the UCB has a minimum networth of Rs. 10 crore and it has not been classified as Grade III or IV bank.
	8	• Exemption to RRBs from 'mark to market' norms in respect of their investments in SLR securities extended by one more year, *i.e.*, for the financial year 2007-08. Accordingly, RRBs would have the freedom to classify their entire investment portfolio of SLR securities under 'Held to Maturity' for the financial year 2007-08, with valuation on book value basis and amortisation of premium, if any, over the remaining life of securities.
		• Deposit taking NBFCs with deposit size of Rs.20 crore and above and NBFCs-ND-SI have been advised to frame their internal guidelines on corporate governance which, *inter alia*, include constitution of audit committee, nomination committee, risk management committee; to follow disclosure and transparency practices and instructions on connected lending.
	10	• Banks in India permitted to extend funded and/or non-funded credit facilities to wholly owned step-down subsidiaries of subsidiaries of Indian companies (where the holding by the Indian company is more than 51 per cent) abroad within the existing prudential limits and some additional safeguards.
	16	• In partial modification of the earlier guidelines on purchase/sale of NPAs dated July 13, 2005, SCBs (excluding RRBs), AIFIs, NBFCs (including RNBCs) advised that at least 10 per cent of the estimated cash flows should be realised in the first year and at least 5 per cent in each half year thereafter, subject to full recovery within three years.
	24	• The Banking Ombudsman Scheme, 2006 amended and all SCBs, RRBs and scheduled UCBs were directed to comply with the amended Scheme.
		• In view of several complaints regarding levying of excessive interest and charges on certain loans and advances by NBFCs, they were advised to lay out appropriate internal principles and procedures in determining interest rates and processing and other charges, even though interest rates are not regulated by the Reserve Bank. NBFCs, have been advised to keep in view the guidelines on Fair Practices Code about transparency in respect of terms and conditions of the loan.
	25	• Concessions/credit relaxations to borrowers/customers in Jammu and Kashmir would continue to be operative for a further period of one year *i.e.*, up to 31 March 2008.
	28	• Guidelines issued to all registered Securitisation Companies/Reconstruction Companies on declaration of net asset value of Security Receipts issued by them.
	29	• SCBs (excluding RRBs) were advised that Government of India had allocated a target of 375,690 to States/UTs under Prime Minister's *Rozgar Yojana* (PMRY) for the year 2007-08.
June	**13**	• The limit of loans under the Differential Rate of Interest (DRI) scheme raised from Rs.6,500 to Rs.15,000 and that of the housing loan under the scheme, from Rs.5,000 to Rs.20,000 per beneficiary.
	15	• With a view to encouraging RRBs to open branches in hitherto uncovered districts, the concerned Empowered Committees for RRBs were given discretion in respect of certain conditions stipulated for opening of branches by RRBs.
	19	• With a view to providing more business avenues and opportunities to RRBs for lending, RRBs were permitted to participate in consortium lending, within the extant exposure limits, with their sponsor banks as also with other public sector banks and developmental financial institutions (DFIs), subject to the condition that the project to be financed is in the area of operation of the RRB concerned and guidance and appraisal of the project is provided by their sponsor bank.
	22	• RRBs were allowed to set up service branches/central processing centres/back offices exclusively to attend to back office functions and other functions incidental to their banking business.
	26	• Banks advised to put in place appropriate stress test policies and relevant stress test framework for the various risk factors by September 30, 2007.
	28	• RRBs were permitted to accept FCNR (B) deposits as announced in the Union Budget 2007-08. The eligibility criteria prescribed for authorisation to open/maintain Non-Resident (Ordinary/External) accounts in rupees were also reviewed.

Date of Announcement		POLICY ANNOUNCEMENTS
2007		**III. FINANCIAL SECTOR MEASURES** *(Contd.)*
June	**28**	• Banks permitted to undertake Pension Fund Management (PFM) through their subsidiaries set up for the purpose, subject to their satisfying the eligibility criteria prescribed by PFRDA for Pension Fund Managers and as per guidelines set out by the Reserve Bank. Banks desiring to undertake PFM were advised to obtain prior approval of the Reserve Bank before entering into such business.
July	**2**	• Updated guidelines and directions together with Guidance Notes as on June 30, 2007 were issued to Securitisation Companies and Reconstruction Companies.
	3	• Keeping in view the continuous complaints from credit card subscribers and the observations of the Hon'ble High Court of Delhi in the context of a Public Interest Litigation in this regard, the Telecom Regulatory Authority of India (TRAI) is in the process of taking certain national level initiatives to address the various issues relating to Unsolicited Commercial Communications (UCC). As part of these measures, TRAI has framed The Telecom Unsolicited Commercial Communications (UCC) Regulations 2007 for curbing UCC. Banks were advised to implement the instructions issued in this regard. Similar guidelines were issued to NBFCs on November 26, 2007.
	13	• UCBs were advised that they were prohibited from extending any fund based or non-fund based credit facilities whether secured or unsecured to stockbrokers and commodity brokers.
		• Guidelines were issued to UCBs for issuance of ATM-cum-Debit Cards. Banks which were authorised to install onsite/off-site ATMs, could introduce ATM-cum-Debit cards with the approval of their Board.
	31	• SEBI has permitted FIMMDA to set up its reporting platform for corporate bonds. It has also been mandated to aggregate the trades reported on its platform as well as those reported on BSE and NSE with appropriate value addition. FIMMDA has proposed to go live with its platform from September 1, 2007. All SCBs (except RRBs & LABs)/AIFIs/NBFCs are required to report their secondary market transactions in corporate bonds in OTC market on FIMMDA's reporting platform with effect from September 1, 2007.
Aug.	**3**	• All SCBs (excluding RRBs) were advised that (i) in cases where negotiation of bills drawn under LC is restricted to a particular bank, and the beneficiary of the LC is not a constituent of that bank, the bank concerned may negotiate such an LC, subject to the condition that the proceeds will be remitted to the regular banker of the beneficiary. However, the prohibition regarding negotiation of unrestricted LCs of non-constituents will continue to be in force; and (ii) the banks may negotiate bills drawn under LCs, on 'with recourse' or 'without recourse' basis, as per their discretion and based on their perception about the credit worthiness of the LC issuing bank. However, the restriction on purchase/discount of other bills (the bills drawn otherwise than under LC) on 'without recourse' basis will continue to be in force.
	9	• In view of the fact that the priority sector guidelines have been revised with effect from April 30, 2007, SCBs (excluding RRBs) were advised to furnish the data in the existing formats of special returns I, II and III as on the last reporting Friday of June 2007. However, loans granted from April 30, 2007 to June 22, 2007 were to be classified on the basis of revised guidelines on priority sector advances.
	13	• All RRBs were advised that they may extend, with the approval of their Boards, direct finance to the housing sector up to Rs. 20 lakh, irrespective of the area. Further, the limit of 5 per cent of incremental deposits over previous year, prescribed earlier also stood withdrawn.
	14	• All Scheduled UCBs were guided about the notification issued by the Ministry of Consumer Affairs, Food and Public Distribution in regard to creation of buffer stock. As per the GoI notification, the Government has decided to create a buffer stock of 20 lakh tons of sugar for a period of one year with effect from May 1, 2007. Under the arrangement, the Government will release subsidy of Rs.378 crore out of Sugar Development Fund and the banks have to sanction additional credit limit amounting to Rs.420 crore to release the margin consequent upon creation of the buffer stock from the existing stock of sugar. For operation of the Scheme, it would be necessary for sugar mills to segregate the stocks meant for buffer stock operations from the stock of sugar already held by them. The banks should allocate out of the regular limits, separate sub-limits representing 100 per cent value of buffer stocks held by sugar mills. The amount released as a result of providing 100 per cent drawings against buffer stocks, *i.e.*, the amount in lieu of the margin money should be credited to a special account. It would be necessary for the banks to ensure that the amount available in this account is utilised for making cane payments.
	22	• All SCBs were advised to discontinue furnishing of statement on housing finance disbursement that were required to be submitted on a quarterly basis indicating details of disbursement made by them towards housing finance.
		• All SCBs were advised to invariably furnish a copy of the loan agreement to all the borrowers at the time of sanction/disbursement of loans.
		• Revised guidelines on lending to priority sector issued to RRBs.

Date of Announcement		POLICY ANNOUNCEMENTS
2007		**III. FINANCIAL SECTOR MEASURES** *(Contd.)*
Aug.	**23**	• All Scheduled Commercial Banks (excluding RRBs and LABs) and PDs were advised that the CCIL has developed a reporting platform for OTC Interest Rate Derivatives, which would capture the transactions in OTC interest rate derivatives (Interest Rate Swaps and Forward Rate Agreement (IRS/FRA)). The platform would be operationalised by August 30, 2007. All banks and PDs are required to report all their IRS/FRA trades on the reporting platform within 30 minutes from the deal time. Client trades are not to be reported. Banks and PDs may also ensure that details of all the outstanding IRS/ FRA contracts (excluding the client trades) are migrated to the reporting platform by September 15, 2007. Detailed operational guidelines in this regard would be made available by CCIL.
	28	• All UCBs were advised that the Bank has decided to consider their requests to shift their branches from one city to another in their area of operation within the same State subject to the following conditions – (i) The new centre is of the same or lower population group as the existing centre, e.g., a branch at a ‘D’ centre can be shifted to another ‘D’ centre only; (ii) A branch located in underbanked district can be shifted to another centre in underbanked district only; and (iii) The shifting should be beneficial to the bank in terms of cost and business.
	30	• All UCBs were advised to issue necessary instructions to their controlling offices, branch offices advising them to specially monitor the credit flow to minorities in the specified 121 minority concentrated districts thereby ensuring that the minority communities receive an equitable portion of the credit within the overall target of the priority sector. The above requirement should be kept in view for the purpose of earmarking of targets and location of development projects under the ‘Prime Ministers New 15 Point Programme for the Welfare of the Minorities’.
		• All UCBs were advised the revised guidelines on lending to priority Sector, which take into account the revised definition of small and micro enterprises as per the Micro, Small and Medium Enterprises Development Act, 2006.
Sept.	**3**	• All Scheduled Commercial Banks were advised to take necessary steps for strengthening the branch level committees with greater involvement of customers. It is desirable that branch level committees include their customers too. Further as senior citizens usually form an important constituency in banks, a senior citizen may preferably be included therein.
		• The reporting formats for data on priority sector lending were revised in view of the revision of guidelines on lending to priority sector.
	4	• All deposits taking NBFCs were advised that a copy of FMR-1 where the amount involved in the fraud is Rs.25 lakh and above should also be submitted to the Regional Office of the Department of Non-Banking Supervision of Reserve Bank of India under whose jurisdiction the Registered Office of the NBFC falls.
		• All RRBs were allowed to set up extension counters at places of worship and market places. The condition of being principal bankers would not apply in such cases. However, RRBs shall be required to obtain necessary licence from the concerned Regional Office of the Reserve Bank.
	5	• All Commercial Banks (excluding RRBs) were advised that; (a) the banks may adopt a more granular approach to measurement of liquidity risk by splitting the first time bucket (1-14 days at present) in the Statement of Structural Liquidity into three time buckets, *viz.*, next day, 2-7 days and 8-14 days; (b) The net cumulative negative mismatches during the next day, 2-7 days, 8-14 days and 15-28 days buckets should not exceed 5 per cent, 10 per cent, 15 per cent and 20 per cent of the cumulative cash outflows in the respective time buckets in order to recognise the cumulative impact on liquidity. The format of Statement of Structural Liquidity has been revised suitably.
	7	• All SCBs were advised that the name of “The Sangli Bank Ltd.” has been excluded from the Second Schedule to the Reserve Bank of India Act, 1934.
	10	• All PSBs were advised that it has been decided in consultation with the Government of India to withdraw 5 more circulars, *viz*., Delegation of powers to CMD/ED of nationalised banks, Delegation of powers to CMD/ED for compromise/write off, Vigilance arrangements in banks, reporting of cases of bank robberies/dacoities/burglaries and meeting of Standing Committee on Customer Services Settlement procedures in respect of payment of fraudulent instruments.
	12	• All lead banks in Jammu and Kashmir State were advised that it has been decided to regularise the assignment of lead bank responsibility in respect of newly created districts to State Bank of India and the Jammu and Kashmir Bank Ltd.
	13	• All RRBs were advised that it has been decided to allow RRBs to convert their satellite offices into full-fledged branches after obtaining concurrence from the Empowered Committee on RRBs. RRBs should also obtain necessary licence from the concerned Regional Office of the Reserve Bank.

Date of Announcement		POLICY ANNOUNCEMENTS
2007		**III. FINANCIAL SECTOR MEASURES** *(Contd.)*
Sept.	**13**	• All Primary UCBs were advised to ensure that loan facilities are utilised by borrowers for the purpose sanctioned. Banks should therefore have a mechanism for proper monitoring of the end use of funds. Wherever diversion is observed, they should take appropriate action against the borrowers concerned and the steps needed to protect the bank's interest. The bank may put in place more stringent safeguards, especially where accounts show sign of turning into NPAs. In such cases banks may strengthen their monitoring system by resorting to more frequent inspections of borrowers' godowns, ensuring that sale proceeds are routed through the borrower's accounts maintained with the bank and insisting on pledge of the stock in place of hypothecation. Whenever stocks under hypothecation to cash credit and other loan accounts are found to have been sold but the proceeds thereof not credited to the loan account, such action should normally be treated as a fraud. In such cases, banks may take immediate steps to secure the remaining stock so as to prevent further erosion in the value of the available security; as also other action as warranted.
	17	• All Commercial Banks were advised to ensure that all the branches of their bank meticulously adhere to the instructions issued by the Reserve Bank while extending home loans.
	18	• All Salary Earners Primary UCBs were advised that it has been decided not to insist upon induction of two professional directors on the Boards of Salary Earners Banks.
		• Guidelines were issued to all Primary UCBs with a view to allowing them greater flexibility in making non-SLR investments.
	20	• All Primary (Urban) Co-operative Banks were advised that when a UCB has availed a loan from a DCCB/StCB with which it is maintaining deposits, the amount of loan availed from the DCCB/StCB would be deducted from the deposits irrespective of whether lien has been marked on such deposits or not, for the purpose of computation of SLR. UCBs are given a period of six months to comply with the SLR requirements in case of shortfall, if any, arising from the above instructions.
	21	• All RRBs were advised that since the restrictive provisions of Service Area Approach have been dispensed with, some of the provisions relating to shifting of branches at rural areas and at semi-urban, merger of loss making branches *etc*. have been modified.
Oct.	**9**	• RRBs were advised that in cases of RRBs having negative networth but earning net profits for the last three years, the application for accepting NRO/NRE/FCNR deposits by RRBs may be examined by the Empowered Committee on a case to case basis from the supervisory comfort angle and recommend to the Reserve Bank.
		• The Empowered Committee may, taking into account the local conditions and the financials of a bank, permit a RRB to open a controlling office, even if it does not have 75 branches.
	10	• Guidelines were issued to NBFCs (including RNBCs) on September 28, 2006 for framing the Fair Practices Code in which it was prescribed under 'Loan appraisal and terms/conditions', that the NBFCs should convey in writing to the borrower by means of sanction letter or otherwise, the amount of loan sanctioned along with the terms and conditions including annualised rate of interest and method of application thereof and keep the acceptance of these terms and conditions by the borrower on its record. In this connection, NBFCs were advised to invariably furnish a copy of the loan agreement along with a copy each of all enclosures quoted in the loan agreement to all the borrowers at the time of sanction/ disbursement of loans.
	18	• RRBs permitted to apply for currency chest facility to the Reserve Bank subject to compliance of eligibility norms.
	23	• The name of 'Lord Krishna Bank Ltd' was excluded from the Second Schedule to the Reserve Bank of India Act, 1934.
	24	• The Guidelines on Asset-Liability Management (ALM) System was amended and all commercial banks advised that: (a) the banks may adopt a more granular approach to measurement of liquidity risk by splitting the first time bucket (1-14 days) in the Statement of Structural Liquidity into three time buckets, *viz*., next day, 2-7 days and 8-14 days, (b) the statement of structural liquidity may be compiled on best available data coverage, in due consideration of non-availability of a fully net worked environment. Banks may, however, make concerted and requisite efforts to ensure coverage of 100 per cent data in a timely manner, (c) the net cumulative negative mismatches during the next day, 2-7 days, 8-14 days and 15-28 days buckets should not exceed 5 per cent, 10 per cent, 15 per cent and 20 per cent of the cumulative cash outflows in the respective time buckets in order to recognise the cumulative impact on liquidity, (d) banks may undertake dynamic liquidity management and should prepare the statement of structural liquidity on daily basis. The statement of structural liquidity, may, however, be reported to the Reserve Bank, once a month, as on the third Wednesday every month.
	30	• On a review of the current liquidity situation, it has been decided to increase cash reserve ratio (CRR) of Scheduled Commercial Banks by 50 basis points to 7.50 per cent of their demand and time liabilities with effect from the fortnight beginning November 10, 2007. Similar circular was also issued for RRB's on October 31, 2007 and for Scheduled Primary (Urban) Co-op. on November 1, 2007.

Date of Announcement		POLICY ANNOUNCEMENTS
2007		**III. FINANCIAL SECTOR MEASURES** *(Contd.)*
Oct.	**30**	• The name of 'UTI Bank Ltd' was changed to 'Axis Bank Ltd' in the Second Schedule to the Reserve Bank of India Act, 1934 with effect from July 30, 2007.
Nov.	**1**	• The Reserve Bank laid down specific 'fit and proper' criteria to be fulfilled by the persons being elected as directors on the Boards of the nationalised banks under the provisions of Section 9(3)(i) of Banking Companies (Acquisition and Transfer of undertakings) Act 1970/80.
	6	• At the time of financing projects banks generally adopt one of the following methodologies as far as determining the level of promoters' equity is concerned.1) Promoters bring their entire contribution upfront before the bank starts disbursing its commitment.2) Promoters bring certain percentage of their equity (40% – 50%) upfront and balance is brought in stages.3) Promoters agree, *ab initio*, that they will bring in equity funds proportionately as the banks finance the debt portion. The Reserve Bank observed that the last method has greater equity funding risk. To contain this risk, banks were advised to have a clear policy regarding the Debt Equity Ratio (DER) and to ensure that the infusion of equity/fund by promoters should be such that the stipulated level of DER is maintained at all times. Further they were advised to adopt funding sequences so that possibility of equity funding by banks is obviated.
	8	• All the Public Sector Banks and the relevant private sector banks were advised that the rate of interest on delayed remittances and double/excess reimbursement would remain unchanged at 8 per cent (*i.e.*, Bank rate 6 per cent + 2 per cent) till further instructions.
	14	• StCBs/DCCBs were advised that before launching new domestic deposit mobilisation scheme with the approval of their respective Boards, they should ensure that the provisions of Reserve Bank's directives on interest rates on deposits, premature withdrawal of term deposits, sanction of loans/advances against term deposits, *etc*., issued from time to time, are strictly adhered to. Any violation in this regard will be viewed seriously and may attract penalty under the Banking Regulation Act, 1949 (AACS). Similar guidelines were issued to RRBs on November 29, 2007.
	20	• StCBs/DCCBs were advised to rely upon the Guardianship Certificate issued either by the District Court under Mental Health Act or by the Local Level Committees under the above Act for the purposes of opening/operating bank accounts for disabled persons with autism, cerebral palsy, mental retardation and multiple disabilities. RRBs may also ensure that their branches give proper guidance so that the parents/relatives of the disabled persons do not face any difficulty in this regard. Similar guidelines were issued to RRBs on November 22, 2007.
	22	• The Ministry of Corporate Affairs regulates Mutual Benefit Financial Companies (Notified *Nidhis*) and Mutual Benefit Companies (Potential *Nidhis*) compreshensively since 2001. Accordingly reflecting this status, the provisions of the Non-Banking Financial Companies Acceptance of Public Deposits (Reserve Bank) Directions, 1998 as applicable to Mutual Benefit Financial Companies have been updated and such companies were exempted from the provisions of the said directions. However, if the application of any MBC (Potential *Nidhis*) for grant of *Nidhi* status is rejected by the Government of India under the provisions of the Companies Act, 1956 the provisions of the said Directions as applicable to NBFCs would apply to such companies.
	30	• It was decided to bring down the priority sector lending target for UCBs to 40 per cent of the adjusted bank credit (ABC) (total loan and advances plus investments made by UCBs in non-SLR bonds) or credit equivalent amount of off balance sheet exposure (OBE), whichever is higher, as on March 31 of the previous year.
Dec.	**4**	• StCBs/DCCBs were previously outside the Capital to Risk Weighted Assets Ratio (CRAR) framework. In order to assess their capital structure in the context of financial stability of the whole system, StCBs/DCCBs were advised to disclose their CRAR as on March 31, 2008 and thereafter every year as 'Notes on Accounts' to their Balance Sheets. Similar guidelines were issued to RRBs on December 28, 2007.
	12	• The commercial banks/sponsor banks and RRBs were advised that all loans granted by commercial banks/sponsor banks to RRBs for on-lending to agriculture and allied activities sector may be classified as indirect finance to agriculture in the books of commercial banks/sponsor banks. Consequently, the amount lent by RRBs out of funds borrowed from commercial banks/sponsor banks, may not be classified by RRBs as part of their priority sector advances. The RRBs need not also include such lending as part of their Bank Credit for the purpose of computing achievement level under priority sector lending.
	14	• RNBCs were advised that in the interest of the depositors, where an RNBC fails to repay the deposits along with interest on maturity on the claim made by the depositor, it shall be liable to pay interest in the manner prescribed in the directions.

Date of Announce-ment		POLICY ANNOUNCEMENTS
2007		**III. FINANCIAL SECTOR MEASURES** *(Contd.)*
Dec.	**20**	• All SCBs were advised to take note of issues relating to corporate social responsibility, sustainable development and non-financial reporting and consider using the same to put in place a suitable and appropriate plan of action towards helping the cause of sustainable development with the approval of their boards.
2008		
Jan.	**8**	• In terms of Section 17 (2) read with Section 51 of the Banking Regulation Act, 1949, where a banking company appropriates any sum or sums from the reserve fund, it shall, within twenty one days from the dates of such appropriation report the fact to the Reserve Bank explaining the circumstances relating to such appropriation. In order to ensure that such recourse to drawing down the reserve fund is done prudently and is not in violation of any of the regulatory prescriptions, RRBs were advised to take prior approval from the Reserve Bank before any appropriation is made from the statutory reserve or any other reserve. Guidelines were also issued relating to disclosures in balance sheet regarding the drawdown of such reserves.
	15	• With prior approval of Central Government, the Reserve Bank notified mortgage guarantee companies as non-banking financial companies. Further, mortgage guarantee companies have been exempted from the provisions of Section 45-IA (requirement of registration), Section 45-IB (maintenance of liquid assets) and Section 45-IC (creation and transfer to Reserve Fund a certain percentage of the net profit) of the RBI Act.
Feb.	**15**	• Guidelines on registration and operations of mortgage guarantee companies and prudential norms and investment directions as applicable to them were issued.
	18	• In terms of Know-Your-Customer guidelines, the SCBs (excluding RRBs) were earlier advised that customer identification means identifying the customer and verifying his/her identity by using reliable, independent source documents, data or information to their satisfaction. An indicative list of the nature and type of documents/information that may be relied upon for customer identification was also given. It was observed that some banks treat this indicative list as exhaustive list and as a result a section of public is being denied access to banking services. Banks were advised to take a review of their extant internal instructions in this regard. Banks were also advised to carry out the review of risk categorisation of customers at a periodicity of not less than once in six months. The periodicity of updation of customer identification data including photograph should not be less than once in five years in case of low risk category customers and not less than once in two years in case of high and medium risk categories. Banks were also advised to develop suitable mechanism through appropriate policy framework for enhanced monitoring of accounts suspected of having terrorist links. Similar guidelines were also issued to UCBs on February 25, 2008, to RRBs on February 27, 2008, and to StCBs and DCCBs on February 28, 2008.
	19	• In view of loss of income occurred due to culling of birds as well as steep fall in the demand for poultry products and their prices, guidelines on relief measures to poultry industry were issued to SCBs.
March	**5**	• The securitisation companies/reconstruction companies registered with the Reserve Bank were advised to furnish a copy of audited balance sheets along with the directors report/auditors report every year within one month from the date of annual general body meeting, in which the audited results are adopted, starting with the balance sheet as on March 31, 2008.
		• Deposit taking NBFCs (including RNBCs) were advised that cases of ‘negligence and cash shortage’ and irregularities in foreign exchange transactions were to be reported as fraud if the intention to cheat/defraud was suspected/proved.
	10	• With a view to ensuring that the customer is able to access any ATM installed in the country free of charge through equitable co-operative initiative by banks, all the SCBs (except RRBs) were directed to allow customers to use bank’s own ATM for any purpose free; to use any other bank ATMs for balance enquiries free. Furthermore, banks were also instructed not to increase the charges prevailing as on December 23, 2007; those banks which were charging more than Rs. 20 per transaction were instructed to reduce the charges to a maximum of Rs. 20 per transaction by March 31, 2008 and all the transactions may be made free with effect from April 1, 2009. Similar guidelines were issued to StCBs and DCCBs on May 13, 2008.
		• All the commercial banks and co-operative banks were advised that with effect from April 10, 2008, all the payment transactions of Rs. 1 crore and above between RBI regulated entities such as banks/primary dealers and NBFCs are required to be routed through electronic payment mechanism. Furthermore, all payments of Rs. 1 crore and above in RBI regulated markets such as money market, Government securities market and foreign exchange market may also be routed through electronic payment mechanism with effect from April 1, 2008.
April	**8**	• Based on the recommendations of the Report of Internal Working Group set up by the Reserve Bank to examine various issues related to migration from paper-based systems to electronic systems, it was decided to make large value payments of Rs.1 crore and above to be mandatorily routed through electronic payment mechanism.

Date of Announcement		POLICY ANNOUNCEMENTS
2008		**III. FINANCIAL SECTOR MEASURES** *(Contd.)*
April	**10**	• SCBs (excluding RRBs) were advised the revised income criteria for availing loans under DRI scheme. Accordingly, borrowers with annual family income of Rs.18,000 in rural areas and Rs.24,000 in urban areas will now be eligible to avail the facility.
	15	• SCBs were advised to meet the entire credit requirements of SHG members as envisaged in the Finance Minister's Union Budget speech for the year 2008-09.
		• Guidelines on new self employment scheme for rehabilitation of manual scavengers (SRMS) issued to banks.
	17	• The Reserve Bank advised that the matter concerning accounting procedure to be followed for transfer of accounts under SCSS, from one Agency Bank to another Agency Bank/Post Office was examined by the Ministry of Finance, and the Ministry conveyed their approval for adopting the same procedure for inter Agency bank/Post Office transfer of accounts under SCSS as is being followed for PPF scheme, subject to the payment of transfer fee as applicable under the relevant rules of the captioned scheme. Accordingly the Reserve Bank notified an illustrative list of procedures to be followed in this regard.
	22	• In order to enable the investors to make informed investment decisions in the SRs, the disclosure in respect of underlying basket of assets required to be made by SCs/RCs in the offer documents as above, include disclosure in respect of the date of acquisition of the assets, valuation of the assets and the interest of SCs/RCs in such assets at the time of issue of SRs.
	24	• In view of the rise in the number of disputes and litigations against banks for engaging recovery agents in the recent past, it was felt that the adverse publicity would result in serious reputational risk for the banking sector as a whole. Against this background, the Reserve Bank issued detailed guidelines regarding the policy, practice, and procedure involved in the engagement of recovery agents banks in India.
		• It was decided to permit banks to engage retired bank employees, ex-servicemen and retired government employees as Business Correspondents (BCs) with immediate effect, in addition to the entities already permitted, subject to appropriate due diligence. While appointing such individuals as BCs, banks were advised to ensure that these individuals are permanent residents of the area in which they propose to operate as BCs and also institute additional safeguards as may be considered appropriate to minimise agency risk.
May	**2**	• SCBs were advised to ensure that a suitable mechanism exists for receiving and addressing complaints from customers/ constituents with specific emphasis on resolving such complaints fairly and expeditiously.
		• SCBs were advised to formulate a policy which would enable them to settle the claims of a missing person.
	6	• SCBs (including RRBs) were advised to classify 100 per cent of the credit outstandings under GCCs and overdrafts up to Rs.25,000 (per account) granted against 'no-frills' accounts in rural and semi-urban areas as indirect finance to agriculture under priority sector.
		• SCBs (excluding RRBs) were advised that the shortfall in lending to weaker sections will also be taken into account for the purpose of allocating amounts for contribution to RIDF or funds with other FIs with effect from April, 2009.
	8	• In view of the representations made in regard to delays in completion of infrastructure projects for legal and other extraneous reasons, the asset classification norms for infrastructure projects under implementation were modified with effect from March 31, 2008. The revised norms stipulated that in case of infrastructure projects, financed by the bank after May 28, 2002, the date of completion of the project should be clearly spelt out at the time of financial closure of the project and if the date of commencement of commercial production extends beyond a period of two years (as against the earlier norm of one year) after the date of completion of the project, as originally envisaged, the account should be treated as sub-standard.
	22	• In terms of earlier guidelines issued on 'Know Your Customer Norms' and 'Anti-Money Laundering Measures' banks were required to prepare a profile for each customer based on risk categorization. The need for periodical review of risk categorization was also emphasized. It was reiterated that banks, as a part of transaction monitoring mechanism, are required to put in place an appropriate software application to throw alerts when the transactions are inconsistent with risk categorization and updated profile of customers. Further, a reporting mechanism for attempted banking transactions and also for transactions involving counterfeit currency report was also introduced.
		• RRBs permitted to sell loan assets held by them under priority sector categories in excess of their priority sector lending target of 60 per cent.
	23	• The Finance Minister in his Budget Speech (2008-09) had announced the Debt Waiver and Debt Relief Scheme for farmers. A detailed scheme in this regard was notified for implementation by all scheduled commercial banks, besides RRBs and co-operative credit institutions. Banks were advised that the implementation of the Debt Waiver and DebtRelief Scheme should be completed by June 30, 2008.

Date of Announce-ment		POLICY ANNOUNCEMENTS
2008		**III. FINANCIAL SECTOR MEASURES** *(Concld.)*
May	**26**	• As announced in the Annual Policy Statement for the year 2008-09 the eligibility norms for opening up of on-site ATMs have been liberalised. Accordingly, UCBs that are registered in states which have entered into MoU with RBI or are registered under the Multi-State Cooperative Societies Act, 2002 and classified in Grades other than Grade III and IV, may hereafter, set up on-site ATMs without prior approval of the Reserve Bank.
June	**2**	• The operative instructions for smooth implementation of the Agricultural Debt Waiver and Debt Relief Scheme, 2008 were issued. Accordingly PCBs/UCBs were advised that one time consolidated claims for the bank as a whole may be submitted by them through their Head Office by September 30, 2008, to the respective regional office of Reserve Bank. Guidelines regarding procedure for reimbursement of claims, data maintenance, monitoring of progress in implementation, procedure for audit of the claims were also issued.
	4	• It has been observed that, over the years, the Government of India has, from time to time, issued several special securities which do not qualify for the purpose of complying with the SLR requirements of FIs. Such Government securities are governed by a separate set of terms and conditions and entail a higher degree of illiquidity spread. Currently, the guidelines issued by FIMMDA regarding the valuation of such non-SLR securities provide that such securities be valued by applying a mark-up of 50 basis points (bps) above the corresponding yield on Government of India securities. The issue of valuation of such special securities has since been examined. It has been decided that, for the limited purpose of valuation, all special securities issued by the Government of India, directly to the beneficiary entities, which do not carry SLR status, may be valued at a spread of 25 bps above the corresponding yield on Government of India securities. This amendment would come into force from the financial year 2008-09.Similar circular was issued for StCBs and DCCBs on June 23, 2008.
		• Banks were advised to ensure that all the banking facilitiesincluding cheque book facility including third party cheques, ATMs, net banking, locker, retail loans, credit card, *etc.* are invariably offered to the visually challenged without any discrimination. Banks were also advised to instruct their branches to render all possible assistance to the visually challenged for availing various banking facilities.
	17	• To ensure a measured movement towards strengthening the financials of all deposit taking NBFCs by increasing their net owned fund (NoF) to a minimum of Rs.200 lakh, NBFCs-D having a minimum NoF of less than Rs.200 lakh were advised to freeze their deposits at the level currently held by them and further bring down public deposits to the revised ceiling of deposits as prescribed.
	18	• In terms of instructions issued earlier, it was reiterated that RRBs, as a part of transaction monitoring mechanism, are required to put in place an appropriate software application to throw alerts when the transactions are inconsistent with risk categorization and updated profile of customers.
	30	• The reporting formats for priority sector lending by UCBs were revised. Accordingly, the UCBs were advised that data under the revised formats may be submitted to the concerned regional office concerned on a yearly basis within 15 days of close of the financial year to which it pertains.
July	**3**	• In terms of Agriculture Debt Waiver and Debt Relief Scheme, 2008, the Government of India clarified that: "If the loan is for poultry farming or sheep rearing or piggery or a cattle farm and part of the loan amount is used for sheds, pens, fences *etc*., the entire composite loan amount would be reckoned for calculating 'eligible amount' as defined in the scheme. If it is a standalone loan for putting up fencing or sheds *etc.*, these would not be covered." Accordingly the earlier circular in respect of the Scheme was modified.
	9	• StCBs/DCCBs were advised to ensure that all the banking facilities such as cheque book facility including third party cheques, ATM facility, Net banking facility, locker facility, retail loans, credit cards, *etc*., are invariably offered to the visually challenged without any discrimination. StCBs/DCCBs may also advise their branches to render all possible assistance to the visually challenged for availing the various banking facilities. Similar circular was also issued for RRBs on July 23, 2008.
	15	• In order to facilitate raising of capital funds (Tier l and Tier ll) UCBs have been permitted to issue preference shares *viz*., (i) perpetual non-cumulative preference shares (PNCPS), (ii) perpetual cumulative preference shares (PCPS), (iii) redeemable non-cumulative preference shares (RNCPS) and (iv) redeemable cumulative preference shares (RCPS). Further, UCBs have also been permitted to raise term deposits for a minimum period of not less than five years, which will be eligible to be treated as Tier II capital.
	31	• NBFCs were advised that the balance in deferred tax liability (DTL) account will not be eligible for inclusion in Tier I or Tier II capital for capital adequacy purpose as it is not an eligible item of capital. Further, deferred tax asset (DTA) will be treated as an intangible asset and should be deducted from Tier I capital.

Date of Announcement		POLICY ANNOUNCEMENTS
		IV. CAPITAL MARKET POLICIES
2007		**a) Securities and Exchange Board of India (SEBI)**
April	**16**	• SEBI stipulated guidelines for parking of funds, pending deployment by mutual funds in short term deposits of scheduled commercial banks.
	20	• SEBI issued guidelines for consent orders and composition of offences. Under the prescribed guidelines, if the party against whom adjudication proceedings are pending, SEBI shall constitute a consent order panel headed by a retired high court judge and two other external experts as members which shall screen applications and forward its recommendations to Adjudication Officer for passing suitable order in line with the consent terms.
	26	• SEBI permitted listed companies to send a statement containing the salient features of the Balance Sheet, Profit and Loss Account and Auditor’s Report to each shareholder instead of sending a copy of the complete and full balance sheet, profit and loss account and Directors’ report.
	27	• Permanent Account Number (PAN) was made the sole identification number for all transactions in securities market.
	30	• SEBI amended (Disclosure and Investor Protection) Guidelines, 2000 to make grading of IPOs mandatory and permitted companies with listing history of less than six months to raise money through preferential allotment.
May	**11**	• Guidelines on renewal of certificate of registration for portfolio managers have been clarified. If the application for renewal is not received at SEBI by the expiry date of the certificate of registration, the portfolio manger shall cease to be a portfolio manager on the date of such expiry. Furthermore, it shall immediately stop carrying on the portfolio manager activities from the date of expiry and may either transfer its business to another SEBI registered portfolio manager or allow the client to withdraw the securities and funds in its custody at the option of the client. If the portfolio manager fails to comply with the above, it will be considered as a violation of Section 12 and may attract action under the relevant provisions of SEBI Act, 1992.
	14	• SEBI decided that mutual funds can invest in ADRs/GDRs/foreign securities within overall limit of US$ 4 billion. This will be with a sub-ceiling for individual mutual funds which should not exceed 10 per cent of the net assets managed by them as on March 31 of each relevant year and subject to a maximum of US$ 200 million per mutual fund.
June	**25**	• In view of the introduction of PAN as the sole identification number, SEBI discontinued the Unique Identification Number (UIN) under the SEBI (Central Database of Market Participants’ Regulations), 2003 (MAPIN regulations)/circulars.
	27	• SEBI extended the time limit for uploading of net asset value (NAV) for Fund of Funds Schemes on AMFI’s website to 10.00 a.m. on the following business day in consideration of the practical difficulties being faced by mutual funds in uploading of NAV of such schemes.
July	**5**	• Filing of bi-monthly compliance test reports (CTR) have been simplified. SEBI decided that instead of filing of complete CTR with the SEBI, Asset Management Companies (AMCs) shall only do exceptional reporting on a bi-monthly basis. While the format and contents of CTR would continue, the AMCs would be required to report to SEBI only the exceptions in the CTR, *i.e.*, the AMCs shall report for only those points in the CTR where it had not complied with the same.
	10	• In order to facilitate government companies/corporations, statutory authorities/corporations or any special purpose vehicle set up by any of them, which are engaged in infrastructure sector, to raise funds in the Indian primary market through IPOs, SEBI decided to amend certain provisions of the SEBI (Disclosure and Investor Protection) Guidelines, 2000 relating to pricing by companies, promoter’s contribution, lock in requirements and other issue requirements.
		• To rationalise and simplify the process and formats for submission of financial results to the stock exchange, SEBI decided to replace the existing Clause 41 of the Listing Agreement, *inter alia*, several amendments were made in the revised clause relating to submission of financial results and publication of results.
Aug.	**6**	• SEBI decided that companies issuing debentures and the respective debenture trustees/stock exchanges shall disseminate all information regarding debentures to investors and general public.
	9	• SEBI issued guidelines for overseas investments by venture capital funds.
Sept.	**7**	• In the light of discontinuation of the requirement of Unique Identification Number under the SEBI (Central Database of Market Participants’ Regulations), 2003 (MAPIN Regulations/Circulars), SEBI has advised depositories to discontinue with the practice of accepting ‘MAPIN Card’ as one of the documents for the purpose of Proof of Identity’ while opening a Beneficial Owner (BO) account.
	11	• SEBI cleared the proposal allowing foreign institutional investors (FIIs) to provide AAA-rated foreign government securities as collateral for margins against transactions in the derivatives segment.

Date of Announcement		POLICY ANNOUNCEMENTS
2007		**IV. CAPITAL MARKET POLICIES** *(Contd.)*
Sept.	**26**	• In order to facilitate overseas investments by mutual funds, SEBI decided to raise the aggregate ceiling for overseas investments by mutual funds to US$ 5 billion. Within the overall limit of US$ 5 billion, mutual funds can make overseas investments subject to maximum of US $ 300 million per mutual fund. The overall ceiling for investment in overseas exchange traded funds that invest in securities was kept at US$ 1 billion subject to a maximum of US$ 50 million per mutual fund.
Oct.	**25**	• SEBI confirmed the proposal to ban issue of participatory notes to unregulated foreign entities. To accommodate more and more investors through the registration route, SEBI agreed to several changes to the FII registration criteria.
Nov.	**29**	• SEBI approved new derivative products relating to mini contracts on equity indices, options with longer tenure, volatility index and futures and options contracts, exchange traded currency futures and options.
Dec.	**3**	• SEBI amended the provisions pertaining to issuances of corporate bonds under the SEBI (Disclosure and Investor Protection) (DIP) Guidelines, 2000.
	20	• SEBI allowed all classes of investors to short sell subject to a broad framework. SEBI also decided to set up a full-fledged securities lending and borrowing (SLB) scheme for all participants in the market under the overall framework of “Securities Lending Scheme, 1997”. Further, naked short selling was not allowed and FIIs were prohibited from day trading.
	27	• SEBI amended Equity Listing Agreement with regards to monitoring of utilisation of issue proceeds and electronic filing through corporate filing and dissemination system (CFDS).
		• SEBI introduced mini derivatives contract on index with a minimum contract size of Rs.1 lakh at the time of its introduction in the market.
2008		
Jan.	**11**	• SEBI recommended the introduction of option contracts on indices and stocks with life tenure of up to five years (60 months).
	15	• The Derivatives Contracts Review Committee appointed by SEBI recommended the introduction of volatility index and futures and options in this index.
	31	• In order to bring in more transparency and clarity to the investors in terms of the expenses charged to them in close-ended schemes, SEBI decided that there will not be any provision of charging initial issue expense and amortisation of the same. Also, all mutual fund schemes have been asked to meet the sales, marketing and other such expenses connected with sales and distribution of schemes from the entry load.
	31	• SEBI enhanced the cumulative debt investment limit available for investments by FIIs/sub accounts in Government securities/T-bills to US$ 3.2 billion.
March	**12**	• SEBI in consultation with the stock exchanges decided that in cases of merger, de-merger, amalgamation, capital reduction and scheme of arrangement, in terms of Companies Act and/or sanctioned by the courts, rehabilitation packages approved by the Board of Industrial and Financial Reconstruction under Sick Industrial Companies Act and Corporate Debt Restructuring (CDR) packages by the CDR Cell of the Reserve Bank, there is no need to have a price band on the first day of commencement/recommencement of trading. The price band may be retained in all other cases on the first day.
	17	• SEBI included National Investment Fund in the definition of Qualified Institutional Buyers (QIBs).
	18	• Based on recommendations of AMFI Working Group on Standardisation of Key Operational Areas, it was decided that Asset Management Companies (AMCs) shall not charge entry as well as exit load on bonus units and of units allotted on reinvestment of dividend.
	19	• SEBI decided that all institutional trades in the cash market shall be subject to payment of margins as applicable to transactions of other investors with effect from April 21, 2008. However, in the light of difficulties expressed by the market participants regarding implementation of upfront margining of institutional trades in the cash market, SEBI *vide* circular dated May 22, 2008 decided to keep the same in abeyance. Accordingly, institutional trades in the cash market continued to be margined on T+1 basis till further directions.
		• SEBI decided to operationalise short selling and securities lending and borrowing scheme for all market participants with effect from April 21, 2008.
April	**03**	• Investors residing in Sikkim were exempted from the mandatory requirement of PAN for their investments in mutual funds.
	07	• Filing fees for offer documents was revised downwards by SEBI.
	08	• SEBI increased the aggregate ceiling for overseas investment by mutual funds to US$ 7 billion.

Date of Announcement		POLICY ANNOUNCEMENTS
2008		**IV. CAPITAL MARKET POLICIES** *(Concld.)*
April	**09**	• SEBI amended provisions with respect to independent directors in Clause 49 of the listing agreement.
	16	• Mutual funds were allowed to sell government securities contracted for purchase in DVP III mode for government securities market.
		• SEBI amended (Mutual Funds) Regulations, 1996 to permit mutual funds to launch Real Estate Mutual Funds.
	17	• Guidelines were issued by SEBI for Comprehensive Risk Management framework for cash market.
	30	• SEBI revised the format of Monthly Cumulative Report of Mutual Funds.
May	**05**	• Cross margining across cash and derivatives segments were allowed.
	06	• SEBI simplified the process of half-yearly reporting of information by merchant bankers. Accordingly, reports have to be submitted only in electronic form. SEBI also simplified reporting of information with respect to bankers to issue and debenture trustees.
	29	• SEBI (FIIs) Regulation, 1995 was amended. Under this, asset management company, investment manager, or institutional portfolio manager owned by NRIs, shall be eligible to be registered as FII subject to the condition that they shall not invest their proprietary funds. Furthermore, the type of securities in which FIIs were permitted to invest has been widened to include schemes floated by a Collective Investment Scheme.
June	**06**	• The cumulative debt-investment limit for FII Investments in Government Securities and corporate debt was increased to US$ 5 billion and US$ 3 billion from US$ 3.2 billion and US$1.5 billion, respectively.
	19	• SEBI (Intermediaries) Regulations, 2008 was released, whereby a comprehensive regulation, applicable to all intermediaries, simplifies registration practices.
		• SEBI released SEBI (Public Offer and Listing of Securitised Debt Instruments), Regulations, 2008.
		• SEBI notified regulation for Issuance and listing of debt securities to provide for simplified regulatory framework for issuance and listing of non-convertible debt securities issued by any company, public sector or statutory corporations.
	30	• SEBI clarified that PAN may not be insisted in case of Central Government, State Government and court officials for transacting in securities markets.
July	**07**	• SEBI instructed all registered intermediaries to create a designated email-id for regulatory communications. It was clarified that the email-id shall be an exclusive email-id only for the above purpose and should not be a person centric email-id.
	23	• SEBI instructed all the exchanges to conduct comprehensive audit relating to examination of trading systems, clearing and settlement systems (clearing corporation/clearing house), risk management, databases, disaster recovery sites, business continuity planning, security capacity management and information security of their systems by a reputed independent auditor on an annual basis.
	30	• In its continuing endeavour to make the existing public issue process more efficient, SEBI introduced a supplementary process of applying in public issues, *viz*., the "Applications Supported by Blocked Amount (ASBA)" process. The ASBA process shall be available in all public issues made through the book building route. It shall co-exist with the current process.
2008		**b) Government of India**
Feb.	**29**	• The Union Budget 2008-09 proposed the following measures: i) Take measures to develop the bond, currency and derivatives markets that will include launching exchange-traded currency and interest rate futures and developing a transparent credit derivatives market with appropriate safeguards, (ii) Enhance the tradability of domestic convertible bonds by putting in place a mechanism that will enable investors to separate the embedded equity option from the convertible bond and trade it separately, (iii) Encourage the development of a market-based system for classifying financial instruments based on their complexity and implicit risks, (iv) Requirement of PAN extended to all transactions in the financial market subject to suitable threshold exemption limits, (v) Empowered Committee of State Finance Ministers to be requested to work with the Central Government to create pan Indian market for securities that will expand the market base and enhance the revenues of the State Governments, (vi) Service tax to be imposed on asset management service provided under ULIP, to bring it on par with asset management service provided under mutual funds, (vii) Service tax to be imposed on services provided by stock/commodity exchanges and clearing houses, (viii) Corporate debt instruments issued in demat form and listed on recognised stock exchanges exempted from TDS, (ix) Parent company allowed to set off the dividend received from its subsidiary company against dividend distributed by the parent company, provided that the dividend received has suffered dividend distribution tax (DDT) and the parent company is not a subsidiary of another company, (x) To increase the rate of tax on short term capital gains under Section 111A and Section 115AD from 10 per cent to 15 per cent which will also encourage investors to stay invested for a longer term, (xi) STT paid to be treated like any other deductible expenditure against business income. Levy of STT, in the case of options to be only on premium, where the option is not exercised, liability to be on the seller. Where the option is exercised, levy to be on the settlement price and the liability on the buyer. No change in the present rates.

Date of Announcement		POLICY ANNOUNCEMENTS
		V. EXTERNAL SECTOR POLICIES
2007		**a) Trade Policy**
April	**4**	• India announced its decision to allow duty free access to India to the Least Developed Countries (LDCs) of SAARC, which includes Bangladesh, Bhutan, Maldives and Nepal, before the end of this year.
	19	• The Annual Supplement (2007) to the Foreign Trade Policy (2004-09) announced to impart further momentum to India's exports. The measures adopted for promoting exports, *inter alia*, included identification of thrust areas and commodities, such as agriculture, handlooms, handicraft, gems and jewellery, leather and marine sectors, technological and infrastructural measures, fiscal measures, simplification of procedures and reducing transaction costs.
July	**13**	• To sustain the export growth momentum, the Government announced an export package to neutralise the adverse impact of rupee appreciation, which includes enhancement of Duty Entitlement Pass Book (DEPB) rates by 3 per cent for 9 sectors, *i.e.*, textiles, readymade garments, leather products, handicrafts, engineering products, processed agricultural products, marine products, sport goods and toys. The rate of interest on pre-shipment and post-shipment credit for exporters reduced by 2 per cent. The rates of duty drawback enhanced by 10 per cent to 40 per cent of existing rates.
Sept.	**17**	• The Government announced refund of service tax paid by exporters on four taxable services which were not in the nature of "input services" but could be linked to export goods.
Oct.	**6**	• Relief measures were announced by Government of India for exporters including extension of refund of service tax to additional three taxable services, which are not in the nature of "input services" but could be linked to export of goods, provision to pay interest on EEFC accounts of exporters on outstanding balances, extension of the period for interest subvention on pre-shipment and post-shipment credit, extension of interest subvention to four more sectors and extension of coverage under *Vishesh Krishi and Gram Udyog Yojana* (VKGUY).
	31	• Government of India introduced "Served from India Scheme" to facilitate exporters of various type of services in order to accelerate growth in export of services. Under this scheme, service providers of more than 100 services are entitled for Duty Credit Scrip.
Nov.	**7**	• Reserve Bank of India announced the enhancement of the limit for direct receipt of import bills/documents from US $ 100,000 to US $ 300,000 in the case of import of rough diamonds as a relief to non-status holder exporters.
	29	• Relief measures were announced by Government of India for exporters including reduction of basic customs duty on certain items relating to textile sector, refund of service tax paid on business exhibition service provided to manufacturer-exporters of textile goods, extension of refund of service tax paid by exporters on taxable services linked to exports to two more taxable services, additional subvention of 2 per cent (in addition to the 2 per cent offered earlier) in pre-shipment and post-shipment credit to the specified sectors and extension of payment of interest for delays in payment of terminal excise duty (TES) and central sales tax (CST).
2008		
Jan.	**16**	• All Exporters/Importers need to maintain only one core-banking enabled bank account at national level for transactions with any of the stakeholders for trade to be effective throughout India from April 1, 2008.
April	**11**	• The Annual Supplement (2008) to India's Foreign Trade Policy (2004-09) announced by the Government of India to further strengthen the export sector by introducing sector specific initiatives, promotional measures, relief to sectors affected by rupee appreciation, measures to reduce transaction cost and procedural simplification.
2007		**b) Foreign Exchange Market**
April	**5**	• AD category-I banks, through whom the export proceeds were originally realised, allowed to consider requests for refund of export proceeds of goods exported from India and being re-imported into India on account of poor quality.
	20	• Indian entities availing fund/non-fund facilities were allowed to transfer by way of pledged shares held in overseas JV/WOS to an overseas lender, subject to conditions.
	30	• The limit for prepayment of external commercial borrowing (ECB) enhanced from US$ 300 million to US$ 400 million without prior approval of the Reserve Bank, subject to compliance with the minimum average maturity period as applicable to the loan.
		• AD category-I banks permitted to make remittances on account of donations by corporates for specified purposes: (i) creation of Chairs in reputed educational institutes outside India; (ii) donations to funds (not being an investment fund) promoted by educational institutes; or (iii) donation to a technical institution or body or association in the field of activity of the donor company. The remittances are subject to a limit of one per cent of the foreign exchange earnings during the previous three financial years or US$ 5 million, whichever is less. The existing facility for remittance up to US$ 5,000 per remitter/per donor per financial year towards donations by Indian corporates would continue as hitherto.

Date of Announce-ment		POLICY ANNOUNCEMENTS
2007		**V. EXTERNAL SECTOR POLICIES** *(Contd.)*
April	**30**	• The limit for remittance for consultancy service procured from outside India by Indian companies executing infrastructure projects increased from US $ 1 million per project up to US$ 10 million per project. For this purpose, infrastructure sector is defined as (i) power, (ii) telecommunication, (iii) railways, (iv) road including bridges, (v) sea port and airport, (vi) industrial parks, and (vii) urban infrastructure (water supply, sanitation and sewage projects).
		• Remittance of foreign exchange towards reimbursement of pre-incorporation expenses incurred in India allowed up to five per cent of the investment brought into India or US$ 100,000 whichever is higher, on the basis of certification from statutory auditors.
		• AD category-I banks permitted to allow ship manning/crew managing agencies, rendering services to shipping companies incorporated outside India, to open foreign currency accounts in India for the purpose of undertaking transactions in the ordinary course of their business provided: (a) credits to such accounts would be only by way of inward remittances through normal banking channels from the overseas principal; b) debits will be towards various expenses in connection with the management of the ships/crew in the ordinary course of its business; (c) no credit facility (fund based or non-fund based) should be granted against security of funds held in the account; (d) the bank should meet the prescribed reserve requirements in respect of such accounts; (e) no EEFC facility should be allowed in respect of the remittances received in the account; and (f) the account will be maintained only during the validity period of the agreement.
		• The Indian VCFs, registered with the SEBI, permitted to invest in equity and equity-linked instruments of off-shore venture capital undertakings, subject to an overall limit of US$ 500 million and compliance with the SEBI regulations issued in this regard.
May	**8**	• The limit of US$ 50,000 per financial year under the Liberalised Remittance Scheme for Resident Individuals enhanced to US$ 100,000 per financial year for any permitted current or capital account transactions or a combination of both. All other transactions which are otherwise not permissible under the FEMA and those in the nature of remittance for margins or margin calls to overseas exchanges/overseas counterparty are not allowed under the Scheme. Banks should not extend any kind of credit facilities to resident individuals to facilitate remittances under the Scheme.
	18	• AD category-I banks and authorised banks allowed to permit remittance of the maturity proceeds of FCNR (B) deposits to third parties outside India, provided the transaction is specifically authorised by the account holder and the authorised dealer is satisfied about the bonafides of the transaction.
		• Resident individuals are required to surrender received/realised/unspent/unused foreign exchange to an authorised person within a period of 180 days from the date of receipt/realisation/purchase/acquisition/date of return of the traveller, as the case may be.
		• AD category-I banks allowed the remittances by Navaratna PSUs towards investment in the oil sector (*i.e.*, for exploration and drilling for oil and natural gas, *etc*.) in an unincorporated entity overseas after ensuring that the proposal has been approved by the appropriate competent authority, and is duly supported by a certified copy of the Board Resolution approving such investment subject to reporting requirements.
May	**21**	• Based on the review, the ECB policy has been modified as under: The exemption accorded to the development of integrated township as a permissible end-use of ECB has been withdrawn. Accordingly, utilisation of ECB proceeds is not permissible in real estate, without any exemption. With the sovereign credit rating of India enhanced to investment grade, the all-in-cost ceilings for ECB were modified as follows: (i) All-in-cost ceilings over six months LIBOR for average maturity period of three years and up to five years was revised from 200 basis points to 150 basis points, (ii) All-in-cost ceilings over six months LIBOR for more than five years revised from 350 basis points to 250 basis points. Above changes are applicable to ECB both under the automatic route as well as approval route.
	24	• AD category-I banks allowed to permit payment towards cash calls to the operator for the purpose of oil exploration in India, either by credit to the foreign currency or rupee account in India as approved by the Reserve Bank wherever applicable, or by remittance overseas, subject to certain conditions.
		• AD category-I banks permitted to open escrow account and special account on behalf of non-resident corporates, without prior approval of the Reserve Bank, for acquisition/transfer of shares/convertible debentures through open offers/delisting/ exit offers, subject to the relevant SEBI Regulations/provisions of the Companies Act, 1956 and to the terms and conditions stipulated by the Reserve Bank in this regard.

Date of Announce-ment		POLICY ANNOUNCEMENTS
2007		**V. EXTERNAL SECTOR POLICIES** *(Contd.)*
May	**25**	• AD category-I banks permitted to allow business process outsourcing (BPO) companies in India to make remittances towards the cost of equipment to be imported and installed at their overseas sites, subject to the following conditions: (i) the BPO company should have obtained necessary approval from the Ministry of Communications and Information Technology, Government of India and other authorities concerned for setting up of the International Call Centre (ICC); (ii) the remittance is made directly to the account of the overseas supplier; and (iii) obtain a certificate as evidence of import from the Chief Executive Officer (CEO) or auditor of the importer company that the goods for which remittance was made have actually been imported and installed at overseas sites.
		• The facility of operation of NRO account by Power of Attorney granted in favour of a resident by the non-resident individual account holder provided such operations are restricted to: (i) all local payments in rupees including payments for eligible investments subject to compliance with relevant regulations made by the Reserve Bank; and (ii) remittance outside India of current income in India of the non-resident individual account holder, net of applicable taxes. Furthermore, the resident Power of Attorney holder is not permitted to repatriate outside India funds held in the account other than to the non-resident individual account holder nor to make payment by way of gift to a resident on behalf of the non-resident account holder or transfer funds from the account to another NRO account.
	31	• AD category-I banks permitted remittance out of assets of Indian companies under liquidation under the provisions of the Companies Act, 1956 subject to any order issued by the court winding up the company or the official liquidator or the liquidator in case of voluntary winding up and also subject to tax compliance and to certain terms and conditions.
		• AD category-I banks, specifically authorised by Reserve Bank allowed to permit domestic producers/users to hedge their price risk on aluminium, copper, lead, nickel and zinc in international commodity exchanges, based on their underlying economic exposures. Hedging may be permitted up to the average of previous three financial years' actual purchases/ sales or the previous year's actual purchases/sales turnover, whichever is higher, of the above commodities. Further, only standard exchange traded futures and options (purchases only) may be permitted.
		• AD category-I banks, specifically authorised by Reserve Bank allowed to permit actual users of aviation turbine fuel (ATF) to hedge their economic exposures in the international commodity exchanges based on their domestic purchases. Furthermore, if the risk profile warrants, the actual users of ATF may also use OTC contracts. Permission for hedging ATF would be granted only against firm orders and necessary documentary evidence. The AD category-I banks should ensure that the entities entering into hedging activities should have Board approved policies which define the overall framework within which derivatives activities should be conducted and the risks controlled.
June	**8**	• To enable the MFs to tap a larger investible stock overseas, they were permitted to invest in (i) overseas mutual funds that make nominal investments (say to the extent of 10 per cent of net asset value) in unlisted overseas securities; (ii) overseas exchange traded funds that invest in securities; and (iii) ADRs/GDRs of foreign companies.
		• Guidelines for foreign investment in preference shares were revised as follows: (a) foreign investment coming as fully convertible preference shares would be treated as part of share capital. This would be included in calculating foreign equity for purposes of sectoral caps on foreign equity, where such caps have been prescribed; (b) foreign investment coming as any other type of preference shares (non- convertible, optionally convertible or partially convertible) would be considered as debt and shall require conforming to ECB guidelines/ECB caps; (c) any foreign investment as non-convertible or optionally convertible or partially convertible preference shares as on and up to April 30, 2007 would continue to be outside the sectoral cap till their current maturity; and (d) issue of preference shares of any type would continue to conform to the guidelines of the Reserve Bank/SEBI and other statutory bodies and would be subject to all statutory requirements.
	14	• The limit for overseas investments by an Indian entity was enhanced from 200 percent to 300 per cent of its net worth. However, the limit for partnership firm for overseas investments remained unchanged at 200 per cent of net worth.
		• The limit for portfolio investment by listed Indian companies in the equity of listed foreign companies was raised from 25 per cent to 35 per cent of the net worth of the investing company.
	19	• AD category-I banks permitted to allow cancellation of forward contracts entered into by residents for overseas direct investments (in equity and loan) for hedging the exchange risk. Further, 50 per cent of the cancelled contracts is allowed to be rebooked.
	29	• It was decided as a sector specific measure to allow airline companies permitted by the Director General of Civil Aviation to operate as a schedule air transport service to make advance remittances without bank guarantee. Accordingly, AD category-I banks permitted to allow advance remittance, without bank guarantee or an unconditional irrevocable standby Letter of Credit, up to US$ 50 million, for direct import of aircraft/helicopter/other aviation related purchases, subject to conditions.

Date of Announcement		POLICY ANNOUNCEMENTS
2007		**V. EXTERNAL SECTOR POLICIES** *(Contd.)*
July	**5**	• RRBs have been authorised to open and maintain FCNR(B) Deposit accounts by NRIs/PIOs subject to prescribed guidelines.
	19	• SEBI approved clearing corporations of stock exchanges and their clearing members have been permitted to undertake the following transactions subject to the guidelines issued in this regard: (i) to open and maintain demat accounts with foreign depositories and to acquire, hold, pledge and transfer the foreign sovereign securities, offered as collateral by FIIs, (ii) to remit the proceeds arising from corporate action, if any, on such foreign sovereign securities and (iii) to liquidate such foreign sovereign securities if the need arises.
Aug.	**7**	• Based on a review, ECB policy has been modified as under : (i) Henceforth, ECB more than US$ 20 million per borrower company per financial year is permitted only for foreign currency expenditure for permissible end-uses of ECB. Accordingly, borrowers raising ECB more than US$ 20 million shall park the ECB proceeds overseas for use as foreign currency expenditures for permissible end uses and shall not remit the funds to India both under the Automatic Route and the Approval Route. (ii) ECB up to US$ 20 million per borrowing company per financial year would be permitted for foreign currency expenditures for permissible end-uses under the Automatic Route and these funds shall be parked overseas and not be remitted to India. Borrowers proposing to avail ECB up to US$ 20 million for Rupees expenditure for permissible end uses would require prior approval of the Reserve Bank under the Approval Route. (iii) All other aspects of ECB policy such as eligible borrower, US$ 500 million limit per borrower company per financial year under the Automatic Route, recognized lender, average maturity period, all-in-cost-ceiling, prepayment, refinancing of existing ECB and reporting arrangements remain unchanged.
	22	• It was decided to allow AD Category–I banks to grant rupee loans to NRI employees of Indian companies for acquiring shares of the companies under the ESOP Scheme. The loan scheme should be as per the policy approved by the bank's Board and would further be subject to certain conditions.
Sep.	**26**	• The Liberalised Remittance Scheme for Resident Individuals was further liberalised. Accordingly, it was decided to enhance the existing limit of US$ 100,000 per financial year to US$ 200,000 per financial year (April-March). Accordingly, AD Category – I banks were allowed to remit up to US$ 200,000, per financial year, under the Scheme, for any permitted current or capital account transaction or a combination of both.
		• The limit for prepayment of ECB was enhanced from US$ 400 million to US$ 500 million.
		• The limit for portfolio investment by listed Indian companies in the equity of listed foreign companies was raised from 35 per cent to 50 per cent of the net worth of the investing company as on the date of its last audited balance sheet. Furthermore, the requirement of reciprocal 10 per cent shareholding in Indian companies has been dispensed with.
		• The overseas investment limit (total financial commitments) for Indian parties (companies incorporated in India under an Act of Parliament) was enhanced from 300 per cent of their net worth to 400 per cent as per the last audited balance sheet. The overseas investment limit for registered partnership firms was enhanced from 200 per cent to 400 per cent of net worth.
		• The aggregate ceiling for overseas investment by mutual funds, registered with SEBI, was enhanced from US$ 4 billion to US$ 5 billion. The existing facility to allow a limited number of qualified Indian mutual funds to invest cumulatively up to US$ 1 billion in overseas Exchange Traded Funds, as may be permitted by the SEBI, would continue.
		• Mutual Funds, registered with SEBI were permitted to invest in ADRs/GDRs of Indian and foreign companies, rated debt instruments not below investment grade by accredited/registered credit rating agencies, in the equity of overseas companies listed on a recognised stock exchange overseas, in overseas mutual funds that make nominal investments (say to the extent of 10 per cent of net asset value) in unlisted overseas securities, and overseas exchange traded funds that invest in securities. Mutual funds allowed to invest in additional instruments, subject to the guidelines issued by SEBI, in order to enable them to tap a larger investible stock overseas.
Oct.	**6**	• All Exchange Earners' Foreign Currency (EEFC) account holders were permitted to maintain outstanding balances to the extent of US$ 1 million in the form of term deposits up to 1 year maturing on or before October 31, 2008.
	17	• The following Anti Money Laundering guidelines were amended: (i) Requests for payment in cash by foreign visitors/non-resident Indians was acceded to the extent of US$ 3000 or its equivalent (earlier limit was US$ 2000). (ii) PAN card may be accepted as a suitable document for establishing the relationship with the company/firm.

Date of Announcement		POLICY ANNOUNCEMENTS
2007		**V. EXTERNAL SECTOR POLICIES** *(Contd.)*
Oct.	**29**	• In order to enable resident individuals to manage/hedge their foreign exchange exposures arising out of actual or anticipated remittances, both inward and outward, it was decided to permit them to book forward contracts, without production of underlying documents, up to a limit of US$ 100,000, based on self declaration. The contracts booked under this facility would normally be on a deliverable basis. However, in case of mismatches in cash flows or other exigencies, the contracts booked under this facility would be allowed to be cancelled and re-booked. The notional value of the outstanding contracts should not exceed US$ 100,000 at any time. Further, the contracts may be permitted to be booked up to tenors of one year only.
		• In order to enable Small and Medium Enterprises (SMEs), having direct and/or indirect exposures to foreign exchange risk to manage their exposures effectively, AD Category - I banks were allowed to permit such entities to book/cancel/rebook/roll over forward contracts without production of underlying documents, subject to conditions.
Nov.	**6**	• It was decided to permit domestic oil marketing and refining companies to hedge their commodity price risk to the extent of 50 per cent of their inventory based on the volumes in the quarter preceding the previous quarter. The hedging may be undertaken through AD Category – I banks, which have been authorised by the Reserve Bank. The hedges would be undertaken using over-the-counter (OTC)/exchange traded derivatives overseas with the tenor restricted to a maximum of one-year forward.
	7	• The limit for direct receipt of import bills/documents was enhanced from US$ 100,000 to US$ 300,000 in the case of import of rough diamonds. Accordingly, AD Category - I banks were permitted to allow remittance for imports up to US$ 300,000 where the importer of rough diamonds has received the import bills/documents directly from the overseas supplier and the documentary evidence for import is submitted by the importer at the time of remittance, subject to conditions.
Dec.	**14**	• In consultation with the Central Government, with effect from November 29, 2007, it was decided that the equity instruments are to be issued within 180 days of the receipt of the inward remittance. In case, the equity instruments are not issued within 180 days from the date of receipt of the inward remittance or date of debit to the NRE/FCNR (B) account, the amount of consideration so received should be refunded immediately to the non-resident investor by outward remittance through normal banking channels or by credit to the NRE/FCNR (B) account, as the case may be. The AD Category - I banks were permitted to allow such outward remittances after satisfying themselves with the bonafides of the transactions and that no part of the remittance represents interest on the funds received as advance. Non-compliance with the above provision would be reckoned as a contravention under FEMA and could attract penal provisions.
		• In exceptional cases, refund of the amount of consideration outstanding beyond a period of 180 days from the date of receipt may be considered by the Reserve Bank on the merits of the case. In all cases where, as on November 28, 2007, 180 days have elapsed since receipt of funds and the equity instruments have not been issued, the companies are required to approach the Reserve Bank with a definite action plan either for allotment of equity instruments or for refund of the advance, with full details, for specific approval. It is clarified that the advances against equity instruments may be received only where the FDI is allowed under the automatic route.
	19	• A person who is a citizen of Bangladesh or an entity incorporated in Bangladesh may, with the prior approval of the Foreign Investment Promotion Board, was allowed to purchase shares and convertible debentures of an Indian company under Foreign Direct Investment Scheme, subject to the terms and conditions.
	31	• FIIs registered with the SEBI and sub-accounts of FIIs were allowed to short sell, lend and borrow equity shares of Indian companies subject to certain conditions.
2008		
April	**3**	• The aggregate ceiling for overseas investment by mutual funds registered with the SEBI was enhanced from US$ 5 billion to US$ 7 billion. The existing facility to allow a limited number of qualified Indian mutual funds to invest cumulatively up to US$ 1 billion in overseas Exchange Traded Funds, as may be permitted by SEBI, would continue. The investments would be subject to the terms and conditions and operational guidelines as issued by SEBI.
	16	• The limit for direct receipt of import bills/documents was enhanced from US$ 100,000 to US$ 300,000 in the case of import of rough precious and semi-precious stones by non-status holder exporters, subject to certain specified conditions.
	28	• It was decided, in consultation with Central Government, that the prior permission of Administrative Ministry/Authorisation from Central Government may not be necessary for International Competitive Bidding (ICB).
		• Credit information companies complying with the Credit Information Companies (Regulations) Act, 2005 were permitted an aggregate foreign investment limit of 49 per cent, with the prior approval of FIPB and regulatory clearance from the Reserve Bank. Investment by SEBI Registered FIIs was permitted only through purchases in the secondary market to an extent of 24 per cent within the overall limit of 49 per cent for foreign investment. No FII was allowed to individually hold directly or indirectly more than 10 per cent of the equity.

Date of Announcement		POLICY ANNOUNCEMENTS
2008		**V. EXTERNAL SECTOR POLICIES** *(Contd.)*
April	**28**	• Commodity Exchanges were permitted foreign investment within a composite ceiling of 49 per cent, with a FDI limit of 26 per cent and an FII limit of 23 per cent, subject to certain terms and conditions.
May	**28**	• The all-in-cost ceiling in respect of trade credits up to one year was enhanced from 50 basis points over six months LIBOR to 75 basis points over six months LIBOR for the respective currency of credit or applicable benchmark. All other aspects of trade credit remained unchanged.
	29	• It was decided to allow borrowers in the infrastructure sector to avail ECBs up to US $ 100 million for rupee expenditure for permissible end-uses under the approval route. In the case of other borrowers, the existing limit of US$ 20 million for rupee expenditure for permissible end-uses under the Approval Route was enhanced to US$ 50 million. The all-in-cost ceilings were revised upwards from 150 bps to 200 bps over 6-month LIBOR for ECBs with an average maturity between three years and up to five years, and from 250 bps to 350 bps for ECBs with average maturity of more than five years.
	30	• In terms of the extant Anti-Money Laundering guidelines, Full-Fledged Money Changers (FFMCs) were permitted to encash foreign currency and make cash payment only up to US$ 3,000 or its equivalent. Amount exceeding US$ 3,000 or its equivalent has to be paid by way of demand draft or bankers' cheque.
June	**2**	• It was decided to allow entities in the service sector, *viz*. hotels, hospitals and software companies to avail ECBs up to US$ 100 million per financial year, for the purpose of import of capital goods under the approval route.
	3	• With a view to provide greater flexibility to Indian parties for investment abroad, it was decided to allow Indian companies to invest in excess of 400 per cent of their net worth, as on the date of the last audited balance sheet, in the energy and natural resources sectors such as oil, gas, coal and mineral ores. The investments in excess of 400 per cent of the net worth shall be made only with the prior approval of the Reserve Bank.
		• It was decided to allow the above facility to other Indian entities to invest in overseas unincorporated entities in oil sector. AD Category – I banks would allow remittance up to 400 per cent of the net worth of the Indian company after ensuring that the proposal has been approved by the competent authority and is duly supported by a certified copy of the Board Resolution approving such investment. Applications by Indian companies, other than by Navaratna PSUs, ONGC Videsh Ltd (OVL) and Oil India Ltd (OIL), for investment in excess of 400 per cent of the net worth of the company as on the date of the last audited balance sheet, in overseas unincorporated entities, where such investments are approved by the competent authority, should be referred by AD Category-I banks to the Reserve Bank for prior approval, as per the procedure laid down.
		• Domestic crude oil refining companies were permitted to hedge their commodity price risk on domestic purchase of crude oil and sell petroleum products on the basis of underlying contracts linked to international prices on overseas exchanges/ markets. The hedging was allowed strictly on the basis of underlying contracts.
		• Domestic crude oil refining companies were permitted to hedge their commodity price risk on crude oil imports in overseas exchanges/markets, on the basis of their past performance up to 50 per cent of the volume of actual imports during the previous year or 50 per cent of the average volume of imports during the previous three financial years, whichever is higher. Contracts booked under this facility will have to be regularised by production of supporting import orders during the currency of hedge. An undertaking may be obtained from the companies to this effect.
		• The hedging has to be undertaken only through AD Category - I banks, who have been specifically authorised by the Reserve Bank in this regard, subject to specified terms and conditions.
		• Earlier, Navaratna Public Sector Undertakings (PSUs) are allowed to invest in overseas unincorporated entities in oil sector (*i.e.*, for exploration and drilling for oil and natural gas, *etc*.), which are duly approved by the Government of India, without any limits, under the automatic route. This facility was extended to ONGC Videsh Ltd (OVL) and Oil India Ltd (OIL).
		• AD Category - I banks were permitted to write off, in addition to the claims settled by Export Credit Guarantee Corporation (ECGC), the outstanding export bills settled by other insurance companies which are regulated by IRDA subject to verifying that the claim in respect of the outstanding export bills has been settled and that the export incentives, if any, have been surrendered. Such write-off will not be restricted to the existing limit of 10 per cent of export dues.
	3	• The claims settled in Rupees by ECGC/insurance companies were not be construed as export realisation in foreign exchange and claim amount should not be allowed to be credited to EEFC account of the exporter.
		• The period of realisation and repatriation to India of the amount representing the full export value of goods or software exported, was enhanced from six months to 12 months from the date of export, subject to review after one year.

Date of Announcement		POLICY ANNOUNCEMENTS
2008		**V. EXTERNAL SECTOR POLICIES** *(Contd.)*
June	**27**	• It was decided to allow Registered Trusts and Societies engaged in manufacturing/educational sector to make investment in the same sector(s) in a Joint Venture or Wholly Owned Subsidiary outside India, with the prior approval of the Reserve Bank.
July	**11**	• Prior approval from the Reserve Bank was dispensed with and AD Category - I banks were permitted to convey ‘no objection’ under the FEMA,1999 for creation of charge on immovable assets, financial securities and issue of corporate or personal guarantees in favour of overseas lender/security trustee, to secure the ECB to be raised by the borrower, subject to certain specified conditions.

APPENDIX TABLE 1 : SELECT MACROECONOMIC AND FINANCIAL INDICATORS

Item	Average 1990-91 to 1999-2000 (10 years)	Average 2000-01 to 2007-08 (8 years)	2003-04	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5	6	7	8
1. Real GDP (% change)	5.7	7.3	8.5	7.5	9.4 PE	9.6 QE	9.0 RE
a) Agriculture (% change)	3.2	2.9	10.0	0.0	5.9	3.8	4.5
b) Industry (% change)	5.7	7.1	6.0	8.5	8.0	10.6	8.1
c) Services (% change)	7.1	9.0	8.8	9.9	11.0	11.2	10.7
2. Per Capita Income (% change)	3.6	5.5	7.1	5.5	7.9 PE	8.1 QE	7.8 RE
3. Foodgrains Production (Million tonnes)	188.6	206.1	213.2	198.4	208.6	217.3	230.7
4. Gross Domestic Saving Rate (% of GDP)	23.0	29.2 ^	29.8	31.8	34.3 PE	34.8 QE	..
5. Gross Domestic Investment Rate (% of GDP)	24.4	29.2 ^	28.2	32.2	35.5 PE	35.9 QE	..
6. Central Government Finances (% of GDP)							
a) Total Revenue Receipts	9.2	9.8	9.6	9.7	9.7	10.5	11.1 RE
b) Total Expenditure	16.0	15.5	17.1	15.8	14.1	14.1	15.1 RE
c) Revenue Deficit	3.0	3.1	3.6	2.5	2.6	1.9	1.4 RE
d) Fiscal Deficit	5.9	4.6	4.5	4.0	4.1	3.5	3.1 RE
e) Net RBI Credit to Centre	0.7	-0.9	-2.8	-1.9	0.8	-0.1	-2.5 RE
f) Interest Payments	4.2	4.2	4.5	4.0	3.7	3.6	3.6 RE
g) Domestic Debt	48.0	58.9	61.4	61.4	60.5	58.8	59.1 RE
7. Monetary Aggregates (% change)							
a) Broad Money (M_3)	17.2	16.5	16.7	12.1 @	17.0 #	21.5	20.8
b) Narrow Money (M_1)	15.6	15.7	22.2	11.9	21.1 #	16.9	19.1
c) Reserve Money	13.9	16.4	18.3	12.1	17.2	23.7	30.9
d) Bank Credit to Commercial Sector (% of GDP)	28.8	41.6	36.9	40.7	47.3	51.4	54.5
8. Scheduled Commercial Banks (% change)							
a) Aggregate Deposits	17.2	17.6	17.5	12.8 @	18.1 #	23.8	22.4
b) Bank Credit	15.9	21.5	15.3	27.0 @	30.8 #	28.1	22.3
c) Non-Food Credit	15.4	22.0	18.4	27.5 @	31.8 #	28.5	23.0
d) Investments in Government Securities	20.9	16.9	25.1	7.9 @	-2.7 #	10.7	23.5
9. Wholesale Price Index (% change)							
a) Point-to-Point	8.7	5.1	4.6	5.1	4.1	5.9	7.7
b) Average	8.1	5.1	5.4	6.4	4.4	5.4	4.7
10. Consumer Price Index - Industrial Workers (% change)							
a) Point-to-Point	9.4	4.9	3.5	4.2	4.9	6.7	7.9
b) Average	9.5	4.6	3.9	3.8	4.4	6.7	6.2
11. BSE Sensitive Index (% change)	37.0	20.2	83.4	16.1	73.7	15.9	19.7
12. Trade and Balance of Payments							
a) Exports in US $ (% change)	8.6	20.1	23.3	28.5	23.4	21.8	23.7
b) Imports in US $ (% change)	9.7	21.6	24.1	48.6	32.1	21.8	29.9
c) Current Account (% of GDP)	-1.3	-0.1	2.3	-0.4	-1.2	-1.1	-1.5
d) Capital Account (% of GDP)	2.2	3.7	2.8	4.0	3.1	5.0	9.2
13. Foreign Exchange Reserves* (US $ Billion)	..	..	113.0	141.5	151.6	199.1	309.7
14. External Debt* (US $ Billion)	92.7	122.5	111.6	133.0	138.1	169.7	221.2
a) Debt-GDP Ratio	29.0	19.3	17.8	18.6	17.2	17.8	18.8
b) Debt-Service Ratio	24.9	11.1	16.1	6.1	9.9	4.8	5.4
15. Exchange Rate (Rupee / US $)							
a) High	..	..	43.45	43.36	43.30	43.14	39.26
b) Low	..	..	47.46	46.46	46.33	46.97	43.15

PE : Provisional Estimates. QE : Quick Estimates. RE : Revised Estimates.

.. : Not available/Not Applicable. * : As at the end of the period.

@ : Adjusted for the mergers and conversions in the banking system. # : Variation over April 1, 2005.

^ : Average for the period 2000-01 to 2006-07.

APPENDIX TABLE 2 : GROWTH RATES AND SECTORAL COMPOSITION OF REAL GROSS DOMESTIC PRODUCT

(AT 1999-2000 PRICES)

(Per cent)

Sector	Growth Rate						Share in real GDP				
	Average 2000-01 to 2007-08	2003-04	2004-05	2005-06@	2006-07#	2007-08*	2003-04	2004-05	2005-06 @	2006-07#	2007-08*
1	2	3	4	5	6	7	8	9	10	11	12
1. Agriculture and Allied Activities	**2.9**	**10.0**	**0.0**	**5.9**	**3.8**	**4.5**	**21.7**	**20.2**	**19.6**	**18.5**	**17.8**
of which :											
Agriculture	n.a.	10.8	0.0	6.1	3.8	n.a.	19.9	18.5	17.9	17.0	n.a.
2. Industry	**7.1**	**6.0**	**8.5**	**8.0**	**10.6**	**8.1**	**19.4**	**19.6**	**19.4**	**19.5**	**19.4**
of which :											
a) Mining and quarrying	4.9	3.1	8.2	4.9	5.7	4.7	2.2	2.2	2.1	2.0	2.0
b) Manufacturing	7.8	6.6	8.7	9.0	12.0	8.8	15.0	15.1	15.1	15.4	15.4
c) Electricity, gas and water supply	4.8	4.8	7.9	4.7	6.0	6.3	2.3	2.3	2.2	2.1	2.1
3. Services	**9.0**	**8.8**	**9.9**	**11.0**	**11.2**	**10.7**	**58.9**	**60.2**	**61.1**	**61.9**	**62.9**
of which :											
a) Construction	10.6	12.0	16.1	16.5	12.0	9.8	6.1	6.6	7.1	7.2	7.3
b) Trade, hotels and restaurants	8.2	10.1	7.7	9.4	8.5 (11.8)	12.0 ^	15.5	15.5	15.5	15.4 (26.8)	27.5 ^
c) Transport, storage and communications	13.7	15.3	15.6	14.6	16.6	n.a.	9.5	10.2	10.7	11.4	n.a.
d) Financing, insurance, real estate and business services	8.8	5.6	8.7	11.4	13.9	11.8	13.4	13.5	13.8	14.3	14.7
e) Community, social and personal services	5.8	5.4	6.9	7.2	6.9	7.3	14.3	14.2	14.0	13.6	13.4
4. Gross Domestic Product at factor cost	**7.3**	**8.5**	**7.5**	**9.4**	**9.6**	**9.0**	**100**	**100**	**100**	**100**	**100**

Memo : (Rupees crore)

Sector	(at current prices)				
Sector	2003-04	2004-05	2005-06	2006-07	2007-08
1. Agriculture and Allied Activities	532,342	552,422	615844	695423	764082
2. Industry	509,106	598,271	677946	790333	899144
3. Services	1,496,722	1,727,013	1981879	2304306	2640428
4. Gross Domestic Product at factor cost	2,538,171	2,877,706	3275670	3790063	4303654

Sector	(at constant prices)				
Sector	2003-04	2004-05	2005-06	2006-07	2007-08
1. Agriculture and Allied Activities	482,676	482,446	511013	530236	554336
2. Industry	431,724	468,451	506016	559801	605061
3. Services	1,308,358	1,437,487	1595818	1774272	1963462
4. Gross Domestic Product at factor cost	2,222,758	2,388,384	2612847	2864310	3122862

@ Provisional Estimates #: Quick Estimates *: Revised Estimates. n.a.: Not available.

^ : Growth rate and share includes growth of 'Transport, storage and communications' comparable with figure of preceding year in parentheses.

Source : Central Statistical Organisation.

APPENDIX TABLE 3: QUARTERLY GROWTH RATES AND COMPOSITION OF REAL GROSS DOMESTIC PRODUCT

(Per cent)

Sector	2005-06				2006-07				2007-08			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Agriculture and Allied Activities	**4.0**	**4.6**	**8.2**	**6.0**	**2.7**	**3.2**	**4.0**	**4.9**	**4.4**	**4.7**	**6.0**	**2.9**
	(19.7)	**(16.0)**	**(23.3)**	**(18.7)**	**(18.5)**	**(15.0)**	**(22.2)**	**(17.9)**	**(17.7)**	**(14.4)**	**(21.6)**	**(16.9)**
2. Industry	**9.8**	**6.6**	**7.2**	**8.6**	**10.0**	**10.7**	**10.3**	**11.5**	**9.6**	**8.6**	**8.6**	**5.8**
	(19.8)	**(20.4)**	**(18.4)**	**(19.1)**	**(19.9)**	**(20.5)**	**(18.5)**	**(19.4)**	**(19.9)**	**(20.4)**	**(18.5)**	**(18.9)**
of which :												
a) Mining and quarrying	7.4	1.8	3.8	6.3	4.1	3.9	6.0	8.2	1.7	5.5	5.7	5.9
b) Manufacturing	10.6	8.0	8.1	9.3	11.7	12.2	11.3	12.8	10.9	9.2	9.6	5.8
c) Electricity, gas and water Supply	6.8	2.1	4.4	5.6	4.3	6.6	7.6	5.4	7.9	6.9	4.8	5.6
3. Services	**10.4**	**10.5**	**11.0**	**12.0**	**11.7**	**11.6**	**11.1**	**10.5**	**10.6**	**10.7**	**10.0**	**11.4**
	(60.5)	**(63.5)**	**(58.3)**	**(62.2)**	**(61.7)**	**(64.4)**	**(59.3)**	**(62.7)**	**(62.4)**	**(65.2)**	**(59.9)**	**(64.2)**
of which :												
a) Construction	14.8	13.4	19.1	18.3	13.1	12.0	10.8	12.2	7.7	11.8	7.1	12.6
b) Trade, hotels, restaurants, transport, storage and communication	11.4	10.9	10.9	12.7	10.9	12.7	12.1	11.6	13.1	11.0	11.5	12.4
c) Financing, insurance, real estate and business services	10.0	11.8	10.2	13.5	13.6	13.9	14.7	13.4	12.6	12.4	11.9	10.5
d) Community, social and personal services	6.9	7.3	7.8	6.8	10.3	7.2	5.6	5.1	5.2	7.7	6.2	9.5
4. Gross Domestic Product at factor cost	**8.9**	**8.7**	**9.6**	**10.2**	**9.6**	**10.1**	**9.3**	**9.7**	**9.2**	**9.3**	**8.8**	**8.8**
	(100.0)	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**	**(100.0)**
Memo												(Amount in Rupees crore)
(at current prices)												
1. Agriculture and Allied Activities	1,39,826	1,15,383	1,99,365	1,61,271	1,55,326	1,27,706	2,25,723	1,86,669	1,75,004	1,43,319	2,46,379	1,99,381
2. Industry	1,58,387	1,62,698	1,72,816	1,84,045	1,81,821	1,89,054	2,01,360	2,18,097	2,11,466	2,13,640	2,25,451	2,48,586
3. Services	4,50,814	4,71,079	5,11,828	5,48,160	5,23,358	5,48,098	5,94,914	6,37,936	6,04,400	6,26,008	6,70,144	7,39,878
4. Gross Domestic Product at factor cost	7,49,027	7,49,160	8,84,009	8,93,476	8,60,505	8,64,858	10,21,997	10,42,702	9,90,870	9,82,967	11,41,974	11,87,845
(at constant prices 1999-00)												
1. Agriculture and Allied Activities	1,19,462	95,550	1,62,245	1,33,756	1,22,660	98,606	1,68,666	1,40,305	1,28,042	1,03,199	1,78,741	1,44,354
2. Industry	1,19,813	1,21,731	1,28,027	1,36,446	1,31,803	1,34,730	1,41,183	1,52,085	1,44,474	1,46,296	1,53,389	1,60,903
3. Services	3,66,461	3,78,491	4,06,443	4,44,423	4,09,183	4,22,378	4,51,482	4,91,228	4,52,433	4,67,490	4,96,529	5,47,012
4. Gross Domestic Product at factor cost	6,05,737	5,95,771	6,96,714	7,14,625	6,63,645	6,55,713	7,61,333	7,83,618	7,24,949	7,16,984	8,28,659	8,52,270

Note : 1. Figures in parentheses are percentage share to GDP.

2. Constituents may not add up to 100 due to rounding off.

3. Quarters Q1, Q2, Q3 and Q4 denote April-June, July-September, October-December and January-March, respectively.

Source : Central Statistical Organisation.

APPENDIX TABLE 4 : AGRICULTURAL PRODUCTION

(Million Tonnes)

Crop	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 #
1	2	3	4	5	6	7	8
I. All Crops: Annual Growth Rate (per cent) $	**7.6**	**-13.2**	**21.0**	**-1.6**	**12.1**	**11.6**	**6.6**
A) Foodgrains	9.4	-14.9	22.6	-7.1	5.8	3.6	5.7
B) Non-foodgrains	5.4	-11.1	19.2	1.6	16.0	15.6	7.9
A. Foodgrains (a+b)	**212.9**	**174.8**	**213.2**	**198.4**	**208.6**	**217.3**	**230.7**
1. Rice	93.3	71.8	88.5	83.1	91.8	93.4	96.4
2 Wheat	72.8	65.8	72.2	68.6	69.4	75.8	78.4
3. Coarse Cereals	33.4	26.1	37.6	33.5	34.1	33.9	40.7
of which:							
i) Jowar	7.6	7.0	6.7	7.2	7.6	7.2	7.8
ii) Bajra	8.3	4.7	12.1	7.9	7.7	8.4	9.8
iii) Maize	13.2	11.2	15.0	14.2	14.7	15.1	19.3
4. Pulses	13.4	11.1	14.9	13.1	13.4	14.2	15.1
of which:							
i) Tur	2.3	2.2	2.4	2.4	2.7	2.3	3.1
ii) Gram	5.5	4.2	5.7	5.5	5.6	6.3	5.9
a) *Kharif*	**112.1**	**87.2**	**117.0**	**103.3**	**109.9**	**110.6**	**121.0**
1. Rice	80.5	63.1	78.6	72.2	78.3	80.2	82.8
2. Coarse Cereals	26.7	20.0	32.2	26.4	26.7	25.6	31.7
of which:							
i) Jowar	4.2	4.2	4.8	4.0	4.1	3.7	4.1
ii) Bajra	8.3	4.7	12.1	7.9	7.7	8.4	9.8
iii) Maize	11.3	9.3	12.7	11.5	12.2	11.6	15.2
3. Pulses	4.8	4.2	6.2	4.7	4.9	4.8	6.5
of which:							
i) Tur	2.3	2.2	2.4	2.4	2.7	2.3	3.1
b) *Rabi*	**100.8**	**87.6**	**96.2**	**95.1**	**98.7**	**106.7**	**109.7**
1. Rice	12.8	8.7	9.9	10.9	13.5	13.2	13.6
2. Wheat	72.8	65.8	72.2	68.6	69.4	75.8	78.4
3. Coarse Cereals	6.7	6.1	5.4	7.1	7.3	8.3	9.0
of which:							
i) Jowar	3.3	2.8	1.8	3.2	3.6	3.4	3.6
ii) Maize	1.9	1.9	2.3	2.7	2.6	3.5	4.2
4. Pulses	8.5	7.0	8.7	8.4	8.5	9.4	8.7
of which:							
i) Gram	5.5	4.2	5.7	5.5	5.6	6.3	5.9
B. Non-foodgrains							
1. Oilseeds++	20.7	14.8	25.2	24.4	28.0	24.3	28.8
of which:							
i) Groundnut	7.0	4.1	8.1	6.8	8.0	4.9	9.4
ii) Rapeseed & Mustard	5.1	3.9	6.3	7.6	8.1	7.4	5.8
iii) Sunflower	0.7	0.9	0.9	1.2	1.4	1.2	1.4
iv) Soyabean	6.0	4.7	7.8	6.9	8.3	8.9	10.0
2. Sugarcane	297.2	287.4	233.9	237.1	281.2	355.5	340.6
3. Cotton @	10.0	8.6	13.7	16.4	18.5	22.6	25.8
4. Jute and Mesta +	11.7	11.3	11.2	10.3	10.8	11.3	11.2
5. Tea*	853.9	838.5	878.1	893.0	946.0	955.9	944.7 $$
6. Coffee*	300.6	275.3	270.5	275.5	274.0	280.0	262.0 $$

: Fourth Advance Estimates as on July 9, 2008.
$: Growth rates are based on Index of Agricultural Production with base triennium ending 1993-94=100.
$$: Estimated production for April-November.
++ : For nine oilseeds out of eleven in all.
@ : Million bales of 170 kg. each.
+ : Million bales of 180 kg. each.
* : Million kilograms.

Source : Ministry of Agriculture, Government of India.

APPENDIX TABLE 5: PROCUREMENT, OFF TAKE AND STOCKS OF FOODGRAINS

(Million Tonnes)

Year	Procurement			Offtake			Stocks *		
	Rice	Wheat	Total	Rice	Wheat	Total	Rice	Wheat	Total #
1	2	3	4	5	6	7	8	9	10
1995-96	9.93	12.33	22.16	11.63	12.72	24.35	13.06	7.76	20.82
1996-97	11.88	8.16	20.04	12.31	13.32	25.63	13.17	3.24	16.41
1997-98	14.54	9.30	23.84	11.20	7.76	18.96	13.05	5.08	18.12
1998-99	11.55	12.65	24.20	11.83	8.90	20.73	12.16	9.66	21.82
1999-00	16.62	14.14	30.76	12.42	10.63	23.05	15.72	13.19	28.91
2000-01	18.93	16.36	35.29	10.42	7.79	18.21	23.19	21.50	44.98
2001-02	21.12	20.63	41.75	15.32	15.99	31.30	24.91	26.04	51.02
2002-03	19.00	19.03	38.03	24.85	24.99	49.84	17.16	15.65	32.81
2003-04	20.78	15.80	36.58	25.04	24.29	49.33	13.07	6.93	20.65
2004-05	24.04	16.80	40.83	23.20	18.27	41.47	13.34	4.07	17.97
2005-06	26.69	14.79	41.48	25.08	17.17	42.25	13.68	2.01	16.62
2006-07	26.30	9.23	35.53	25.06	11.71	36.77	13.17	4.70	17.93
2007-08	26.26	11.13	37.39	25.22	12.20	37.43	13.84	5.80	19.75
2008-09 $	4.52	22.54	27.06	1.95	0.83	2.78	12.86	17.69	30.67

* : Stocks as at end-March.

: Includes coarse grains.

$: Procurement up to July 31, 2008, offtake up to April 30, 2008 and Stock as on May 1, 2008.

Source : Ministry of Food, Consumer Affairs and Public Distribution, Government of India.

APPENDIX TABLE 6 : TRENDS IN INDEX OF INDUSTRIAL PRODUCTION

(Base : 1993-94=100)

Sector	Mining & Quarrying		Manufacturing		Electricity		General	
Weight	10.5		79.4		10.2		100.0	
Period	Index	Growth Rate (per cent)	Index	Growth Rate (per cent)	Index	Growth Rate (per cent)	Index	Growth Rate (per cent)
1	2	3	4	5	6	7	8	9
2003-04	146.9	5.3	196.6	7.4	172.6	5.0	189.0	7.0
		(6.2)		(86.4)		(6.8)		(100.0)
2004-05	153.4	4.4	214.6	9.1	181.5	5.2	204.8	8.4
		(4.3)		(90.4)		(5.7)		(100.0)
2005-06	154.9	1.0	234.2	9.1	190.9	5.2	221.5	8.2
		(0.9)		(93.1)		(5.7)		(100.0)
2006-07	163.2	5.3	263.5	12.5	204.7	7.3	247.1	11.5
		(3.4)		(90.8)		(5.5)		(100.0)
2007-08 P	171.6	5.1	287.2	9.0	217.7	6.3	268.0	8.5
		(4.2)		(90.0)		(6.3)		(100.0)
2006-07								
April-June	158.4	3.6	246.4	11.7	200.9	5.3	232.5	10.5
July-September	145.0	2.6	254.9	13.0	201.2	8.0	237.9	11.8
October-December	166.8	6.9	264.9	11.8	207.7	9.2	248.8	11.2
January-March	182.6	7.7	288.0	13.5	209.2	6.6	268.9	12.5
April-September	151.7	3.1	250.6	12.3	201.0	6.6	235.2	11.1
October-March	174.7	7.3	276.4	12.7	208.5	7.9	258.9	11.9
2007-08 P								
April-June	162.6	2.7	273.7	11.1	217.5	8.3	256.4	10.3
July-September	155.7	7.4	277.7	8.9	215.4	7.1	258.6	8.7
October-December	176.0	5.5	288.5	8.9	217.3	4.6	269.4	8.3
January-March	192.0	5.2	308.9	7.3	220.7	5.5	287.7	7.0
April-September	159.2	4.9	275.7	10.0	216.5	7.7	257.5	9.5
October-March	184.0	5.3	298.7	8.0	219.0	5.1	278.6	7.6
2008-09 P								
April-June	170.2	4.7	289.0	5.6	221.8	2.0	269.7	5.2

P : Provisional.

Note : Figures in parentheses are relative contributions, computed as the ratio (in percentage terms) of the change in the index of the respective industry group to the change in the overall index adjusted for the weight of the relevant industry group.

Source : Central Statistical Organisation.

APPENDIX TABLE 7 : GROWTH IN INDEX OF SEVENTEEN MAJOR INDUSTRY GROUPS OF THE MANUFACTURING SECTOR

(Base : 1993-94=100)

Industry Group	Weight	Index		Percentage Variation		Relative Contribution (Per cent)	
		2006-07	2007-08 P	2006-07	2007-08 P	2006-07	2007-08 P
1	2	3	4	5	6	7	8
I. Acceleration	**23.37**						
1. Wood and wood products, furniture & fixtures	2.70	91.0	127.9	29.1	40.5	2.4	5.3
2. Jute and other vegetable fibre textiles (except cotton)	0.59	90.7	120.7	-15.8	33.0	-0.4	0.9
3. Other manufacturing industries	2.56	298.4	357.4	7.7	19.8	2.4	8.0
4. Beverages, tobacco and related products	2.38	444.5	498.0	11.1	12.0	4.5	6.8
5. Leather and leather & fur products	1.14	150.2	167.8	0.6	11.7	0.0	1.1
6. Chemicals and chemical products except products of petroleum & coal	14.00	283.4	313.4	9.6	10.6	15.0	22.4
II. Deceleration	**53.18**						
7. Basic metal and alloy industries	7.45	278.9	312.7	22.8	12.1	16.6	13.4
8. Machinery and equipment other than transport equipment	9.57	357.1	394.4	14.2	10.5	18.2	19.0
9. Rubber, plastic, petroleum and coal products	5.73	226.3	246.4	12.9	8.9	6.4	6.1
10. Food products	9.08	185.2	198.2	8.5	7.0	5.7	6.3
11. Non-metallic mineral products	4.40	305.8	323.2	12.8	5.7	6.6	4.1
12. Wool, silk and man-made fibre textiles	2.26	268.4	281.2	7.8	4.8	1.9	1.5
13. Cotton textiles	5.52	157.3	164.0	14.8	4.3	4.8	2.0
14. Textile products (including wearing apparel)	2.54	285.0	295.5	11.5	3.7	3.2	1.4
15. Transport equipment and parts	3.98	367.7	378.4	15.0	2.9	8.2	2.3
16. Paper and paper products and printing, publishing and allied activities	2.65	248.6	255.3	8.7	2.7	2.3	0.9
III. Negative	**2.81**						
17. Metal products and parts (except machinery and equipment)	2.81	183.2	172.9	11.4	-5.6	2.3	-1.5
Manufacturing (Total)	**79.36**	**263.5**	**287.2**	**12.5**	**9.0**	**100.0**	**100.0**

P : Provisional.

Note : 1. The industry groups of manufacturing sector have been categorised according to their performance during 2007-08.

2. The relative contribution is computed as the ratio (in percentage terms) of the change in the index of the respective industry group to the change in the overall index adjusted for the weight of the relevant industry group.

Source : Central Statistical Organisation.

APPENDIX TABLE 8 : FREQUENCY DISTRIBUTION OF GROWTH RATES OF SEVENTEEN MAJOR INDUSTRY GROUPS OF THE MANUFACTURING SECTOR - 2003-04 to 2007-08

(Number of years)

Industry Group	Weight	Negative	0-5 %	5-10 %	10-15 %	15+ %	Above 5% (Col. 5+6+7)
1	2	3	4	5	6	7	8
1. Food products	9.08	2	1	2	0	0	2
2. Beverages, tobacco and related products	2.38	0	0	1	3	1	5
3. Cotton textiles	5.52	1	1	2	1	0	3
4. Wool, silk and man-made fibre textiles	2.26	0	3	2	0	0	2
5. Jute and other vegetable fibre textiles (except cotton)	0.59	2	2	0	0	1	1
6. Textile products (including wearing apparel)	2.54	1	1	0	1	2	3
7. Wood and wood products, furniture & fixtures	2.70	2	0	1	0	2	3
8. Paper and paper products and printing, publishing and allied activities	2.65	1	1	1	1	1	3
9. Leather and leather & fur products	1.14	2	1	1	1	0	2
10. Chemicals & chemical products (except products of petroleum & coal)	14.00	0	0	3	2	0	5
11. Rubber, plastic, petroleum and coal products	5.73	0	3	1	1	0	2
12. Non-metallic mineral products	4.40	0	2	1	2	0	3
13. Basic metal and alloy industries	7.45	0	0	2	1	2	5
14. Metal products and parts (except machinery and equipment)	2.81	2	1	1	1	0	2
15. Machinery and equipment other than transport equipment	9.57	0	0	0	3	2	5
16. Transport equipment and parts	3.98	0	2	0	1	2	3
17. Other manufacturing industries	2.56	0	0	2	0	3	5

Source : Based on data of the Central Statistical Organisation.

APPENDIX TABLE 9 : USE-BASED CLASSIFICATION OF INDUSTRIAL PRODUCTION

(Base : 1993-94=100)

Industry Group	Weight	Index			Growth Rate (Per cent)					
		2005-06	2006-07	2007-08 P	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 P
1	2	3	4	5	6	7	8	9	10	11
1. Basic Goods	35.57	189.8	209.3	223.9	4.8 (27.4)	5.5 (25.0)	5.5 (20.9)	6.7 (25.3)	10.3 (27.1)	7.0 (24.8)
2. Capital Goods	9.26	265.8	314.2	370.8	10.5 (16.2)	13.6 (18.0)	13.9 (16.5)	15.7 (20.1)	18.2 (17.5)	18.0 (25.1)
3. Intermediate Goods	26.51	216.4	242.4	264.1	3.9 (19.3)	6.4 (25.4)	6.1 (20.3)	2.5 (8.4)	12.0 (26.9)	8.9 (27.5)
4. Consumer Goods (a+b)	28.66	251.4	276.8	293.6	7.1 (37.0)	7.2 (31.0)	11.7 (42.6)	12.0 (46.3)	10.1 (28.4)	6.1 (23.0)
a) Consumer Durables	5.36	349.9	382.0	378.0	-6.3 (-8.9)	11.6 (11.9)	14.3 (12.9)	15.3 (14.9)	9.2 (6.7)	-1.0 (-1.0)
b) Consumer Non-durables	23.30	228.8	252.6	274.2	12.0 (45.9)	5.8 (19.2)	10.8 (29.6)	10.9 (31.5)	10.4 (21.7)	8.5 (24.1)
IIP - General	**100.00**	**221.5**	**247.1**	**268.0**	**5.8 (100.0)**	**7.0 (100.0)**	**8.4 (100.0)**	**8.2 (100.0)**	**11.5 (100.0)**	**8.5 (100.0)**

P : Provisional.

Note : Figures in parentheses are relative contributions, computed as the ratio (in percentage terms) of the change in the index of the respective industry group to the change in the overall index adjusted for the weight of the relative industry group.

Source : Central Statistical Organisation.

APPENDIX TABLE 10 : GROWTH OF SIX INFRASTRUCTURE INDUSTRIES

(Base : 1993-94=100)

Industry	Weight	Index		Growth Rate (Per cent)				
		2006-07	2007-08 P	2003-04	2004-05	2005-06	2006-07	2007-08 P
1	2	3	4	5	6	7	8	9
1. Electricity	10.17	204.7	217.7	5.0 (30.0)	5.2 (32.1)	5.2 (30.5)	7.3 (28.0)	6.3 (39.2)
2. Coal	3.22	172.8	183.2	5.1 (8.0)	6.2 (10.2)	6.6 (10.4)	5.9 (6.2)	6.0 (9.9)
3. Finished Steel	5.13	330.2	347.1	9.8 (39.4)	8.4 (37.1)	10.8 (46.9)	13.1 (38.9)	5.1 (25.7)
4. Cement	1.99	281.4	304.1	6.1 (8.8)	6.6 (10.0)	12.4 (18.1)	9.1 (9.3)	8.1 (13.4)
5. Crude Petroleum	4.17	125.8	126.2	0.7 (1.3)	1.8 (3.3)	-5.2 (-8.8)	5.5 (5.5)	0.4 (0.6)
6. Petroleum Refinery Products	2.00	274.6	292.5	8.2 (12.4)	4.3 (7.0)	2.1 (3.3)	12.9 (12.4)	6.5 (10.7)
Composite Index of Infrastructure Industries #	**26.68**	**223.6**	**236.2**	**6.1 (100.0)**	**5.8 (100.0)**	**6.1 (100.0)**	**9.3 (100.0)**	**5.6 (100.0)**

P : Provisional.

: Estimate based on weighted industry-wise index.

Note : Figures in brackets are relative contributions. The relative contribution is computed as the ratio (in percentage terms) of the change in the index of the respective industry group to the change in the overall index adjusted for the weight of the relative industry group.

Source : Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India.

APPENDIX TABLE 11 : GROSS DOMESTIC SAVING AND INVESTMENT

Item	Per cent of GDP at current market prices				Amount in Rupees crore		
	10 Plan Average	2004-05	2005-06	2006-07 *	2004-05	2005-06	2006-07 *
1	2	3	4	5	6	7	8
1. Household Saving	**23.7**	**23.0**	**24.2**	**23.8**	**7,25,110**	**8,66,756**	**9,85,822**
of which :							
a) Financial Assets	11.0	10.1	11.8	11.3	3,18,264	4,20,841	4,67,985
b) Physical Assets	12.7	12.9	12.5	12.5	4,06,846	4,45,915	5,17,837
2. Private corporate sector	**6.0**	**6.6**	**7.5**	**7.8**	**2,06,363**	**2,68,329**	**3,22,242**
3. Public sector	**1.7**	**2.2**	**2.6**	**3.2**	**68,951**	**92,263**	**1,33,359**
4. Gross Domestic Saving	**31.4**	**31.8**	**34.3**	**34.8**	**10,00,424**	**12,27,348**	**14,41,423**
5. Net capital inflow	**0.0**	**0.4**	**1.2**	**1.1**	**13,338**	**44,604**	**46,362**
6. Gross Domestic Capital Formation	**31.4**	**32.2**	**35.5**	**35.9**	**10,13,761**	**12,71,953**	**14,87,786**
7. Errors and Omissions	**0.0**	**0.6**	**1.0**	**-0.1**	**17818.0**	**35153.0**	**-4527.0**
8. Gross Capital Formation	**30.8**	**31.6**	**34.5**	**36.0**	**9,95,943**	**12,36,800**	**14,92,313**
of which :							
a) Public sector	6.9	6.9	7.6	7.8	2,16,962	2,72,002	3,21,753
b) Private corporate sector	10.1	10.5	13.3	14.5	3,31,081	4,77,490	6,03,014
c) Household sector	12.8	12.9	12.5	12.5	4,06,846	4,45,916	5,17,837
d) Valuables #	1.0	1.3	1.2	1.2	41,054	41,392	49,709
Memo:							
Total Consumption Expenditure (a+b)		69.2	67.8	66.1			
a) Private Final Consumption Expenditure		58.4	57.4	55.8			
b) Government Final Consumption Expenditure		10.7	10.4	10.3			
Saving-Investment Balance(4-6)		-0.4	-1.2	-1.1			
Public Sector Balance		-4.7	-5.0	-4.5			
Private Sector Balance		6.1	5.9	4.5			
a) Private Corporate Sector		-4.0	-5.8	-6.8			
b) Household Sector		10.1	11.8	11.3			
GDP at Market Prices (at current prices)		31,49,412	35,80,344	41,45,810			

* : Quick Estimates.

\# : Valuables cover the expenditures made on acquisition of valuables, excluding works of art and antiques.

Source : Central Statistical Organisation.

APPENDIX TABLE 12 : FINANCIAL SAVING OF THE HOUSEHOLD SECTOR (GROSS)

Item	Per cent to Total Financial Saving			Rupees crore		
	2005-06 (P)	2006-07 (P)	2007-08 #	2005-06 (P)	2006-07 (P)	2007-08 #
1	2	3	4	5	6	7
Financial Saving (Gross)	**100.0**	**100.0**	**100.0**	**5,97,867**	**7,68,967**	**7,34,699**
	(16.7)	**(18.5)**	**(15.6)**			
a) Currency	8.9	8.6	10.9	53,071	66,323	80,342
	(1.5)	(1.6)	(1.7)			
b) Deposits	47.0	55.3	56.5	2,80,772	4,25,050	4,15,245
	(7.8)	(10.3)	(8.8)			
i) With Banks	46.0	54.3	55.3	2,74,747	4,17,228	4,06,448
ii) With Non-banking Companies	1.0	1.0	1.2	6,130	7,873	8,772
iii) With Co-operative Banks and Societies	0.0	0.0	0.0	117	131	183
iv) Trade Debt (Net)	0.0	0.0	0.0	-222	-183	-158
c) Share and Debentures	5.1	6.6	10.5	30,735	51,086	77,073
	(0.9)	(1.2)	(1.6)			
i) Private Corporate Business	1.3	1.4	2.7	8,034	10,953	19,828
ii) Banking	0.1	0.1	0.1	366	403	443
iii) Units of Unit Trust of India	-0.1	0.0	0.0	-444	-310	-325
iv) Bonds of public Sector undertakings	0.0	0.0	0.0	172	237	328
v) Mutual Funds (Other than UTI)	3.8	5.2	7.7	22,606	39,803	56,799
d) Claims on Government	14.6	5.3	-3.7	87,168	40,627	-27,042
	(2.4)	(1.0)	(-0.6)			
i) Investment in Government securities	2.4	0.2	-2.0	14,390	1,667	-14,763
ii) Investment in Small Savings, etc.	12.2	5.1	-1.7	72,778	38,960	-12,279
e) Insurance Funds	14.0	14.9	17.5	83,540	1,14,889	1,28,878
	(2.3)	(2.8)	(2.7)			
i) Life Insurance Funds	13.4	14.4	16.9	80,020	1,10,965	1,24,422
ii) Postal Insurance	0.3	0.3	0.4	1,962	2,200	3,045
iii) State Insurance	0.3	0.2	0.2	1,559	1,724	1,411
f) Provident and Pension Funds	10.5	9.2	8.2	62,581	70,992	60,204
	(1.7)	(1.7)	(1.3)			
Memo :						
GDP at Market Prices (at current prices)				35,80,344	41,45,810	47,13,148

P : Provisional.

: Preliminary Estimates.

Note : 1. Figures in parentheses are percentage to GDP at current market prices.

2. Components may not add up to the totals due to rounding off.

APPENDIX TABLE 13 : VARIATIONS IN RESERVE MONEY

(Amount in Rupees crore)

Item	Outstanding as on March 31, 2008	Variations							
		Financial year				April-June			
		2006-07		2007-08		2007-08		2008-09	
		Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6	7	8	9	10
Reserve Money (C.1+C.2+C.3 = S.1+S.2+S.3+S.4+S.5-S.6)	**9,28,417**	**1,35,935**	**23.7**	**2,19,427**	**30.9**	**11,630**	**1.6**	**3,155**	**0.3**
Components									
C.1. Currency in Circulation	5,90,901	73,523	17.1	86,702	17.2	16,866	3.3	36,795	6.2
C.2. Bankers' Deposits with the RBI	3,28,447	61,784	45.6	1,31,152	66.5	-4,800	-2.4	-29,333	-8.9
of which:									
Scheduled Commercial Banks	3,11,880	59,261	46.6	1,25,558	67.4	-5,722	-3.1	-30,480	-9.8
C.3. 'Other' Deposits with the RBI	9,069	628	9.1	1,573	21.0	-436	-5.8	-4,308	-47.5
Sources									
S.1. Net RBI Credit to Government (a+b)	-1,13,209	-4,176		-1,15,632		-22,154		-13	
a) Net RBI credit to Central Government (i-ii)	-1,14,636	-3,024		-1,16,772		-21,825		1,430	
i) Claims on Central Government	1,14,725	26,620		17,542		-34,156		-39,240	
ii) Deposits of Central Government	2,29,361	29,644		1,34,314		-12,330		-40,670	
b) Net RBI credit to State Governments (i-ii)	1,427	-1,152		1,140		-328		-1,443	
i) Claims on State Governments	1,468	-1,152		1,140		-328		-1,443	
ii) Deposits of State Governments	41	0		0		0		0	
S.2. RBI's Claims on Commercial and Co-operative Banks	4,590	4,838		-3,045		-6,299		-2,978	
of which:									
Loans and Advances to Scheduled Commercial Banks	4,571	4,822		-1,739		-6,209		-2,959	
S.3. RBI's Credit to Commercial Sector	1,788	150	10.8	251	16.3	-151	-9.8	-381	-21.3
S.4. Net Foreign Exchange Assets of the RBI	**12,36,130**	**1,93,170**	**28.7**	**3,69,977**	**42.7**	**-2,745**	**-0.3**	**1,03,932**	**8.4**
S.5. Government's Currency Liabilities to the Public	9,324	-493	-5.6	1,064	12.9	166	2.0	161	1.7
S.6. Net Non-monetary Liabilities of the RBI	2,10,206	54,556	44.5	33,187	18.7	-42,812	-24.2	97,567	46.4
S.7. Net Domestic Assets of the RBI (S.1+S.2+S.3+S.5-S.6)	**-3,07,713**	**-57,234**	**57.3**	**-1,50,550**	**95.8**	**14,375**	**-9.1**	**-1,00,777**	**32.8**

Note : Data are Provisional.

APPENDIX TABLE 14 : RESERVE BANK OF INDIA (RBI) SURVEY

(Amount in Rupees crore)

Item	Outstanding as on March 31, 2008	Variations							
		Financial year				April-June			
		2006-07		2007-08		2007-08		2008-09	
		Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6	7	8	9	10
Components									
C.I Currency in Circulation	5,90,901	73,523	17.1	86,702	17.2	16,866	3.3	36,795	6.2
C.II Bankers' Deposits with the RBI	3,28,447	61,784	45.6	1,31,152	66.5	-4,800	-2.4	-29,333	-8.9
C.II.1 Scheduled Commercial Banks	3,11,880	59,261	46.6	1,25,558	67.4	-5,722	-3.1	-30,480	-9.8
C.III 'Other' Deposits with the RBI	9,069	628	9.1	1,573	21.0	-436	-5.8	-4,308	-47.5
Reserve Money (C.I+C.II+C.III = S.I + S.II + S.III - S.IV - S.V)	**9,28,417**	**1,35,935**	**23.7**	**2,19,427**	**30.9**	**11,630**	**1.6**	**3,155**	**0.3**
Sources									
S.I RBI's Domestic Credit (S.I.1+S.I.2+S.I.3)	-1,06,831	-2,186		-1,18,426		-28,604		-3,372	
S.I.1 Net RBI Credit to the Government (S.I.1.1+S.I.1.2)	-1,13,209	-4,176		-1,15,632		-22,154		-13	
S.I.1.1 Net RBI Credit to the Central Government (S.I.1.1.1+S.I.1.1.2+S.I.1.1.3+S.I.1.1.4-S.I.1.1.5)	-114,636	-3,024		-1,16,772		-21,825		1,430	
S.I.1.1.1 Loans and Advances to the Central Government	0	0		0		0		0	
S.I.1.1.2 Investments in Treasury Bills	0	0		0		0		0	
S.I.1.1.3 Investments in Dated Government Securities	1,14,593	26,763	38.0	17,421	17.9	-34,284	-35.3	-39,239	-34.2
S.I.1.1.3.1 Central Government Securities	1,13,547	26,763	38.6	17,421	18.1	-34,284	-35.7	-39,239	-34.6
S.I.1.1.4 Rupee Coins	132	-143		121		128		-1	
S.I.1.1.5 Deposits of the Central Government	2,29,361	29,644		1,34,314		-12,330		-40,670	
S.I.1.2 Net RBI Credit to State Governments	1,427	-1,152		1,140		-328		-1,443	
S.I.2 RBI's Claims on Banks	4,590	4,838		-3,045		-6,299		-2,978	
S.I.2.1 Loans and Advances to Scheduled Commercial Banks	4,571	4,822		-1,739		-6,209		-2,959	
S.I.3 RBI's Credit to Commercial Sector	1,788	-2,848	-64.9	251	16.3	-151	-9.8	-381	-21.3
S.I.3.1 Loans and Advances to Primary Dealers	405	153		252		-153		-230	
S.I.3.2 Loans and Advances to NABARD	0	-2,998		0		0		0	
S.II Government's Currency Liabilities to the Public	9,324	-493	-5.6	1,064	12.9	166	2.0	161	1.7
S.III Net Foreign Exchange Assets of the RBI	12,36,130	1,93,170	28.7	3,69,977	42.7	-2,745	-0.3	1,03,932	8.4
S.III.1 Gold	40,124	3,899	15.2	10,551	35.7	-1,426	-4.8	-934	-2.3
S.III.2 Foreign Currency Assets	11,96,023	1,89,270	29.2	3,59,426	43.0	-1,318	-0.2	1,04,866	8.8
S.IV Capital Account	1,79,181	40,632	34.8	21,902	13.9	-50,463	-32.1	88,386	49.3
S.V Other Items (net)	31,025	13,924		11,286		7651		9,181	

Note : Data are provisional.

APPENDIX TABLE 15 : VARIATIONS IN MONEY STOCK

(Amount in Rupees crore)

Item	Outstanding as on March 31, 2008	Variations							
		Financial year				April-June			
		2006-07		2007-08		2007-08		2008-09	
		Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6	7	8	9	10
Narrow Money (M_1)[C.1+C.2(a)+C.3]	**11,50,953**	**1,39,714**	**16.9**	**1,84,864**	**19.1**	**-26,229**	**-2.7**	**-45,998**	**-4.0**
Broad Money (M_3) (C.1+C.2+C.3 = S.1+S.2+S.3+S.4-S.5)	**40,06,722**	**5,86,548**	**21.5**	**6,90,629**	**20.8**	**73,824**	**2.2**	**84,387**	**2.1**
Components									
C.1. Currency with the Public	5,67,476	69,786	16.9	84,571	17.5	18,237	3.8	36,481	6.4
C.2. Aggregate Deposits with Banks (a+b)	34,30,177	5,16,134	22.3	6,04,485	21.4	56,023	2.0	52,214	1.5
a) Demand Deposits	5,74,408	69,300	17.1	98,721	20.8	-44,030	-9.3	-78,171	-13.6
b) Time Deposits	28,55,769	4,46,834	23.5	5,05,765	21.5	1,00,053	4.3	1,30,385	4.6
C.3. `Other' Deposits with the RBI	9,069	628	9.1	1,573	21.0	-436	-5.8	-4,308	-47.5
Sources									
S.1. Net Bank Credit to Government (A+B)	**9,07,077**	**69,177**	**9.0**	**72,842**	**8.7**	**28,117**	**3.4**	**32,597**	**3.6**
A. Net RBI Credit to Government (a+b)	-1,13,209	-4,176		-1,15,632		-22,154		-13	
a. Net RBI Credit to Central Government	-1,14,636	-3,024		-1,16,772		-21,825		1,430	
b. Net RBI Credit to State Governments	1,427	-1,152		1,140		-328		-1,443	
B. Other Banks' Credit to Government	10,20,286	73,353	9.7	1,88,474	22.7	50,270	6.0	32,610	3.2
S.2. Bank Credit to Commercial Sector (a+b)	**25,69,912**	**4,37,074**	**25.8**	**4,39,834**	**20.6**	**-30,547**	**-1.4**	**42,252**	**1.6**
a) RBI's Credit to Commercial Sector	1,788	150	10.8	251	16.3	-151	-9.8	-381	-21.3
b) Other Banks' Credit to Commercial Sector	25,68,124	4,36,924	25.8	4,39,583	20.7	-30,395	-1.4	42,633	1.7
S.3. Net Foreign Exchange Assets of Banking Sector (a+b)	**12,95,131**	**1,86,985**	**25.7**	**3,81,952**	**41.8**	**-17,945**	**-2.0**	**1,03,932**	**8.0**
a) RBI's Net Foreign Exchange Assets	12,36,130	1,93,170	28.7	3,69,977	42.7	-2,745	-0.3	1,03,932	8.4
b) Other banks' net Foreign Exchange Assets	59,001	-6,184	-11.6	11,975	25.5	-15,200	-32.3	0	0.0
S.4. Government's Currency Liabilities to the Public	**9,324**	**-493**	**-5.6**	**1,064**	**12.9**	**166**	**2.0**	**161**	**1.7**
S.5. Banking Sector's Net Non-Monetary Liabilities (a+b)	**7,74,723**	**1,06,195**	**22.9**	**2,05,063**	**36.0**	**-94,033**	**-16.5**	**94,555**	**12.2**
a) Net Non-monetary liabilities of RBI	2,10,206	54,556	44.5	33,187	18.7	-42,812	-24.2	97,567	46.4
b) Net Non-monetary liabilities of other banks (residual)	5,64,517	51,640	15.1	1,71,876	43.8	-51,221	-13.0	-3,012	-0.5

Note : Data are provisional.

APPENDIX TABLE 16 : NEW MONETARY AGGREGATES

(Amount in Rupees crore)

Item	Outstanding as on March 31, 2008	Variations							
		Financial year				April-June			
		2006-07		2007-08		2007-08		2008-09	
		Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6	7	8	9	10
Monetary Aggregates									
M_1 (C.I+C.II.1+C.III)	11,52,851	1,39,139	16.8	1,83,442	18.9	-26,416	-2.7	-46,345	-4.0
NM_2 (M_1+C.II.2.1)	24,00,856	3,34,971	20.2	4,10,238	20.6	19,028	1.0	11,082	0.5
NM_3 (NM_2+C.II.2.2+C.IV = S.I+S.II+S.III-S.IV-S.V)	**40,32,699**	**5,77,013**	**21.0**	**7,08,101**	**21.3**	**71,586**	**2.2**	**79,607**	**2.0**
Components									
C.I Currency with the Public	**5,67,615**	**69,834**	**16.9**	**84,638**	**17.5**	**18,279**	**3.8**	**36,512**	**6.4**
C.II Aggregate Deposits of Residents (C.II.1+C.II.2)	**33,49,511**	**5,03,859**	**22.4**	**6,01,222**	**21.9**	**56,727**	**2.1**	**49,066**	**1.5**
C.II.1 Demand Deposits	5,76,167	68,677	16.7	97,232	20.3	-44,259	-9.2	-78,549	-13.6
C.II.2 Time Deposits of Residents (C.II.2.1+C.II.2.2)	27,73,344	4,35,181	23.7	5,03,990	22.2	1,00,986	4.4	1,27,616	4.6
C.II.2.1 Short-term Time Deposits	12,48,005	1,95,832	23.7	2,26,796	22.2	45,444	4.4	57,427	4.6
C.II.2.1.1 Certificates of Deposits (CDs)	1,66,642	52,943		69,200		9,315		-1,431	
C.II.2.2 Long-term Time Deposits	15,25,339	2,39,350	23.7	2,77,195	22.2	55,542	4.4	70,189	4.6
C.III 'Other' Deposits with the RBI	**9,069**	**628**	**9.1**	**1,573**	**21.0**	**-436**	**-5.8**	**-4,308**	**-47.5**
C.IV Call/Term Funding from Financial Institutions	**1,06,504**	**2,692**	**3.2**	**20,668**	**24.1**	**-2,984**	**-3.5**	**-1,664**	**-1.6**
Sources									
S.I Domestic Credit (S.I.1+S.I.2)	**36,31,337**	**5,03,007**	**19.4**	**5,35,200**	**17.3**	**18,642**	**0.6**	**82,772**	**2.3**
S.I.1 Net Bank Credit to the Government (S.I.1.1+S.I.1.2)	8,96,064	69,463	9.2	70,507	8.5	27,716	3.4	31,712	3.5
S.I.1.1 Net RBI Credit to the Government	-1,13,209	-4,176		-1,15,632		-22,154		-13	
S.I.1.2 Credit to the Government by the Banking System	10,09,273	73,639	9.8	1,86,138	22.6	49,870	6.1	31,725	3.1
S.I.2 Bank Credit to the Commercial Sector (S.I.2.1+S.I.2.2)	27,35,273	4,33,544	23.6	4,64,693	20.5	-9,074	-0.4	51,060	1.9
S.I.2.1 RBI Credit to the Commercial Sector	1,788	-2,848	-64.9	251	16.3	-151	-9.8	-381	-21.3
S.I.2.2 Credit to the Commercial Sector by the Banking System	27,33,485	4,36,391	23.8	4,64,442	20.5	-8,923	-0.4	51,441	1.9
S.I.2.2.1 Other Investments (Non-SLR Securities)	1,79,572	5,114	3.5	30,155	20.2	23,487	15.7	9,626	5.4
S.II Government's Currency Liabilities to the Public	**9,324**	**-493**	**-5.6**	**1,064**	**12.9**	**166**	**2.0**	**161**	**1.7**
S.III Net Foreign Exchange Assets of the Banking Sector (S.III.1+S.III.2)	**11,65,934**	**1,98,173**	**31.6**	**3,40,392**	**41.2**	**73**	**0.0**	**84,185**	**7.2**
S.III.1 Net Foreign Exchange Assets of the RBI	12,36,130	1,93,170	28.7	3,69,977	42.7	-2,745	-0.3	1,03,932	8.4
S.III.2 Net Foreign Currency Assets of the Banking System	-70,196	5,004	-11.0	-29,585	72.8	2,817	-6.9	-19,748	28.1
S.IV Capital Account	**4,75,973**	**65,706**	**20.6**	**91,723**	**23.9**	**-23,650**	**-6.2**	**1,31,377**	**27.6**
S.V Other items (net)	**2,97,923**	**57,968**	**35.5**	**76,831**	**34.8**	**-29,055**	**-13.1**	**-43,865**	**-14.7**

Note : Data are provisional.

APPENDIX TABLE 17: LIQUIDITY AGGREGATES

(Amount in Rupees Crore)

Month/Year	NM_3	Postal Deposits	L_1	Liabilities of Financial Institutions				L_2	Public Deposits with NBFCs	L_3
				Term Money Borrowings	CDs	Term Deposits	Total			
1	2	3	**4=(2+3)**	5	6	7	8=(5+6+7)	**9=(4+8)**	10	**11=(9+10)**
2006-07										
April	**27,84,883**	1,04,700	**28,89,583**	2,656	31	245	2,932	**28,92,515**		
May	**27,88,335**	1,05,852	**28,94,187**	2,656	31	245	2,932	**28,97,119**		
June	**28,01,951**	1,07,171	**29,09,122**	2,656	31	245	2,932	**29,12,054**	22,623	**29,34,677**
July	**28,46,735**	1,08,492	**29,55,227**	2,656	31	245	2,932	**29,58,159**		
August	**28,90,723**	1,09,931	**30,00,654**	2,656	31	245	2,932	**30,03,586**		
September	**29,65,093**	1,11,023	**30,76,116**	2,656	31	245	2,932	**30,79,048**	25,578	**31,04,625**
October	**29,59,194**	1,11,997	**30,71,191**	2,656	31	245	2,932	**30,74,123**		
November	**30,03,278**	1,13,240	**31,16,518**	2,656	31	245	2,932	**31,19,450**		
December	**30,21,785**	1,14,365	**31,36,150**	2,656	31	245	2,932	**31,39,082**	24,623	**31,63,706**
January	**30,84,631**	1,14,759	**31,99,390**	2,656	31	245	2,932	**32,02,322**		
February	**31,52,769**	1,14,804	**32,67,573**	2,656	31	245	2,932	**32,70,505**		
March	**33,24,598**	1,15,549	**34,40,147**	2,656	31	245	2,932	**34,43,079**	24,697	**34,67,776**
2007- 08										
April	**33,28,180**	1,15,589	**34,43,769**	2,656	31	245	2,932	**34,46,701**		
May	**33,43,121**	1,16,135	**34,59,256**	2,656	31	245	2,932	**34,62,188**		
June	**33,96,184**	1,16,573	**35,12,757**	2,656	31	245	2,932	**35,15,689**	25,619	**35,41,308**
July	**34,63,052**	1,16,874	**35,79,926**	2,656	31	245	2,932	**35,82,858**		
August	**34,97,583**	1,16,886	**36,14,469**	2,656	31	245	2,932	**36,17,401**		
September	**35,96,806**	1,16,882	**37,13,688**	2,656	31	245	2,932	**37,16,620**	25,968	**37,42,588**
October	**36,21,994**	1,16,886	**37,38,880**	2,656	31	245	2,932	**37,41,812**		
November	**36,81,864**	1,16,994	**37,98,858**	2,656	31	245	2,932	**38,01,790**		
December	**37,16,924**	1,16,901	**38,33,825**	2,656	31	245	2,932	**38,36,757**	25,968	**38,62,725**
January	**38,17,808**	1,15,871	**39,33,679**	2,656	31	245	2,932	**39,36,611**		
February	**39,04,454**	1,14,579	**40,19,033**	2,656	31	245	2,932	**40,21,965**		
March	**40,32,699**	1,14,851	**41,47,550**	2,656	31	245	2,932	**41,50,482**	25,968	**41,76,451**
2008 - 09										
April	**40,42,653**	1,14,497	**41,57,150**	2,656	31	245	2,932	**41,60,082**		
May	**40,96,096**	1,15,131	**42,11,227**	2,656	31	245	2,932	**42,14,159**		
June	**41,12,306**	1,15,471	**42,27,777**	2,656	31	245	2,932	**42,30,709**	25,968	**42,56,677**

CDs: Certificates of Deposit; L_1, L_2 and L_3: Liquidity Aggregates; NBFCs: Non-Banking Financial Companies

Notes :
1. Postal Deposits comprise post office savings bank deposits, post office time deposits, post office recurring deposits, other deposits and post office cumulative time deposits.
2. Financial Institutions (FIs), here, comprise IFCI, EXIM Bank, IIBI, SIDBI, NABARD, NHB, TFCI and IDFC. Since October 2004, data on FI's do not include that of IDBI reflecting its conversion into a banking entity.
3. Since July 2001, the term money borrowings of the FIs comprise borrowings from corporate and others.
4. Since August 2002,Term Deposits include CP and Others.
5. Estimates of public deposits are generated on the basis of returns received from all NBFCs with public deposits of Rs. 20 crore and more as had been recommended by the Working Group.
6. While L_1 and L_2 are compiled on a monthly basis, L_3 is compiled on a quarterly basis.
7. Data are provisional. Wherever data are not available, the estimates for the last available month have been repeated.

APPENDIX TABLE 18 : IMPORTANT BANKING INDICATORS - SCHEDULED COMMERCIAL BANKS

(Amount in Rupees crore)

Item		Outstanding as on March 28, 2008	Variations							
			Financial year				April-June			
			2006-07		2007-08		2007-08		2008-09 P	
			Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent
1		2	3	4	5	6	7	8	9	10
1	**Gross Demand and Time Liabilites (2+3+4+6)**	**36,99,953**	**5,72,411**	**23.3**	**6,71,405**	**22.2**	**17,074**	0.6	**38,407**	**1.0**
2	**Aggregate Deposits (a+b)**	**31,96,939**	**5,02,885**	**23.8**	**5,85,006**	**22.4**	**54,791**	2.1	**52,837**	**1.7**
	a. Demand Deposits	524,310	65,091	17.9	94,579	22.0	-41,898	-9.7	**-76,061**	**-14.5**
	b. Time Deposits	26,72,630	4,37,794	25.1	4,90,427	22.5	96,689	4.4	**1,28,898**	**4.8**
3	Other Borrowings #	1,06,504	2,692	3.2	20,668	24.1	-2,984	-3.5	**-1,664**	**-1.6**
4	Other Demand and Time Liabilities	2,98,355	53,454	28.3	56,122	23.2	-21,948	-9.1	**-3,709**	**-1.2**
5	Borrowings from the RBI	4,000	4,757	319.8	-2,245	-35.9	-6,144	-98.4	**-2,388**	**-59.7**
6	Inter-bank Liabilities	98,154	13,380	17.8	9,609	10.9	-12,785	-14.4	**-9,057**	**-9.2**
7	**Bank Credit (a+b)**	**23,61,914**	**4,24,112**	**28.1**	**4,30,724**	**22.3**	**-36,348**	-1.9	**30,534**	**1.3**
	a. Food Credit	44,399	5,830	14.3	-2,121	-4.6	-2,564	-5.5	**5,748**	**12.9**
	b. Non-food Credit	23,17,515	4,18,282	28.5	4,32,846	23.0	-33,784	-1.8	**24,786**	**1.1**
8	**Investments (a+b)**	**9,71,715**	**74,062**	**10.3**	**1,80,199**	**22.8**	**49,683**	6.3	**36,233**	**3.7**
	a. Government Securities	9,58,661	75,316	10.7	1,82,603	23.5	50,067	6.5	**30,064**	**3.1**
	b. Other approved Securities	13,053	-1,255	-7.5	-2,405	-15.6	-384	-2.5	**6,169**	**47.3**
9	Cash in Hand	18,044	3,093	23.7	1,905	11.8	-54	-0.3	**1,730**	**9.6**
10	Balances with the RBI	2,57,122	53,161	41.8	76,900	42.7	378	0.2	**24,277**	**9.4**
11	Inter-Bank Assets	90,877	23,049	42.4	13,435	17.3	-12,534	-16.2	**-3,029**	**-3.3**
12	Credit-Deposit Ratio (%)	73.9		84.3		73.6		-66.3		**57.8**
13	Non-food Credit-Deposit Ratio (%)	72.5		83.2		74.0		-61.7		**46.9**
14	Investment-Deposit Ratio (%)	30.4		14.7		30.8		90.7		**68.6**

P : Provisional.

 # : Other than from RBI/IDBI/NABARD/EXIM Bank.

APPENDIX TABLE 19 : COMMERCIAL BANK SURVEY

(Amount in Rupees crore)

Item	Outstanding as on March 28, 2008	Variations							
		Financial year				April-June			
		2006-07		2007-08		2007-08		2008-09	
		Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6	7	8	9	10
Components									
C.I Aggregate Deposits of Residents (C.I.1+C.I.2)	**31,40,004**	**4,94,699**	**24.1**	**5,95,531**	**23.4**	**58,993**	**2.3**	**51,048**	**1.6**
C.I.1 Demand Deposits	5,24,310	65,091	17.9	94,579	22.0	-41,898	-9.7	-76,061	-14.5
C.I.2 Time Deposits of Residents (C.I.2.1+C.I.2.2)	26,15,695	4,29,609	25.5	5,00,952	23.7	1,00,890	4.8	1,27,108	4.9
C.I.2.1 Short-term Time Deposits	11,77,063	1,93,324	25.5	2,25,429	23.7	45,401	4.8	57,199	4.9
C.I.2.1.1 Certificates of Deposits (CDs)	1,66,642	52,943		69,200		9,315		-1,431	
C.I.2.2 Long-term Time Deposits	14,38,632	2,36,285	25.5	2,75,524	23.7	55,490	4.8	69,910	4.9
C.II Call/Term Funding from Financial Institutions	**1,06,504**	**2,692**	**3.2**	**20,668**	**24.1**	**-2,984**	**-3.5**	**-1,664**	**-1.6**
Sources									
S.I Domestic Credit (S.I.1+S.I.2)	35,07,759	5,01,718	21.2	6,41,799	22.4	36,539	1.3	75,597	2.2
S.I.1 Credit to the Government	9,58,661	75,316	10.7	1,82,603	23.5	50,067	6.5	30,064	3.1
S.I.2 Credit to the Commercial Sector (S.I.2.1+S.I.2.2+S.I.2.3+S.I.2.4)	25,49,097	4,26,402	25.6	4,59,196	22.0	-13,527	-0.6	45,533	1.8
S.I.2.1 Bank Credit	23,61,914	4,24,112	28.1	4,30,724	22.3	-36,348	-1.9	30,534	1.3
S.I.2.1.1 Non-food Credit	23,17,515	4,18,282	28.5	4,32,846	23.0	-33,784	-1.8	24,786	1.1
S.I.2.2 Net Credit to Primary Dealers	3,521	-1,570	-35.9	721	25.8	-282	-10.1	-797	-22.6
S.I.2.3 Investments in Other Approved Securities	13,053	-1,255	-7.5	-2,405	-15.6	-384	-2.5	6,169	47.3
S.I.2.4 Other Investments (in non-SLR Securities)	1,70,609	5,114	3.8	30,155	21.5	23,487	16.7	9,626	5.6
S.II Net Foreign Currency Assets of Commercial Banks (S.II.1-S.II.2-S.II.3)	**-70,196**	**5,004**	**-11.0**	**-29,585**	**72.8**	**2,817**	**-6.9**	**-19,748**	**28.1**
S.II.1 Foreign Currency Assets	31,189	15,260	35.1	-27,564	-46.9	-8,312	-14.1	-8,211	-26.3
S.II.2 Non-resident Foreign Currency Repatriable Fixed Deposits	56,935	8,185	13.8	-10,525	-15.6	-4,202	-6.2	1,789	3.1
S.II.3 Overseas Foreign Currency Borrowings	44,451	2,071	6.9	12,546	39.3	-6,928	-21.7	9,747	21.9
S.III Net Bank Reserves (S.III.1+S.III.2-S.III.3)	**2,71,166**	**51,497**	**37.2**	**81,050**	**42.6**	**6,468**	**3.4**	**28,396**	**10.5**
S.III.1 Balances with the RBI	2,57,122	53,161	41.8	76,900	42.7	378	0.2	24,277	9.4
S.III.2 Cash in Hand	18,044	3,093	23.7	1,905	11.8	-54	-0.3	1,730	9.6
S.III.3 Loans and Advances from the RBI	4,000	4,757		-2,245		-6,144		-2,388	
S.IV Capital Account	**2,72,622**	**25,074**	**14.1**	**69,821**	**34.4**	**26,813**	**13.2**	**42,991**	**15.8**
S.V Other items (net) (S.I+S.II+S.III-S.IV-C.I-C.II)	**1,89,598**	**35,754**	**24.4**	**7,244**	**4.0**	**-36,996**	**-20.3**	**-8,129**	**-4.3**
S.V.1 Other Demand & Time Liabilities (net of S.II.3)	2,53,905	51,383	32.3	43,576	20.7	-15,020	-7.1	-13,456	-5.3
S.V.2 Net Inter-Bank Liabilities (other than to PDs)	10,797	-11,239	-44.7	-3,105	-22.3	-533	-3.8	-6,824	-63.2

Note : Data are provisional.

APPENDIX TABLE 20 : SECTORAL DEPLOYMENT OF GROSS BANK CREDIT

(Amount in Rupees crore)

Sector		March 31, 2006	March 31, 2007	March 28, 2008	Variations during 2006-07 Absolute	Variations during 2006-07 Per cent	Variations during 2007-08 Absolute	Variations during 2007-08 Per cent
1		2	3	4	5	6	7	8
I	Gross Bank Credit (II + III)	14,45,531	18,48,166	22,47,437	40,2,635	27.9	3,99,271	21.6
II	Food Credit	40,691	46,927	44,399	6,236	15.3	-2,528	-5.4
III	Non-Food Gross Bank Credit (1 to 4)	14,04,840	18,01,239	22,03,038	3,96,399	28.2	4,01,799	22.3
1	Agriculture & Allied Activities	1,73,972	2,30,398	2,73,658	56,426	32.4	43,260	18.8
2	Industry (Small,Medium & Large)	5,50,444	6,97,334	8,71,900	1,46,890	26.7	1,74,566	25.0
3	Services	3,20,177	4,16,773	5,46,516	96,596	30.2	1,29,743	31.1
	3.1. Transport Operators	17,341	26,519	37,447	9,178	52.9	10,928	41.2
	3.2. Professional and Other Services	15,283	23,926	29,756	8,643	56.6	5,830	24.4
	3.3 .Trade	83,535	1,06,612	1,22,297	23,077	27.6	15,685	14.7
	3.4. Real Estate Loans	26,723	45,206	62,276	18,483	69.2	17,070	37.8
	3.5. Non-Banking Financial Companies	34,305	49,027	75,301	14,722	42.9	26,274	53.6
4	Personal Loans	3,60,248	4,56,734	5,05,390	96,486	26.8	48,656	10.7
	4.1. Consumer Durables	7,106	9,189	8,663	2,083	29.3	-526	-5.7
	4.2. Housing @	1,85,203	2,30,994	2,55,653	45,791	24.7	24,659	10.7
	4.3. Advances against Fixed Deposits (including FCNR (B), NRNR Deposits etc.)	34,417	40,239	45,031	5,822	16.9	4,792	11.9
	4.4. Credit Card Outstandings	9,086	13,416	19,259	4,330	47.7	5,843	43.6
	4.5. Education	9,962	15,209	20,547	5,247	52.7	5,338	35.1
Memo:								
5	Priority Sector	5,10,738	6,34,142	7,38,686	1,23,404	24.2	1,04,544	16.5
	of which, Housing#	1,33,200	1,60,345	1,82,646	27,145	20.4	22,301	13.9

@ : Direct housing loans.

\# : Direct as well as indirect housing loans.

Note : 1. Data are provisional and relate to select scheduled commercial banks. Data also include the figures of Bharat Overseas Bank, which was merged with Indian Overseas Bank on March 31, 2007.

2. Gross bank credit data include bills rediscounted with Reserve Bank, EXIM Bank, other approved financial institutions and Inter-bank participations.

APPENDIX TABLE 21: INDUSTRY-WISE DEPLOYMENT OF GROSS BANK CREDIT

(Amount in Rupees crore)

Sector		Outstanding as on			Variations during			
		March 31, 2006	March 31, 2007	March 28, 2008	2006-07		2007-08	
					Absolute	Per cent	Absolute	Per cent
1		2	3	4	5	6	7	8
1	Industry (Small, Medium and Large Scale)	5,50,444	6,97,334	8,71,900	1,46,890	26.7	1,74,566	25.0
2	Mining and Quarrying (including Coal)	4,146	7,704	10,616	3,558	85.8	2,912	37.8
3	Food Processing	30,946	39,999	50,221	9,053	29.3	10,222	25.6
4	Beverage & Tobacco	4,002	4,774	5,641	772	19.3	867	18.2
5	Textiles	58,472	78,971	95,935	20,499	35.1	16,964	21.5
6	Leather and Leather Products	4,486	4,774	5,750	288	6.4	976	20.4
7	Wood and Wood Products	1,497	2,887	3,060	1,390	92.9	173	6.0
8	Paper and Paper Products	9,148	11,588	13,622	2,440	26.7	2,034	17.6
9	Petroleum,Coal Products and Nuclear Fuels	25,150	35,886	41,738	10,736	42.7	5,852	16.3
10	Chemicals and Chemical Products	48,638	55,774	64,391	7,136	14.7	8,617	15.4
11	Rubber,Plastic and their Products	7,250	9,250	10,410	2,000	27.6	1,160	12.5
12	Glass and Glass Ware	1,817	2,564	2,759	747	41.1	195	7.6
12	Cement and Cement Products	7,799	9,389	14,210	1,590	20.4	4,821	51.3
14	Basic Metals and Metal Products	65,896	83,870	1,04,719	17,974	27.3	20,849	24.9
15	All Engineering	34,878	44,026	52,442	9,148	26.2	8,416	19.1
16	Vehicles, Vehicle Parts and Transport Equipments	18,628	20,922	29,152	2,294	12.3	8,230	39.3
17	Gems and Jewellery	20,559	23,850	24,995	3,291	16.0	1,145	4.8
18	Construction	13,303	19,970	28,298	6,667	50.1	8,328	41.7
19	Infrastructure	1,12,853	1,42,975	2,02,296	30,122	26.7	59,321	41.5
20	Other Industries	80,975	98,161	1,11,645	17,186	21.2	13,484	13.7

Note: 1. Data are provisional and relate to select scheduled commercial banks. Data also include the figures of Bharat Overseas Bank, which was merged with Indian Overseas Bank on March 31, 2007.

2. Gross bank credit data include bills rediscounted with Reserve Bank, EXIM Bank, other approved financial institutions and Inter-bank participations.

APPENDIX TABLE 22: RESERVE BANK'S ACCOMMODATION TO SCHEDULED COMMERCIAL BANKS

(Amount in Rupees crore)

tem	2006-07	2007-08				2008-09
	March	June	September	December	March	June
1	2	3	4	5	6	7
1. Export Credit Refinance						
A) Limit	8,110	8,343	7,505	7,819	9,103	9,052
B) Outstanding	4,985	101	45	779	2,825	1,132
Memo Items:						
1. Aggregate Export Credit	1,04,926	1,07,983	1,13,373	1,17,719	1,29,983	1,29,956
2. Export Credit Eligible for Refinance	54,069	55,619	50,037	52,125	60,690	60,347
3. Aggregate Export Credit as Percentage of Net Bank Credit	5.4	5.6	5.6	5.5	5.5	5.4

Note : 1. Data pertain to the last reporting Friday of the month.

2. Effective April 1, 2002, ECR facility is being provided to the banks to the extent of 15 per cent of the outstanding export credit eligible for refinance as at the end of second preceding fortnight.

APPENDIX TABLE 23 : VARIATIONS IN INDEX NUMBERS OF WHOLESALE PRICES
(Base : 1993-94 = 100)

(Per cent)

Major Group/Sub-group/ Commodity	Weight	Variations					
		Year-on-year		Average		Year-on-year	
		2006-07	2007-08	2006-07	2007-08	June 30, 2007	June 28, 2008 P
1	2	3	4	5	6	7	8
All Commodities	**100.0**	**5.9**	**7.7**	**5.4**	**4.7**	**4.4**	**11.9**
I. Primary Articles	**22.0**	**10.7**	**9.7**	**7.8**	**7.7**	**9.3**	**10.8**
1. Food articles	15.4	8.0	6.5	7.7	5.6	7.8	6.1
a) Cereals	4.4	7.4	7.3	7.3	6.3	7.6	7.2
i) Rice	2.4	5.7	9.1	2.9	6.9	5.8	8.4
ii) Wheat	1.4	7.3	5.1	13.1	4.3	9.0	6.7
b) Pulses	0.6	12.5	-1.9	30.5	-4.2	3.0	-0.8
c) Fruits and vegetables	2.9	3.8	8.2	3.9	3.8	9.1	6.3
d) Milk	4.4	8.4	8.7	6.3	8.6	6.7	7.6
e) Eggs, fish and meat	2.2	9.4	2.4	4.4	5.2	9.4	1.4
f) Condiments and spices	0.7	18.0	4.0	29.1	5.0	10.0	10.8
g) Other food articles	0.2	15.6	8.7	19.0	0.7	4.0	19.8
i) Tea	0.2	16.7	6.8	18.7	-5.8	-2.5	26.6
ii) Coffee	0.1	14.1	11.2	19.4	10.1	14.7	10.3
2. Non-food articles	6.1	17.2	11.4	5.0	12.8	13.3	17.4
a) Fibres	1.5	16.5	13.4	4.2	14.9	11.2	35.3
Raw cotton	1.4	21.9	14.0	5.2	17.5	15.1	38.1
b) Oilseeds	2.7	31.6	20.3	5.1	24.3	31.1	18.5
3. Minerals	0.5	17.5	49.9	28.3	13.6	10.1	45.6
II. Fuel, Power, Light and Lubricants	**14.2**	**1.0**	**6.8**	**5.6**	**1.0**	**-1.4**	**16.3**
1. Coking coal	0.2	0.0	10.3	0.0	3.2	0.0	10.3
2. Minerals oil	7.0	0.5	9.3	7.9	1.0	-3.6	25.6
3. Electricity	5.5	2.3	1.5	3.2	0.5	2.4	1.4
III. Manufactured Products	**63.8**	**6.1**	**7.3**	**4.4**	**5.0**	**4.9**	**10.6**
1. Sugar, *Khandsari and Gur*	3.9	-11.4	-3.4	0.6	-13.7	-17.0	0.6
i) Sugar	3.6	-12.7	1.1	0.7	-13.5	-18.5	5.2
ii) *Khandsari*	0.2	-11.3	-1.7	3.0	-16.9	-22.0	12.6
iii) *Gur*	0.1	-4.0	2.9	-3.8	-8.0	-11.8	15.9
2. Edible oils	2.8	14.1	20.0	5.8	13.5	15.8	18.3
3. Cotton textiles	4.2	-1.0	-6.8	3.2	-1.8	2.3	5.4
4. Chemicals and chemical products	11.9	3.6	6.0	3.0	5.6	3.9	9.5
5. Cement	1.7	11.6	5.1	18.5	10.3	10.3	3.5
6. Iron and steel	3.6	8.1	34.2	1.5	10.1	6.7	33.5
7. Machinery and machine tools	8.4	8.1	3.5	5.6	7.1	9.0	5.0
8. Transport equipments and parts	4.3	2.0	3.9	1.6	2.8	2.2	5.6

P : Provisional.

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India.

APPENDIX TABLE 24 : VARIATIONS IN WHOLESALE PRICES - WEIGHTED CONTRIBUTIONS
(Base : 1993-94 = 100)

(Per cent)

Major Group/Sub-group/ Commodity	Weight	Variations					
		Year-on-year		Average		Year-on-year	
		2006-07	2007-08	2006-07	2007-08	June 30, 2007	June 28, 2008 P
1	2	3	4	5	6	7	8
All Commodities	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
I. Primary Articles	**22.0**	**39.0**	**28.2**	**31.3**	**36.4**	**46.3**	**21.0**
1. Food articles	15.4	20.8	13.2	21.9	18.5	27.4	8.3
a) Cereals	4.4	5.3	4.1	5.6	5.7	7.1	2.6
i) Rice	2.4	2.1	2.5	1.2	3.1	2.8	1.5
ii) Wheat	1.4	1.8	1.0	3.3	1.3	2.8	0.8
b) Pulses	0.6	1.4	-0.2	3.4	-0.7	0.5	-0.1
c) Fruits and vegetables	2.9	2.0	3.3	2.4	2.6	6.3	1.7
d) Milk	4.4	5.8	4.7	4.8	7.5	6.4	2.7
e) Eggs, fish and meat	2.2	3.8	0.8	2.0	2.7	5.3	0.3
f) Condiments and spices	0.7	2.0	0.4	3.2	0.8	1.6	0.7
g) Other food articles	0.2	0.4	0.2	0.6	0.0	0.2	0.3
i) Tea	0.2	0.2	0.1	0.3	-0.1	-0.1	0.2
ii) Coffee	0.1	0.2	0.1	0.2	0.2	0.2	0.1
2. Non-food articles	6.1	15.6	8.8	5.2	15.1	16.6	8.8
a) Fibres	1.5	3.1	2.1	0.9	3.6	2.9	3.6
Raw cotton	1.4	3.5	2.0	1.0	3.7	3.4	3.5
b) Oilseeds	2.7	11.0	6.7	2.1	11.6	15.1	4.2
3. Minerals	0.5	2.6	6.2	4.2	2.8	2.2	3.9
II. Fuel, Power, Light and Lubricants	**14.2**	**4.0**	**18.9**	**23.1**	**4.8**	**-7.1**	**29.5**
1. Coking coal	0.2	0.0	0.4	0.0	0.2	0.0	0.2
2. Minerals oil	7.0	1.1	15.1	18.7	2.9	-11.0	27.1
3. Electricity	5.5	2.8	1.4	4.4	0.8	3.9	0.8
III. Manufactured Products	**63.8**	**57.3**	**52.8**	**45.5**	**58.8**	**60.9**	**49.6**
1. Sugar, *Khandsari and Gur*	3.9	-7.0	-1.3	0.4	-9.9	-13.9	0.1
i) Sugar	3.6	-6.6	0.4	0.4	-8.2	-12.9	1.0
ii) *Khandsari*	0.2	-0.3	0.0	0.1	-0.6	-0.9	0.1
iii) *Gur*	0.1	0.0	0.0	0.0	-0.1	-0.1	0.1
2. Edible oils	2.8	4.7	5.5	2.2	5.9	7.1	3.4
3. Cotton textiles	4.2	-0.6	-2.8	1.9	-1.2	1.7	1.4
4. Chemicals and chemical products	11.9	7.1	8.7	6.4	13.3	10.1	9.1
5. Cement	1.7	3.2	1.1	5.0	3.6	3.8	0.5
6. Iron and steel	3.6	6.0	20.1	1.3	9.5	6.8	12.9
7. Machinery and machine tools	8.4	8.6	2.9	6.5	9.4	12.7	2.7
8. Transport equipments and parts	4.3	1.2	1.7	1.0	2.0	1.7	1.6

Source : Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India.

APPENDIX TABLE 25 : ANNUALISED VARIATIONS IN PRICE INDICES (Year-on-year)

(Per cent)

Year/ Month	Wholesale Price Index @	CPI for Industrial Workers #	CPI for Urban Non-manual Employees +	CPI for Agricultural Labourers*
1	2	3	4	5
2000-01	4.9	2.5	5.6	-2.0
	(7.2)	(3.8)	(5.6)	(-0.3)
2001-02	1.6	5.2	4.8	3.0
	(3.6)	(4.3)	(5.1)	(1.1)
2002-03	6.5	4.1	3.8	4.9
	(3.4)	(4.0)	(3.8)	(3.2)
2003-04	4.6	3.5	3.4	2.5
	(5.4)	(3.9)	(3.7)	(3.9)
2004-05	5.1	4.2	4.0	2.4
	(6.4)	(3.8)	(3.6)	(2.6)
2005-06	4.1	4.9	5.0	5.3
	(4.4)	(4.4)	(4.7)	(3.9)
2006-07	5.9 ^	6.7	7.6	9.5
	(5.4)	(6.7)	(6.6)	(7.8)
2007-08	7.7	7.9	6.0	7.9
	(4.7)	(6.2)	(5.9)	(7.5)
2006-07				
April	3.9	5.0	5.0	5.6
May	5.0	6.3	5.8	6.4
June	4.8	7.7	6.5	7.2
July	4.7	6.7	5.7	6.3
August	5.3	6.3	6.1	6.5
September	5.4	6.8	6.6	7.3
October	5.3	7.3	7.2	8.4
November	5.6	6.3	6.7	8.3
December	5.9	6.9	6.9	8.9
January	6.7	6.7	7.4	9.5
February	6.2	7.6	7.8	9.8
March	5.9	6.7	7.6	9.5
2007-08				
April	6.0	6.7	7.7	9.4
May	5.2	6.6	6.8	8.2
June	4.4	5.7	6.1	7.8
July	4.7	6.5	6.9	8.6
August	3.9	7.3	6.4	8.8
September	3.4	6.4	5.7	7.9
October	3.1	5.5	5.5	7.0
November	3.1	5.5	5.1	6.2
December	3.8	5.5	5.1	5.9
January	4.8	5.5	4.8	5.6
February	5.7	5.5	5.2	6.4
March	7.7	7.9	6.0	7.9
2008-09				
April	8.3	7.8	7.0	8.9
May	9.3	7.8	6.8	9.1
June	11.9 P	7.7	7.3	8.8
July	12.0 P	-	-	9.4

P Provisional. @ Base : 1993-94=100.

Base : 1982=100 up to December 2005 and Base : 2001=100 from January 2006.

+ Base : 1984-85=100. * Base : 1986-87=100.

^ The year-on-year inflation comparable with the week ended March 31, 2007 is 4.0 per cent, which represents the variation of April 1, 2006 over April 2, 2005.

Note : Figures in parentheses are on an average basis.

Source : 1.Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India.
2.Labour Bureau, Ministry of Labour and Employment, Government of India.
3.Central Statistical Organisation, Ministry of Planning and Programme Implementation, Government of India.

APPENDIX TABLE 26: MEASURES OF DEFICIT OF THE CENTRAL GOVERNMENT

(Rupees crore)

Year	Fiscal Deficit		Primary Deficit		Net RBI Credit +	Revenue Deficit
	Gross	Net	Gross	Net		
1	2	3	4	5	6	7
1997-98	88,937	63,062	23,300	22,748	12,914	46,449
	(73,204)		(7,567)			
1998-99	1,13,349	79,944	35,466	32,138	11,800	66,976
	(89,560)		(11,678)			
1999-2000	1,04,716	89,910	14,467	33,539	-5,588	67,596
2000-01	1,18,816	1,07,854	19,502	41,351	6,705	85,234
2001-02	1,40,955	1,23,074	33,495	51,152	-5,150	1,00,162
2002-03	1,45,072	1,33,829	27,268	53,647	-28,399	1,07,879
2003-04	1,23,273	1,15,558	-815	30,008	-76,065	98,261
2004-05	1,25,794	1,26,252	-1,140	31,705	-60,177	78,338
2005-06	1,46,435	1,45,743	13,805	35,145	28,417	92,299
2006-07	1,42,573	1,51,245	-7,699	23,497	-3,024	80,222
2007-08BE	1,50,948	1,44,950	-8,047	5,263	..	71,478
2007-08 RE	1,43,653	1,37,158	-28,318	-17,349	-1,16,772	63,488
	1,42,431 #	1,35,936 #	-29,540 #	-18,571 #		
2008-09 BE	1,33,287	1,29,542	-57,520	-42,130	..	55,184
As percentage to GDP at current market prices						
1997-98	5.82	4.13	1.53	1.49	0.85	3.04
	(4.79)		(0.50)			
1998-99	6.47	4.57	2.03	1.84	0.67	3.82
	(5.11)		(0.67)			
1999-2000	5.36	4.61	0.74	1.72	-0.29	3.46
2000-01	5.65	5.13	0.93	1.97	0.32	4.05
2001-02	6.19	5.40	1.47	2.24	-0.23	4.40
2002-03	5.91	5.45	1.11	2.19	-1.16	4.40
2003-04	4.48	4.20	-0.03	1.09	-2.76	3.57
2004-05	3.99	4.01	-0.04	1.01	-1.91	2.49
2005-06	4.09	4.07	0.39	0.98	0.79	2.58
2006-07	3.50	3.65	-0.19	0.57	-0.07	1.94
2007-08 BE	3.30	3.08	-0.17	0.11	..	1.52
2007-08 RE	3.05	2.92	-0.60	-0.37	-2.48	1.35
	(3.02) #	(2.90) #	-(0.63) #	-(0.39) #		
2008-09 BE	2.51	2.44	-1.08	-0.79	..	1.04
Average						
1997-98 to 2006-07	4.90 *	4.52	0.55 *	1.51	-0.38	3.37

RE : Revised Estimates. BE : Budget Estimates. **.. :** Not Available.

+ : As per Reserve Bank records before closure of Government Accounts.

* : Net of States' share in small savings.

: Net of transfer of surplus from Reserve Bank to the Central Government amounting to Rs.34,309 crore and acquisition cost of Reserve Bank's stake in State Bank of India by the Central Government at Rs.35,351 crore.

Note: 1. Revenue deficit is the excess of revenue expenditure over revenue receipts. The net RBI credit to the Central Government is the sum of increase in the Reserve Bank's holdings of i) Treasury Bills, ii) Government of India dated securities, iii) rupee coins and iv) Loans and Advances from the Reserve Bank to Centre since April 1, 1997 adjusted for changes in Centre's cash balances with the Reserve Bank. The gross fiscal deficit is the excess of total expenditure including loans, net of recoveries over revenue receipts (including external grants) and non-debt capital receipts.The net fiscal deficit is the difference between gross fiscal deficit and net lending.The gross primary deficit is the difference between the gross fiscal deficit and interest payments. The net primary deficit denotes net fiscal deficit minus net interest payments. Since April 1, 2006 Reserve Bank is prohibited from subscribing to primary issuance of Government securities.

2. Figures in parentheses are excluding States' share in small savings as per the system of accounting followed since 1999-2000.

3. Negative sign indicates surplus.

Source : Central Government Budget Documents and Reserve Bank records.

APPENDIX TABLE 27 : MAJOR ITEMS OF RECEIPTS AND EXPENDITURES OF THE CENTRAL GOVERNMENT

(Rupees crore)

Item	Average 1997-98 to 2006-07	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)	2007-08 (RE)	2008-09 (BE)
1	2	3	4	5	6	7	8	9
1. Total Receipts (2+5)		4,75,146	5,06,382	5,26,626	5,83,387	6,80,521 @	7,09,373 *	7,50,884
	(15.68)	(17.25)	(16.08)	(14.71)	(14.07)	(14.44)	(15.05)	(14.16)
2. Revenue Receipts (3+4)		2,63,813	3,05,991	3,47,077	4,34,387	4,86,422	5,25,098	6,02,935
	(9.35)	(9.58)	(9.72)	(9.69)	(10.48)	(10.32)	(11.14)	(11.37)
3. Tax Revenue (Net to Centre)		1,86,982	2,24,798	2,70,264	3,51,182	4,03,872	4,31,773	5,07,150
	(6.76)	(6.79)	(7.14)	(7.55)	(8.47)	(8.57)	(9.16)	(9.56)
4. Non-tax Revenue		76,831	81,193	76,813	83,205	82,550	93,325	95,785
of which :	(2.59)	(2.79)	(2.58)	(2.15)	(2.01)	(1.75)	(1.98)	(1.81)
i) Interest Receipts		38,538	32,387	22,032	22,524	19,308	17,464	19,135
	(1.34)	(1.40)	(1.03)	(0.62)	(0.54)	(0.41)	(0.37)	(0.36)
ii) Dividends and Profits		21,160	22,939	25,451	29,309	33,925	36,108	43,204
	(0.64)	(0.77)	(0.73)	(0.71)	(0.71)	(0.72)	(0.77)	(0.81)
5. Capital Receipts		2,11,333	2,00,391	1,79,549	1,49,000	1,94,099 @	1,84,275 *	1,47,949
	(6.34)	(7.67)	(6.36)	(5.01)	(3.59)	(4.12)	(3.91)	(2.79)
6. Total Expenditure (7+8)		4,71,203	4,98,252	5,05,738	5,83,387	6,80,521 @	7,09,373 #	7,50,884
	(15.58)	(17.11)	(15.82)	(14.13)	(14.07)	(14.44)	(15.05)	(14.16)
7. Revenue Expenditure		3,62,074	3,84,329	4,39,376	5,14,609	5,57,900	5,88,586	6,58,119
	(12.72)	(13.14)	(12.20)	(12.27)	(12.41)	(11.84)	(12.49)	(12.41)
of which :								
i) Interest Payments		1,24,088	1,26,934	1,32,630	1,50,272	1,58,995	1,71,971	1,90,807
	(4.35)	(4.50)	(4.03)	(3.70)	(3.62)	(3.37)	(3.65)	(3.60)
ii) Subsidies		44,323	45,957	47,522	57,125	54,330	69,742	71,431
	(1.40)	(1.61)	(1.46)	(1.33)	(1.38)	(1.15)	(1.48)	(1.35)
iii) Defence		43,203	43,862	48,211	51,682	54,078	54,795	57,593
	(1.59)	(1.57)	(1.39)	(1.35)	(1.25)	(1.15)	(1.16)	(1.09)
8. Capital Disbursements		1,09,129	1,13,923	66,362	68,778	1,22,621 @	1,20,787 #	92,765
	(2.86)	(3.96)	(3.62)	(1.85)	(1.66)	(2.60)	(2.56)	(1.75)
of which :								
Capital Outlay		34,150	52,338	55,025	60,254	1,15,123	1,09,795	84,522
	(1.29)	(1.24)	(1.66)	(1.54)	(1.45)	(2.44)	(2.33)	(1.59)
9 Development Expenditure**		1,95,428	2,14,955	2,29,060	2,55,718	3,45,878 @	3,18,834 #	3,60,027
	(6.93)	(7.09)	(6.83)	(6.40)	(6.17)	(7.34)	(6.76)	(6.79)
of which :								
Social Sector		62,778	66,697	78,458	1,02,363	96,286	1,02,014	1,17,620
	(1.98)	(2.28)	(2.12)	(2.19)	(2.47)	(2.04)	(2.16)	(2.22)
10 Non-Development Expenditure**		2,43,298	2,62,904	2,90,677	3,41,278	3,48,847	4,05,325	4,07,504
	(8.80)	(8.83)	(8.35)	(8.12)	(8.23)	(7.40)	(8.60)	(7.68)
Memo Items:								
1. Interest Payments/Revenue Receipts	46.82	47.04	41.48	38.21	34.59	32.69	32.75	31.65
2. Revenue Deficit/Gross Fiscal Deficit	65.43	79.71	62.27	63.03	56.27	47.35	44.20	41.40
3. Net RBI Credit to Centre/ Gross Fiscal Deficit	-9.02	-61.70	-47.84	19.41	-2.12	..	-78.31	..

RE : Revised Estimates. BE : Budget Estimates .. : Not available.

@ : Includes an amount of Rs. 40,000 crore on account of transactions relating to the Reserve Bank's Stake in the State Bank of India (SBI) to the Central Government.

* : Includes an amount of Rs. 34,309 crore which represents the Reserve Bank's surplus transferred to the Central Government on account of transfer of its stake in SBI to the Central Government.

: Includes an amount of Rs. 35,531 crore on account of transactions relating to transfer of Reserve Bank's Stake in SBI to the Central Government.

** : Data on development and non-development expenditures are inclusive of commercial departments.

Note : 1. Figures in parentheses are percentages to GDP.

Source : Central Government Budget Documents and Reserve Bank records.

APPENDIX TABLE 28 : FINANCING OF GROSS FISCAL DEFICIT OF THE CENTRAL GOVERNMENT

(Rupees crore)

Year	Internal Finance				External Finance	Total Finance/ Gross Fiscal Deficit(5+6)
	Market Borrowings #	Other Borrowings @	Drawdown of cash balances *	Total (2+3+4)		
1	2	3	4	5	6	7
1990-91	8,001	22,103	11,347	41,451	3,181	44,632
	(17.9)	(49.5)	(25.4)	(92.9)	(7.1)	(100.0)
1995-96	34,001	16,117	9,807	59,925	318	60,243
	(56.4)	(26.8)	(16.3)	(99.5)	(0.5)	(100.0)
2001-02	90,812	46,038	-1,496	1,35,354	5,601	1,40,955
	(64.4)	(32.7)	-(1.1)	(96.0)	(4.0)	(100.0)
2002-03	1,04,126	50,997	1,883	1,57,006	-11,934	1,45,072
	(71.8)	(35.2)	(1.3)	(108.2)	-(8.2)	(100.0)
2003-04	88,870	51,833	-3,942	1,36,761	-13,488	1,23,273
	(72.1)	(42.0)	-(3.2)	(110.9)	-(10.9)	(100.0)
2004-05	50,939	68,232	-8,130	1,11,041	14,753	1,25,794
	(40.5)	(54.2)	-(6.5)	(88.3)	(11.7)	(100.0)
2005-06	1,06,241	53,610	-20,888	1,38,963	7,472	1,46,435
	(72.6)	(36.6)	-(14.3)	(94.9)	(5.1)	(100.0)
2006-07	1,14,801	14,782	4,518	1,34,101	8,472	1,42,573
	(80.5)	(10.4)	(3.2)	(94.1)	(5.9)	(100.0)
2007-08 (BE)	1,10,827	31,010	0	1,41,837	9,111	1,50,948
	(73.4)	(20.5)	(0.0)	(94.0)	(6.0)	(100.0)
2007-08 (RE)	1,10,727	41,140	-18,184	1,33,683	9,970	1,43,653
	(77.1)	(28.6)	-(12.7)	(93.1)	(6.9)	(100.0)
2008-09(BE)	99,000	16,073	7,225	1,22,298	10,989	1,33,287
	(74.3)	(12.1)	(5.4)	(91.8)	(8.2)	(100.0)

RE: Revised Estimates. BE: Budget Estimates.

: Comprise dated securities and 364-day Treasury Bills.

@ : Other borrowings comprise small savings, state provident funds, special deposits, reserve funds, Treasury Bills (excluding 364-day Treasury Bill). From 1999-2000 onwards, small savings and public provident funds are represented through NSSF's investment in Central Government special securities. Also includes NSSF's investment of redemption proceeds in Central Government special securities since 2003-04.

* : Prior to 1997, represents variations in 91-day Treasury Bills issued net of changes in cash balances with the Reserve Bank.

Note : 1. Figures in parentheses represent percentages to total finance (gross fiscal deficit).
2. Since 1999-2000, gross fiscal deficit excludes the States' share in small savings.
3. Market borrowings are exclusive of amount raised under Market Stabilisation Scheme (MSS) effective from 2004-05.

Source : Central Government Budget Documents and Reserve Bank records.

APPENDIX TABLE 29 : OUTSTANDING LIABILITIES OF THE CENTRAL GOVERNMENT

(Rupees crore)

Year	Internal Debt	Small Savings, Provident Funds, Special Deposits, and Other Items	Reserve Fund and Deposits	Total Internal Liabilities (2+3+4)	External Liabilities *	Total Liabilities (5+6)
1	2	3	4	5	6	7
1990-91	1,54,004	1,07,107	21,922	2,83,033	31,525	3,14,558
	(27.0)	(18.8)	(3.8)	(49.7)	(5.5)	(55.2)
1995-96	3,07,869	2,13,435	33,680	5,54,983	51,249	6,06,232
	(25.8)	(17.9)	(2.8)	(46.6)	(4.3)	(50.9)
2001-02	9,13,061	3,08,668	73,133	12,94,862	71,546	13,66,408
	(40.1)	(13.5)	(3.2)	(56.8)	(3.1)	(60.0)
2002-03	10,20,689	3,98,774	80,126	14,99,589	59,612	15,59,201
	(41.6)	(16.2)	(3.3)	(61.1)	(2.4)	(63.5)
2003-04	11,41,706	4,56,472	92,376	16,90,554	46,124	17,36,678
	(41.4)	(16.6)	(3.4)	(61.4)	(1.7)	(63.0)
2004-05	12,75,971	5,64,584	92,989	19,33,544	60,878	19,94,422
	(40.5)	(17.9)	(3.0)	(61.4)	(1.9)	(63.3)
2005-06	13,89,758	6,66,682	1,09,462	21,65,902	94,243	22,60,145
	(38.8)	(18.6)	(3.1)	(60.5)	(2.6)	(63.1)
2006-07	15,44,975	7,59,610	1,31,295	24,35,880	1,02,716	25,38,596
	(37.3)	(18.3)	(3.2)	(58.8)	(2.5)	(61.2)
2007-08 (RE)	18,44,110	8,05,432	1,34,810	27,84,352	1,12,686	28,97,038
	(39.1)	(17.1)	(2.9)	(59.1)	(2.4)	(61.5)
2008-09 (BE)	19,72,532	8,32,857	1,33,849	29,39,238	1,23,675	30,62,913
	(37.2)	(15.7)	(2.5)	(55.4)	(2.3)	(57.7)

RE : Revised Estimates BE : Budget Estimates.

* : At historical exchange rate.

Note : 1. Figures in parentheses represent percentages to GDP.

2. Begining 1999-2000 Centre's share in small saving collection has been converted into Central Government special securities and are part of Internal Debt.

3. Market borrowings include amounts raised under Market Stabilisation Scheme (MSS) effective from 2004-05.

Source : Central Government Budget Documents.

APPENDIX TABLE 30: BUDGETARY OPERATIONS OF THE STATE GOVERNMENTS

A : Measures of Deficit of State Governments (Rupees crore)

Year	Fiscal Deficit		Primary Deficit		Net RBI	Conventional	Revenue
	Gross	Net	Gross	Net	Credit*	Deficit	Deficit
1	2	3	4	5	6	7	8
1990-91	18,787	14,532	10,132	8,281	420	-72	5,309
1995-96	30,870	26,846	9,031	10,792	16	-2,680	8,620
2000-01	87,922	85,576	36,937	45,551	-1,092	-2,379	55,316
2006-07 P	77,509	71,300	-15,654	-10,039	640	-16,078	-24,857
2007-08 (RE) P	1,07,958	97,404	5,080	7,567	-3,486	24,122	-22,526
2008-09 (BE) P	1,12,653	1,01,733	4,270	6,036	..	-2,524	-28,426
As percentage to GDP at current market prices							
1990-91	3.30	2.55	1.78	1.45	0.07	-0.01	0.93
1995-96	2.59	2.25	0.76	0.91	0.00	-0.22	0.72
2000-01	4.18	4.07	1.76	2.17	-0.05	-0.11	2.63
2006-07 P	1.87	1.72	-0.38	-0.24	0.06	-0.39	-0.60
2007-08 (RE) P	2.29	2.07	0.11	0.16	-0.06	0.51	-0.48
2008-09 (BE) P	2.12	1.92	0.08	0.11	..	-0.05	-0.54

B : Select Budgetary Variables of State Governments (Per cent)

Item	1990-00 (Average)	2006-07 P	2007-08 P (RE)	2008-09 P (BE)
1	2	3	4	5
1. GFD / Total Expenditure (excluding recoveries)	22.4	12.3	14.1	12.9
2. Revenue Deficit / Revenue Expenditure	9.5	-4.9	-3.7	-4.1
3. Conventional Deficit / Aggregate Disbursements	-0.04	2.4	-3.1	0.3
4. Revenue Deficit / GFD	36.2	-32.1	-20.9	-25.2
5. Non-Development Revenue Expenditure / Revenue Receipts	39.8	39.1	37.3	37.3
6. Interest Payments/Revenue Receipts	16.6	17.6	16.4	15.1
7. Development Expenditure/GDP	10.0	9.5	10.5	10.5
of which :				
Social Sector Expenditure/GDP	5.7	5.4	6.1	6.3
8. Non-Development Expenditure/GDP	4.6	5.1	5.1	5.2
9. States' Own Tax Revenue/GDP	5.2	6.1	6.2	6.4
10. States' Own Non Tax Revenue/GDP	1.7	1.5	1.3	1.3

RE: Revised Estimates. BE: Budget Estimates. .. Not Available.
GFD: Gross Fiscal Deficit. P: Provisional data.
*: Data pertain to State Governments having accounts with the Reserve Bank of India.

Note : 1. The net RBI credit to State Governments refers to variations in loans and advances given to them by the Reserve Bank net of their incremental deposits with the Reserve Bank.
2. Negative sign (-) indicates surplus in deficit indicators.

Source : Budget Documents of the State Governments and the Reserve Bank Records.

APPENDIX TABLE 31: FINANCING OF GROSS FISCAL DEFICIT AND OUTSTANDING LIABILITIES OF STATE GOVERNMENTS

A. Financing of Gross Fiscal Deficit of State Governments (Rupees crore)

Year	Market Borrow-ings	Loans from Centre	Loans against Securities issued to NSSF	Loans from LIC, NABARD, NCDC, *etc.*	Provident Funds, *etc.*	Reserve Funds	Deposits and Advances	Suspense and Miscell-aneous	Remitt-ances	Others #	Overall Surplus (-)/ Deficit (+)	Gross Fiscal Deficit (2 to12)
1	2	3	4	5	6	7	8	9	10	11	12	13
1990-91	2,556	9,978	-	241	3,069	1,120	1,670	376	-154	4	-74	18,787
	(13.6)	(53.1)	-	(1.3)	(16.3)	(6.0)	(8.9)	(2.0)	-(0.8)	(0.0)	-(0.4)	(100.0)
1995-96	5,888	14,075	-	635	4,902	2,101	2,947	3,096	-338	245	-2,680	30,870
	(19.1)	(45.6)	-	(2.1)	(15.9)	(6.8)	(9.5)	(10.0)	-(1.1)	(0.8)	-(8.7)	(100.0)
2000-01	12,519	8,324	32,606	4,550	13,107	3,099	7,136	2,355	1,032	5,574	-2,379	87,922
	(14.2)	(9.5)	(37.1)	(5.2)	(14.9)	(3.5)	(8.1)	(2.7)	(1.2)	(6.3)	-(2.7)	(100.0)
2001-02	17,249	10,895	35,648	6,285	10,186	4,521	4,996	-2,452	-427	3,814	3,545	94,261
	(18.3)	(11.6)	(37.8)	(6.7)	(10.8)	(4.8)	(5.3)	-(2.6)	-(0.5)	(4.0)	(3.8)	(100.0)
2002-03	28,484	-372	48,966	4,858	9,863	4,799	711	1,212	93	5,403	-4,290	99,727
	(28.6)	-(0.4)	(49.1)	(4.9)	(9.9)	(4.8)	(0.7)	(1.2)	(0.1)	(5.4)	-(4.3)	(100.0)
2003-04	47,286	13,940	18,003	4,132	9,325	6,377	-374	-3,651	1,850	24,268	-526	1,20,631
	(39.2)	(11.6)	(14.9)	(3.4)	(7.7)	(5.3)	-(0.3)	-(3.0)	(1.5)	(20.1)	-(0.4)	(100.0)
2004-05	34,559	-9,781	64,192	26	8,883	7,127	8,074	-2,623	1,240	6,335	-10,232	1,07,800
	(32.1)	-(9.1)	(59.5)	(0.0)	(8.2)	(6.6)	(7.5)	-(2.4)	(1.1)	(5.9)	-(9.5)	(100.0)
2005-06	15,305	-44	73,815	4,055	10,463	5,228	7,262	7,911	51	-17	-33,947	90,084
	(17.0)	(0.0)	(81.9)	(4.5)	(11.6)	(5.8)	(8.1)	(8.8)	(0.1)	(0.0)	-(37.7)	(100.0)
2006-07 P	13,057	-9,478	56,500	805	10,370	7,634	12,796	4,765	-305	-2,557	-16,078	77,509
	(16.8)	-(12.2)	(72.9)	(1.0)	(13.4)	(9.8)	(16.5)	(6.1)	-(0.4)	-(3.3)	-(20.7)	(100.0)
2007-08 (RE) P	63,553	3,089	9,873	6,676	12,147	-9,625	5,026	-4,871	-322	-1,709	24,122	1,07,958
	(58.9)	(2.9)	(9.1)	(6.2)	(11.3)	-(8.9)	(4.7)	-(4.5)	-(0.3)	-(1.6)	(22.3)	(100.0)
2008-09 (BE) P	63,842	6,684	22,303	6,723	13,001	1,203	4,813	-1,851	85	-1,627	-2,524	1,12,653
	(56.7)	(5.9)	(19.8)	(6.0)	(11.5)	(1.1)	(4.3)	-(1.6)	(0.1)	-(1.4)	-(2.2)	(100.0)

B. Outstanding Liabilities of State Governments

Year	Market Loans	Power Bonds	Loans and Advances from Centre	NSSF	Loans from Banks and FIs	Provident Funds, *etc.*	Reserve Funds	Deposits and Advances	Others *	Total Out-standing Liabilities (2 to 10)	Total Out-standing Liabilities as Percentage to GDP
1	2	3	4	5	6	7	8	9	10	11	12
1990-91	15,652	-	73,521	-	2,513	16,861	4,734	12,769	2,105	1,28,155	22.5
1995-96	37,088	-	1,29,264	-	4,838	38,216	10,577	26,654	2,899	2,49,535	20.9
2000-01	86,767	-	2,38,655	56,352	29,213	93,629	22,868	59,328	7,335	5,94,147	28.3
2001-02	1,04,027	-	2,49,551	90,226	40,894	1,03,815	27,389	64,325	10,520	6,90,747	30.3
2002-03	1,33,066	-	2,49,179	1,39,193	51,198	1,13,678	32,188	65,036	2,892	7,86,430	32.0
2003-04	1,79,917	28,984	1,92,981	1,98,454	65,960	1,32,043	42,217	69,116	3,704	9,13,376	33.2
2004-05	2,13,480	29,883	1,60,045	2,82,200	67,921	1,45,936	52,311	75,290	2,108	10,29,174	32.7
2005-06	2,28,925	31,581	1,57,004	3,65,933	71,845	1,60,955	63,120	86,691	1,812	11,67,866	32.6
2006-07 P	2,41,982	26,051	1,47,526	4,22,433	72,650	1,71,325	70,754	99,487	-1,389	12,50,819	30.2
2007-08 (RE) P	3,05,535	23,144	1,50,615	4,32,306	79,326	1,83,471	61,130	1,04,513	-2,996	13,37,044	28.4
2008-09 (BE) P	3,69,377	20,237	1,57,299	4,54,609	86,049	1,96,473	62,333	1,09,325	-4,533	14,51,169	27.4

RE: Revised Estimates. BE: Budget Estimates. P: Provisional data. - : Not applicable.

FIs : Financial Institutions.

\# : Includes Compensation and Other Bonds, Loans from Other Institutions, Appropriation to Contingency Fund, Inter-state Settlement and Contingency Fund.

* : Includes WMA from RBI, Contingency Fund and Compensation and Other Bonds.

Note : Figures in parantheses are percentages to gross fiscal deficit.

Source : Budget Documents of State Governments and Combined Finance and Revenue Accounts of the Union and State Governments.

APPENDIX TABLE 32 : DIRECT AND INDIRECT TAX REVENUES OF THE CENTRAL AND THE STATE GOVERNMENTS

(Rupees crore)

	Centre (Gross)			States @			Centre and States Combined		
Year	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
1	2	3	4	5	6	7	8	9	10
1995-96	33,563	77,661	1,11,224	8,040	55,587	63,627	41,603	1,33,248	1,74,851
(a)	30.2	69.8	100.0	12.6	87.4	100.0	23.8	76.2	100.0
(b)	2.8	6.5	9.3	0.7	4.7	5.3	3.5	11.2	14.7
2001-02	69,197	1,17,863	1,87,060	13,592	1,13,878	1,27,470	82,789	2,31,741	3,14,530
(a)	37.0	63.0	100.0	10.7	89.3	100.0	26.3	73.7	100.0
(b)	3.0	5.2	8.2	0.6	5.0	5.6	3.6	10.2	13.8
2002-03	83,085	1,33,181	2,16,266	18,151	1,24,526	1,42,677	1,01,236	2,57,707	3,58,943
(a)	38.4	61.6	100.0	12.7	87.3	100.0	28.2	71.8	100.0
(b)	3.4	5.4	8.8	0.7	5.1	5.8	4.1	10.5	14.6
2003-04	1,05,090	1,49,258	2,54,348	20,531	1,40,703	1,61,234	1,25,621	2,89,961	4,15,582
(a)	41.3	58.7	100.0	12.7	87.3	100.0	30.2	69.8	100.0
(b)	3.8	5.4	9.2	0.7	5.1	5.9	4.6	10.5	15.1
2004-05	1,32,771	1,72,187	3,04,958	24,043	1,65,045	1,89,088	1,56,814	3,37,232	4,94,046
(a)	43.5	56.5	100.0	12.7	87.3	100.0	31.7	68.3	100.0
(b)	4.2	5.5	9.7	0.8	5.2	6.1	5.0	10.7	15.7
2005-06	1,65,201	2,00,949	3,66,150	30,211	1,90,658	2,20,869	1,95,412	3,91,607	5,87,019
(a)	45.1	54.9	100.0	13.7	86.3	100.0	33.3	66.7	100.0
(b)	4.6	5.6	10.2	0.8	5.3	6.2	5.5	10.9	16.4
2006-07	2,30,192	2,43,320	4,73,512	37,579	2,14,029	2,51,608	2,67,771	4,57,349	7,25,120
(a)	48.6	51.4	100.0	14.9	85.1	100.0	36.9	63.1	100.0
(b)	5.6	5.9	11.5	0.9	5.2	6.1	6.5	11.0	17.5
2007-08	2,67,490	2,80,632	5,48,122	38,161	2,48,680	2,86,841	3,05,651	5,29,312	8,34,963
BE (a)	48.8	51.2	100.0	13.3	86.7	100.0	36.6	63.4	100.0
(b)	5.7	6.0	11.7	0.8	5.3	6.1	6.5	11.2	17.7
2007-08	3,04,760	2,80,650	5,85,410	37,601	2,51,056	2,88,657	3,42,361	5,31,706	8,74,067
RE (a)	52.1	47.9	100.0	13.0	87.0	100.0	39.2	60.8	100.0
(b)	6.5	6.0	12.5	0.8	5.3	6.1	7.3	11.3	18.6
2008-09	3,65,000	3,22,715	6,87,715	42,744	2,86,178	3,28,922	4,07,744	6,08,893	10,16,637
BE (a)	53.1	46.9	100.0	13.0	87.0	100.0	40.1	59.9	100.0
(b)	6.9	6.1	13.0	0.8	5.4	6.2	7.7	11.5	19.2
Memo Items :									
(Average)									
1997-98 to (a)	39.1	60.9	100.0	12.0	88.0	100.0	28.8	71.2	100.0
2006-07 (b)	3.7	5.6	9.3	0.7	5.0	5.7	4.4	10.6	14.9

RE :Revised Estimates.BE : Budget Estimates.
@ :Excluding States' share in Central Taxes as reported in Central Government budget documents.
(a) :Represents percentages to total tax revenue.
(b) :Represents percentages to GDP.
Source : Budget Documents of the Central and the State Governments.

APPENDIX TABLE 33: COMBINED RECEIPTS AND DISBURSEMENTS OF THE CENTRAL AND THE STATE GOVERNMENTS

(Rupees crore)

Item	2003-04 (Accounts)	2004-05 (Accounts)	2005-06 (Accounts)	2006-07 (Accounts)	2007-08 (Revised Estimates)	2008-09 (Budget Estimates)
1	2	3	4	5	6	7
I. Total Disbursements (A+B+C)	**7,96,384**	**8,69,757**	**9,59,855**	**1,109,174**	**1,355,830**	**1,485,535**
of which :						
A. Developmental (i +ii +iii)	**4,17,834**	**4,45,354**	**5,09,525**	**5,88,028**	**7,36,974**	**8,34,345**
i) Revenue	3,18,444	3,42,517	3,92,386	4,52,499	5,63,937	6,43,124
ii) Capital	69,070	78,936	96,825	1,16,613	1,52,042	1,71,734
iii) Loans	30,320	23,901	20,314	18,916	20,995	19,487
B. Non-Developmental (i+ii+iii)	**3,71,651**	**4,16,340**	**4,40,377**	**5,07,635**	**6,02,125**	**6,31,255**
i) Revenue	3,52,676	3,79,825	4,04,027	4,66,431	5,15,456	5,72,503
of which :						
Interest Payments	1,77,573	1,92,312	2,03,977	2,30,831	2,63,736	2,87,477
ii) Capital	17,603	34,368	35,760	40,703	86,084	57,947
iii) Loans	1,371	2,147	590	501	585	805
C. Others *	**6,899**	**8,063**	**9,953**	**13,511**	**16,731**	**19,935**
II. Total Receipts	**7,99,162**	**8,88,345**	**10,14,689**	**11,25,252**	**13,31,711**	**14,88,330**
of which :						
A. Revenue Receipts	**5,18,611**	**6,15,644**	**7,07,054**	**8,77,075**	**10,55,165**	**12,08,804**
i) Tax Receipts (a + b + c)	4,13,981	4,92,481	5,76,596	7,24,023	8,73,299	10,17,107
a) Taxes on commodities and services	2,87,729	3,35,448	3,80,869	4,54,652	5,29,215	6,06,997
b) Taxes on Income and Property	1,25,595	1,56,214	1,94,602	2,68,108	3,42,750	4,08,659
c) Taxes of Union Territories (Without Legislature)	658	819	1,125	1,263	1,334	1,451
ii) Non-Tax Receipt	1,04,630	1,23,163	130,458	1,53,052	1,81,866	1,91,697
of which :						
Interest Receipts	18,856	19,223	18,735	21,744	19,392	20,108
B. Non-debt Capital Receipts (i+ii)	**43,271**	**19,392**	**13,241**	**1,667**	**52,834**	**32,271**
i) Recovery of Loans & Advances	26,318	14,968	11,651	-773	8,309	7,106
ii) Disinvestment proceeds	16,952	4,424	1,590#	2,440#	44,525#	25,165#
III. Gross Fiscal Deficit [I - (IIA + IIB)]	**2,34,501**	**2,34,721**	**2,39,560**	**2,30,432**	**2,47,831**	**2,44,460**
A. Institution-wise (i+ii)	**2,34,501**	**2,34,721**	**2,39,560**	**2,30,432**	**2,47,831**	**2,44,460**
Financed by :						
i) Domestic Financing (a+b)	2,47,989	2,19,968	2,32,088	2,21,960	2,37,861	..
a) Net Bank Credit to Government # #	66,381	13,863	16,351	69,177	72,842	..
of which :						
Net RBI Credit to Government	-75,772	-62,882	34,261	-4,176	-1,15,632	..
b) Non-Bank Credit to Government	1,81,608	2,06,105	2,15,737	1,52,783	1,65,019	..
ii) External Financing	-13,488	14,753	7,472	8,472	9,970	10,989
B. Instrument-wise (i+ii)	**2,34,501**	**2,34,721**	**2,39,560**	**2,30,432**	**2,47,831**	**2,44,460**
i) Domestic Financing (a to g)	2,47,989	2,19,968	2,32,088	2,21,960	2,37,861	2,33,471
a) Market Borrowings (net) @	1,36,156	85,498	1,21,546	1,27,858	1,74,280	1,62,842
b) Small Savings (net) &	67,642	87,690	89,836	63,746	8,827	28,498
c) State Provident Funds (net)	12,014	13,139	15,388	15,188	15,193	16,301
d) Reserve Funds	8,883	10,827	10,122	19,342	-6,121	231
e) Deposits and Advances	9,705	4,529	18,888	22,982	12,834	13,442
f) Cash Balances ^	-2,778	-18,588	-54,834	-16,078	24,119	-2,795
g) Others **	16,367	36,873	31,143	-11,078	8,729	14,952
ii) External Financing	-13,488	14,753	7,472	8,472	9,970	10,989
IV. I as per cent of GDP	**28.9**	**27.6**	**26.8**	**26.8**	**28.8**	**28.0**
V. II as per cent of GDP	**29.0**	**28.2**	**28.3**	**27.1**	**28.3**	**28.1**
VI. IIA as per cent of GDP	**18.8**	**19.5**	**19.7**	**21.2**	**22.4**	**22.8**
VII. IIA (i) as per cent of GDP	**15.0**	**15.6**	**16.1**	**17.5**	**18.5**	**19.2**
VIII. III as per cent of GDP	**8.5**	**7.5**	**6.7**	**5.6**	**5.3**	**4.6**

* : Represent compensation and assignments by States to local bodies and *Panchayati Raj* institutions.
\# : Also includes sale of 'land and property' and debt relief. # # : As per RBI records. ..: Not Available
@ : Borrowing through dated securities and 364-day Treasury Bills.
& : Represent net investment in Central and State Governments' special securities by the National Small Savings Fund (NSSF).
^ : Include Ways and Means Advances of the State governments.
** : Includes Treasury Bills (excluding 364-day Treasury Bills), loans from financial institutions, insurance and pension funds, remittances, cash balance investment account etc.
(-) : Indicates surplus/net outflow.

Notes: i) Total disbursements/receipts are net of repayments of the Central Government (including repayments to the NSSF) and State governments.
ii) Total receipts are net of variation in cash balances of the Central and State governments.
iii) Data pertaining to State Governments from 2006-07 relate to budgets of 28 State Governments.
iv) In case of Central Government finances for 2007-08 (RE) the figures for non-debt capital receipts includes Rs.34,309 crore and development capital outlay includes an amount of Rs.35,531 crore on account of transactions relating to transfer of Reserve Bank's stake in SBI to the Central Government.

Source : Budget Documents of Central and State Governments.

APPENDIX TABLE 34 : MARKET BORROWINGS OF CENTRAL AND STATE GOVERNMENTS

(Rupees crore)

Government/Authority	Gross			Repayments			Net		
	2006-07	2007-08	2008-09 (BE)	2006-07	2007-08	2008-09 (BE)	2006-07	2007-08	2008-09 (BE)
1	2	3	4	5	6	7	8	9	10
1. Central Government (a+b)	1,79,373	1,88,205	1,75,780	68,097	78,702	76,780	1,11,275	1,09,504	99,000
a) Dated Securities	1,46,000	1,56,000	1,49,780	39,079	45,329	44,575 #	1,06,921	1,10,671	1,05,205 #
b) 364-day Treasury Bills	33,373	32,205	26,000	29,018	33,373	32,205	4,354	-1,167	-6,205
2. State Governments*	20,825	67,779	59,062	6,551	11,555	14,371	14,274	56,224	44,737
Grand Total (1+2)	**2,00,198**	**2,55,984**	**2,34,842**	**74,648**	**90,257**	**91,151** #	**1,25,549**	**1,65,728**	**1,43,737** #

BE : Budget Estimates.
\# : Includes Rs.547 crore pertaining to a security with call and put option.
* : Excludes three States for which Annual Plans for 2008-09 are yet to be finalised.
Source : Reserve Bank records and Budget Documents of the Central Government.

APPENDIX TABLE 35: REPO/REVERSE REPO AUCTIONS UNDER LIQUIDITY ADJUSTMENT FACILITY

(Amount in Rupees crore)

LAF Date	Repo/ Reverse Repo period (Day(s))	Repo (Injection)					Reverse Repo (Absorption)					Net injections(+)/ absorption(-) of liquidity	Outstanding Amount @
		Bids Received		Bids Accepted		Cut-off	Bids Received		Bids Accepted		Cut-Off		
		Number	Amount	Number	Amount	Rate(%)	Number	Amount	Number	Amount	Rate(%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2007-08													
3-Apr-07	1	32	19,740	32	19,740	7.75	-	-	-	-	-	19,740	
$	1	8	2,875	8	2,875	7.75	2	60	2	60	6.00	2,815	-22,555
4-Apr-07	1	16	10,060	16	10,060	7.75	4	3,060	4	2,000	6.00	8,060	
$	1	3	410	3	410	7.75	5	1,245	5	996	6.00	-586	-7,474
5-Apr-07	4	3	1,165	3	1,165	7.75	1	30	1	30	6.00	1,135	
$	4	1	400	1	400	7.75	4	80	4	80	6.00	320	-1,455
9-Apr-07	1	2	760	2	760	7.75	6	3,370	6	2,000	6.00	-1,240	
$	1	-	-	-	-	-	15	5,745	15	1,000	6.00	-1,000	2,240
10-Apr-07	1	-	-	-	-	-	11	14,295	11	1,999	6.00	-1,999	
$	1	-	-	-	-	-	20	14,825	20	1,001	6.00	-1,001	3,000
11-Apr-07	1	-	-	-	-	-	23	24,875	23	1,992	6.00	-1,992	
$	1	-	-	-	-	-	21	18,545	21	1,008	6.00	-1,008	3,000
12-Apr-07	1	-	-	-	-	-	25	28,690	25	1,999	6.00	-1,999	
$	1	-	-	-	-	-	21	22,925	21	1,000	6.00	-1,000	2,999
13-Apr-07	3	-	-	-	-	-	10	19,855	10	1,999	6.00	-1,999	
$	3	-	-	-	-	-	6	9,445	6	1,001	6.00	-1,001	3,000
16-Apr-07	1	1	400	1	400	7.75	2	210	2	210	6.00	190	
$	1	34	13,415	34	13,415	7.75	1	10	1	10	6.00	13,405	-13,595
17-Apr-07	1	36	15,870	36	15,870	7.75	-	-	-	-	-	15,870	
$	1	15	4,460	15	4,460	7.75	2	110	2	110	6.00	4,350	-20,220
18-Apr-07	1	22	9,085	22	9,085	7.75	1	10	1	10	6.00	9,075	
$	1	26	8,075	26	8,075	7.75	-	-	-	-	-	8,075	-17,150
19-Apr-07	1	19	9,385	19	9,385	7.75	-	-	-	-	-	9,385	
$	1	15	6,275	15	6,275	7.75	2	70	2	70	6.00	6,205	-15,590
20-Apr-07	3	20	10,010	20	10,010	7.75	-	-	-	-	-	10,010	
$	3	17	6,190	17	6,190	7.75	2	115	2	115	6.00	6,075	-16,085
23-Apr-07	1	13	5,200	13	5,200	7.75	2	120	2	120	6.00	5,080	
$	1	15	4,790	15	4,790	7.75	2	115	2	115	6.00	4,675	-9,755
24-Apr-07	1	23	14,365	23	14,365	7.75	3	125	3	125	6.00	14,240	
$	1	2	40	2	40	7.75	5	1,615	5	1,000	6.00	-960	-13,280
25-Apr-07	1	1	500	1	500	7.75	5	1,745	5	1,745	6.00	-1,245	
$	1	14	2,990	14	2,990	7.75	2	10	2	10	6.00	2,980	-1,735
26-Apr-07	1	5	2,650	5	2,650	7.75	1	100	1	100	6.00	2,550	
$	1	18	6,070	18	6,070	7.75	1	15	1	15	6.00	6,055	-8,605
27-Apr-07	3	26	10,705	26	10,705	7.75	-	-	-	-	-	10,705	
$	3	2	290	2	290	7.75	10	2,585	10	999	6.00	-709	-9,996
30-Apr-07	3	17	8,360	17	8,360	7.75	1	15	1	15	6.00	8,345	
$	3	23	7,615	23	7,615	7.75	-	-	-	-	-	7,615	-15,960
3-May-07	1	10	4,380	10	4,380	7.75	1	25	1	25	6.00	4,355	
$	1	11	3,225	11	3,225	7.75	1	10	1	10	6.00	3,215	-7,570
4-May-07	3	3	1,720	3	1,720	7.75	2	915	2	915	6.00	805	
$	3	3	225	3	225	7.75	3	215	3	215	6.00	10	-815
7-May-07	1	-	-	-	-	-	5	4,100	5	2,000	6.00	-2,000	
$	1	-	-	-	-	-	6	5,235	6	1,000	6.00	-1000	3,000
8-May-07	1	-	-	-	-	-	17	17,260	17	1,998	6.00	-1,998	
$	1	1	30	1	30	7.75	11	11,335	11	1,002	6.00	-972	2,970
9-May-07	1	-	-	-	-	-	19	18,740	19	2,000	6.00	-2,000	
$	1	1	150	1	150	7.75	17	14,770	17	999	6.00	-849	2,849
10-May-07	1	-	-	-	-	-	24	23,020	24	2,000	6.00	-2,000	
$	1	-	-	-	-	-	19	11,475	19	999	6.00	-999	2,999
11-May-07	3	-	-	-	-	-	17	19,260	17	1,998	6.00	-1,998	
$	3	-	-	-	-	-	9	5,835	9	1,001	6.00	-1,001	2,999
14-May-07	1	7	2,650	7	2,650	7.75	-	-	-	-	-	2,650	
$	1	29	13,845	29	13,845	7.75	1	25	1	25	6.00	13,820	-16,470
15-May-07	1	16	11,120	16	11,120	7.75	-	-	-	-	-	11,120	
$	1	24	12,995	24	12 ,995	7.75	1	10	1	10	6.00	12,985	-24,105
16-May-07	1	15	9,825	15	9,825	7.75	1	10	1	10	6.00	9,815	
$	1	23	11,780	23	11,780	7.75	1	25	1	25	6.00	11,755	-21,570
17-May-07	1	17	10,525	17	10,525	7.75	-	-	-	-	-	10,525	
$	1	17	14,025	17	14,025	7.75	1	15	1	15	6.00	14,010	-24,535
18-May-07	3	22	14,150	22	14,150	7.75	-	-	-	-	-	14,150	
$	3	10	5,530	10	5,530	7.75	1	10	1	10	6.00	5,520	-19,670
21-May-07	1	8	2,530	8	2,530	7.75	-	-	-	-	-	2,530	
$	1	18	9,480	18	9,480	7.75	2	295	2	295	6.00	9,185	-11,715

APPENDIX TABLE 35: REPO/REVERSE REPO AUCTIONS UNDER LIQUIDITY ADJUSTMENT FACILITY *(Contd.)*

(Amount in Rupees crore)

LAF Date	Repo/ Reverse Repo period (Day(s))	Repo (Injection)					Reverse Repo (Absorption)					Net injections(+)/ absorption(-) of liquidity	Outstanding Amount @
		Bids Received		Bids Accepted		Cut-off	Bids Received		Bids Accepted		Cut-Off		
		Number	Amount	Number	Amount	Rate(%)	Number	Amount	Number	Amount	Rate(%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
22-May-07	1	1	225	1	225	7.75	-	-	-	-	-	225	
$	1	12	5,055	12	5,055	7.75	2	95	2	95	6.00	4,960	-5,185
23-May-07	1	-	-	-	-	-	-	-	-	-	-	-	
$	1	5	5,775	5	5,775	7.75	1	10	1	10	6.00	5,765	-5,765
24-May-07	1	2	300	2	300	7.75	-	-	-	-	-	300	
$	1	8	6,455	8	6,455	7.75	1	25	1	25	6.00	6,430	-6,730
25-May-07	3	6	1,595	6	1,595	7.75	-	-	-	-	-	1,595	
$	3	7	3,415	7	3,415	7.75	3	320	3	320	6.00	3,095	-4,690
28-May-07	1	-	-	-	-	-	8	9,955	8	2,000	6.00	-2,000	
$	1	-	-	-	-	-	12	7,535	12	999	6.00	-999	2,999
29-May-07	1	-	-	-	-	-	20	18,275	20	2,000	6.00	-2,000	
$	1	-	-	-	-	-	20	14,995	20	994	6.00	-994	2,994
30-May-07	1	-	-	-	-	-	28	30,805	28	1,999	6.00	-1,999	
$	1	-	-	-	-	-	25	18,530	25	997	6.00	-997	2,996
31-May-07	1	-	-	-	-	-	32	37,020	32	1,995	6.00	-1,995	
$	1	-	-	-	-	-	35	35,270	35	997	6.00	-997	2,992
1-Jun-07	3	-	-	-	-	-	35	44,550	35	1,996	6.00	-1,996	
$	3	-	-	-	-	-	32	37,075	32	1,000	6.00	-1,000	2,996
4-Jun-07	1	-	-	-	-	-	39	48,810	39	1,997	6.00	-1,997	
$	1	-	-	-	-	-	33	38,605	33	1,001	6.00	-1,001	2,998
5-Jun-07	1	-	-	-	-	-	41	56,745	41	1,998	6.00	-1,998	
$	1	-	-	-	-	-	40	46,100	40	999	6.00	-999	2,997
6-Jun-07	1	-	-	-	-	-	41	67,785	41	2,000	6.00	-2,000	
$	1	-	-	-	-	-	37	41,740	37	1,000	6.00	-1,000	3,000
7-Jun-07	1	-	-	-	-	-	45	64,980	45	1,999	6.00	-1,999	
$	1	-	-	-	-	-	37	45,010	37	1,001	6.00	-1,001	3,000
8-Jun-07	3	-	-	-	-	-	41	59,415	41	1,994	6.00	-1,994	
$	3	-	-	-	-	-	35	42,655	35	995	6.00	-995	2,989
11-Jun-07	1	-	-	-	-	-	27	26,120	27	1,994	6.00	-1,994	
$	1	-	-	-	-	-	26	27,885	26	1,003	6.00	-1,003	2,997
12-Jun-07	1	-	-	-	-	-	27	33,190	27	1,994	6.00	-1,994	
$	1	-	-	-	-	-	27	28,935	27	1,005	6.00	-1,005	2,999
13-Jun-07	1	-	-	-	-	-	28	32,580	28	1,998	6.00	-1,998	
$	1	-	-	-	-	-	30	31,880	30	999	6.00	-999	2,997
14-Jun-07	1	-	-	-	-	-	31	39,145	31	1,998	6.00	-1,998	
$	1	-	-	-	-	-	31	34,570	31	1,001	6.00	-1,001	2,999
15-Jun-07	3	-	-	-	-	-	29	38,555	29	1,996	6.00	-1,996	
$	3	-	-	-	-	-	26	30,645	26	1,002	6.00	-1,002	2,998
18-Jun-07	1	-	-	-	-	-	28	35,700	28	2,000	6.00	-2,000	
$	1	-	-	-	-	-	30	33,750	30	999	6.00	-999	2,999
19-Jun-07	1	-	-	-	-	-	30	43,695	30	2,000	6.00	-2,000	
$	1	-	-	-	-	-	31	35,895	31	997	6.00	-997	2,997
20-Jun-07	1	-	-	-	-	-	34	46,600	34	1,989	6.00	-1,989	
$	1	-	-	-	-	-	32	29,410	32	1,011	6.00	-1,011	3,000
21-Jun-07	1	-	-	-	-	-	34	47,805	34	1,994	6.00	-1,994	
$	1	-	-	-	-	-	34	32,500	34	1,006	6.00	-1,006	3,000
22-Jun-07	3	-	-	-	-	-	35	47,145	35	1,990	6.00	-1,990	
$	3	-	-	-	-	-	33	30,435	33	1,007	6.00	-1,007	2,997
25-Jun-07	1	-	-	-	-	-	29	34,595	29	2,000	6.00	-2,000	
$	1	-	-	-	-	-	28	26,475	28	1,000	6.00	-1,000	3,000
26-Jun-07	1	-	-	-	-	-	38	48,350	38	1,995	6.00	-1,995	
$	1	-	-	-	-	-	27	19,180	27	1,001	6.00	-1,001	2,996
27-Jun-07	1	-	-	-	-	-	-	-	-	-	-	0	
$	1	-	-	-	-	-	2	10	2	10	6.00	-10	10
28-Jun-07	1	5	2,500	5	2,500	7.75	-	-	-	-	-	2,500	
$	1	12	6,975	12	6,975	7.75	2	10	2	10	6.00	6,965	-9,465
29-Jun-07	4	16	9,520	16	9,520	7.75	-	-	-	-	-	9,520	
$	4	1	375	1	375	7.75	13	4,005	13	1,000	6.00	-625	-8,895
3-Jul-07	1	-	-	-	-	-	29	40,995	29	1,998	6.00	-1,998	
$	1	-	-	-	-	-	37	39,505	37	997	6.00	-997	2,995
4-Jul-07	1	-	-	-	-	-	40	53,670	40	2,000	6.00	-2,000	
$	1	-	-	-	-	-	33	39,085	33	987	6.00	-987	2,987
5-Jul-07	1	-	-	-	-	-	40	55,370	40	1,996	6.00	-1,996	
$	1	-	-	-	-	-	34	38,850	34	1,001	6.00	-1,001	2,997

APPENDIX TABLE 35: REPO/REVERSE REPO AUCTIONS UNDER LIQUIDITY ADJUSTMENT FACILITY *(Contd.)*

(Amount in Rupees crore)

LAF Date	Repo/ Reverse Repo period (Day(s))	Repo (Injection)					Reverse Repo (Absorption)					Net injections(+)/ absorption(-) of liquidity	Outstanding Amount @
		Bids Received		Bids Accepted		Cut-off	Bids Received		Bids Accepted		Cut-Off		
		Number	Amount	Number	Amount	Rate(%)	Number	Amount	Number	Amount	Rate(%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
6-Jul-07	3	-	-	-	-	-	39	55,325	39	1,998	6.00	-1,998	
$	3	-	-	-	-	-	27	33,800	27	1,001	6.00	-1,001	2,999
9-Jul-07	1	-	-	-	-	-	34	52,935	34	1,999	6.00	-1,999	
$	1	-	-	-	-	-	28	33,380	28	1,000	6.00	-1,000	2,999
10-Jul-07	1	-	-	-	-	-	42	57,540	42	1,999	6.00	-1,999	
$	1	-	-	-	-	-	33	32,905	33	991	6.00	-991	2,990
11-Jul-07	1	-	-	-	-	-	43	56,590	43	1,995	6.00	-1,995	
$	1	-	-	-	-	-	32	35,405	32	1,002	6.00	-1,002	2,997
12-Jul-07	1	-	-	-	-	-	42	58,960	42	1,994	6.00	-1,994	
$	1	-	-	-	-	-	37	39,705	37	1,005	6.00	-1,005	2,999
13-Jul-07	3	-	-	-	-	-	44	63,750	44	1,991	6.00	-1,991	
$	3	-	-	-	-	-	39	41,950	39	1,008	6.00	-1,008	2,999
16-Jul-07	1	-	-	-	-	-	43	56,555	43	1,995	6.00	-1,995	
$	1	-	-	-	-	-	40	41,945	40	1,005	6.00	-1,005	3,000
17-Jul-07	1	-	-	-	-	-	47	66,970	47	1,996	6.00	-1,996	
$	1	-	-	-	-	-	38	35,565	38	1,003	6.00	-1,003	2,999
18-Jul-07	1	-	-	-	-	-	44	67,310	44	1,998	6.00	-1,998	
$	1	-	-	-	-	-	39	42,855	39	1,002	6.00	-1,002	3,000
19-Jul-07	1	-	-	-	-	-	48	65,920	48	1,984	6.00	-1,984	
$	1	-	-	-	-	-	38	42,760	38	1,016	6.00	-1,016	3,000
20-Jul-07	3	-	-	-	-	-	44	62,735	44	1,996	6.00	-1,996	
$	3	-	-	-	-	-	34	42,475	34	1,004	6.00	-1,004	3,000
23-Jul-07	1	-	-	-	-	-	38	59,910	38	1,991	6.00	-1,991	
$	1	-	-	-	-	-	32	37,905	32	1,008	6.00	-1,008	2,999
24-Jul-07	1	-	-	-	-	-	49	68,545	49	1,998	6.00	-1,998	
$	1	-	-	-	-	-	39	45,355	39	999	6.00	-999	2,997
25-Jul-07	1	-	-	-	-	-	47	68,115	47	1,995	6.00	-1,995	
$	1	-	-	-	-	-	34	39,485	34	998	6.00	-998	2,993
26-Jul-07	1	-	-	-	-	-	46	77,930	46	1,994	6.00	-1,994	
$	1	-	-	-	-	-	42	50,855	42	1,005	6.00	-1,005	2,999
27-Jul-07	3	-	-	-	-	-	44	86,110	44	1,993	6.00	-1,993	
$	3	-	-	-	-	-	41	65,690	41	999	6.00	-999	2,992
30-Jul-07	1	-	-	-	-	-	46	88,215	46	2,000	6.00	-2,000	
$	1	-	-	-	-	-	40	62,025	40	999	6.00	-999	2,999
31-Jul-07	1	-	-	-	-	-	40	80,730	40	1,993	6.00	-1,993	
$	1	-	-	-	-	-	33	53,145	33	1,007	6.00	-1,007	3,000
1-Aug-07	1	-	-	-	-	-	44	85,715	44	1,988	6.00	-1,988	
$	1	-	-	-	-	-	35	50,530	35	1,011	6.00	-1,011	2,999
2-Aug-07	1	-	-	-	-	-	41	74,040	41	1,991	6.00	-1,991	
$	1	-	-	-	-	-	33	49,030	33	986	6.00	-986	2,977
3-Aug-07	3	-	-	-	-	-	28	59,630	28	1,996	6.00	-1,996	
$	3	-	-	-	-	-	28	45,000	28	1,001	6.00	-1,001	2,997
6-Aug-07	1	-	-	-	-	-	28	52,070	28	52,070	6.00	-52,070	52,070
7-Aug-07	1	-	-	-	-	-	21	41,605	21	41,605	6.00	-41,605	41,605
8-Aug-07	1	-	-	-	-	-	17	36,425	17	36,425	6.00	-36,425	36,425
9-Aug-07	1	-	-	-	-	-	17	38,135	17	38,135	6.00	-38,135	38,135
10-Aug-07	3	-	-	-	-	-	12	19,625	12	19,625	6.00	-19,625	19,625
13-Aug-07	1	-	-	-	-	-	16	25,325	16	25,325	6.00	-25,325	25,325
14-Aug-07	2	-	-	-	-	-	18	29,450	18	29,450	6.00	-29,450	29,450
16-Aug-07	1	-	-	-	-	-	20	30,670	20	30,670	6.00	-30,670	30,670
17-Aug-07	4	-	-	-	-	-	25	30,650	25	30,650	6.00	-30,650	30,650
21-Aug-07	1	-	-	-	-	-	12	10,190	12	10,190	6.00	-10,190	10,190
22-Aug-07	1	-	-	-	-	-	9	13,885	9	13,885	6.00	-13,885	13,885
23-Aug-07	1	-	-	-	-	-	9	16,060	9	16,060	6.00	-16,060	16,060
24-Aug-07	3	-	-	-	-	-	7	12,325	7	12,325	6.00	-12,325	12,325
27-Aug-07	1	-	-	-	-	-	7	7,770	7	7,770	6.00	-7,770	7,770
28-Aug-07	1	-	-	-	-	-	17	25,355	17	25,355	6.00	-25,355	25,355
29-Aug-07	1	-	-	-	-	-	16	29,280	16	29,280	6.00	-29,280	29,280
30-Aug-07	1	-	-	-	-	-	21	37,670	21	37,670	6.00	-37,670	37,670
31-Aug-07	3	-	-	-	-	-	18	16,855	18	16,855	6.00	-16,855	16,855
3-Sep-07	1	-	-	-	-	-	22	32,570	22	32,570	6.00	-999	2,997
4-Sep-07	1	-	-	-	-	-	21	37,000	21	37,000	6.00	-1,995	
5-Sep-07	1	-	-	-	-	-	19	30,400	19	30,400	6.00	-998	2,993
6-Sep-07	1	-	-	-	-	-	19	39,175	19	39,175	6.00	-1,994	
7-Sep-07	3	-	-	-	-	-	23	35,090	23	35,090	6.00	-1,005	2,999

APPENDIX TABLE 35: REPO/REVERSE REPO AUCTIONS UNDER LIQUIDITY ADJUSTMENT FACILITY *(Contd.)*

(Amount in Rupees crore)

LAF Date	Repo/ Reverse Repo period (Day(s))	Repo (Injection)					Reverse Repo (Absorption)					Net injec- tions(+)/ absorp- tion(-) of liquidity	Outstanding Amount @
		Bids Received		Bids Accepted		Cut-off	Bids Received		Bids Accepted		Cut-Off		
		Number	Amount	Number	Amount	Rate(%)	Number	Amount	Number	Amount	Rate(%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
10-Sep-07	1	-	-	-	-	-	25	27,940	25	27,940	6.00	-1,993	
11-Sep-07	1	-	-	-	-	-	22	23,320	22	23,320	6.00	-999	2,992
12-Sep-07	1	-	-	-	-	-	17	14,255	17	14,255	6.00	-2,000	
13-Sep-07	1	-	-	-	-	-	18	24,380	18	24,380	6.00	-999	2,999
14-Sep-07	3	-	-	-	-	-	14	15,710	14	15,710	6.00	-1,993	
17-Sep-07	1	-	-	-	-	-	6	3,745	6	3,745	6.00	-1,007	3,000
18-Sep-07	1	-	-	-	-	-	4	3,320	4	3,320	6.00	-1,988	
19-Sep-07	1	-	-	-	-	-	7	7,500	7	7,500	6.00	-1,011	2,999
20-Sep-07	1	-	-	-	-	-	7	7,200	7	7,200	6.00	-1,991	
21-Sep-07	3	1	1,200	1	1,200	7.75	-	-	-	-	-	-986	2,977
24-Sep-07	1	-	-	-	-	-	7	4,495	7	4,495	6.00	-1,996	
25-Sep-07	1	-	-	-	-	-	25	26,180	25	26,180	6.00	-1,001	2,997
26-Sep-07	1	-	-	-	-	-	18	22,765	18	22,765	6.00	-52,070	52,070
27-Sep-07	1	-	-	-	-	-	5	28,180	5	28,180	6.00	-41,605	41,605
28-Sep-07	3	13	9,735	13	9,735	7.75	5	3,665	5	3,665	6.00	-36,425	36,425
1-Oct-07	2	-	-	-	-	-	19	30,400	19	30,400	6.00	-30,400	30,400
3-Oct-07	1	-	-	-	-	-	30	53,520	30	53,520	6.00	-53,520	53,520
4-Oct-07	1	-	-	-	-	-	38	57,480	38	57,480	6.00	-57,480	57,480
5-Oct-07	3	-	-	-	-	-	37	54,370	37	54,370	6.00	-54,370	54,370
8-Oct-07	1	-	-	-	-	-	39	56,105	39	56,105	6.00	-56,105	56,105
9-Oct-07	1	-	-	-	-	-	44	69,620	44	69,620	6.00	-69,620	69,620
10-Oct-07	1	-	-	-	-	-	39	60,945	39	60,945	6.00	-60,945	60,945
11-Oct-07	1	-	-	-	-	-	33	46,615	33	46,615	6.00	-46,615	46,615
12-Oct-07	3	-	-	-	-	-	35	36,545	35	36,545	6.00	-36,545	36,545
15-Oct-07	1	-	-	-	-	-	29	46,710	29	46,710	6.00	-46,710	46,710
16-Oct-07	1	-	-	-	-	-	21	34,215	21	34,215	6.00	-34,215	34,215
17-Oct-07	1	-	-	-	-	-	21	28,770	21	28,770	6.00	-28,770	28,770
18-Oct-07	1	-	-	-	-	-	27	40,525	27	40,525	6.00	-40,525	40,525
19-Oct-07	3	-	-	-	-	-	30	31,950	30	31,950	6.00	-31,950	31,950
22-Oct-07	1	-	-	-	-	-	34	36,730	34	36,730	6.00	-36,730	36,730
23-Oct-07	1	-	-	-	-	-	25	30,130	25	30,130	6.00	-30,130	30,130
24-Oct-07	1	-	-	-	-	-	28	32,260	28	32,260	6.00	-32,260	32,260
25-Oct-07	1	-	-	-	-	-	28	31,675	28	31,675	6.00	-31,675	31,675
26-Oct-07	3	-	-	-	-	-	22	18,135	22	18,135	6.00	-18,135	18,135
29-Oct-07	1	-	-	-	-	-	15	18,605	15	18,605	6.00	-18,605	18,605
30-Oct-07	1	-	-	-	-	-	7	3,890	7	3,890	6.00	-3,890	3,890
31-Oct-07	1	-	-	-	-	-	5	5,015	5	5,015	6.00	-5,015	5,015
1-Nov-07	1	-	-	-	-	-	10	11,560	10	11,560	6.00	-11,560	11,560
2-Nov-07	3	-	-	-	-	-	6	7,195	6	7,195	6.00	-7,195	7,195
5-Nov-07	1	-	-	-	-	-	18	22,160	18	22,160	6.00	-22,160	22,160
6-Nov-07	1	-	-	-	-	-	31	41,000	31	41,000	6.00	-41,000	41,000
7-Nov-07	1	-	-	-	-	-	6	9,800	6	9,800	6.00	-9,800	9,800
8-Nov-07	4	-	-	-	-	-	4	2,030	4	2,030	6.00	-2,030	2,030
12-Nov-07	1	14	9,100	14	9,100	7.75	1	5	1	5	6.00	9,095	-9,095
13-Nov-07	1	29	23,010	29	23,010	7.75	1	2,000	1	2,000	6.00	21,010	-21,010
14-Nov-07	1	2	1,780	2	1,780	7.75	-	-	-	-	-	1,780	-1,780
15-Nov-07	1	28	21,580	28	21,580	7.75	-	-	-	-	-	21,580	-21,580
16-Nov-07	3	28	30,655	28	30,655	7.75	-	-	-	-	-	30,655	-30,655
19-Nov-07	1	11	14,875	11	14,875	7.75	1	5	1	5	6.00	14,870	-14,870
20-Nov-07	1	10	8,045	10	8,045	7.75	-	-	-	-	-	8,045	-8,045
21-Nov-07	1	35	32,735	35	32,735	7.75	-	-	-	-	-	32,735	-32,735
22-Nov-07	1	-	-	-	-	-	3	4,055	3	4,055	6.00	-4,055	4,055
23-Nov-07	3	-	-	-	-	-	9	8,710	9	8,710	6.00	-8,710	8,710
26-Nov-07	1	-	-	-	-	-	-	-	-	-	-	0	0
27-Nov-07	1	15	12,135	15	12,135	7.75	-	-	-	-	-	12,135	-12,135
28-Nov-07	1	10	8,245	10	8,245	7.75	-	-	-	-	-	8,245	-8,245
29-Nov-07	1	6	3,875	6	3,875	7.75	-	-	-	-	-	3,875	-3,875
30-Nov-07	3	3	1,320	3	1,320	7.75	-	-	-	-	-	1,320	-1,320
3-Dec-07	1	1	10	1	10	7.75	-	-	-	-	-	10	-10
4-Dec-07	1	2	185	2	185	7.75	1	5,000	1	5,000	6.00	-4,815	4,815
5-Dec-07	1	2	135	2	135	7.75	-	-	-	-	-	135	-135
6-Dec-07	1	-	-	-	-	-	1	15	1	15	6.00	-15	15
7-Dec-07	3	-	-	-	-	-	11	6,965	11	6,965	6.00	-6,965	6,965
10-Dec-07	1	-	-	-	-	-	1	10	1	10	6.00	-10	10
11-Dec-07	1	-	-	-	-	-	1	10	1	10	6.00	-10	10

APPENDIX TABLE 35: REPO/REVERSE REPO AUCTIONS UNDER LIQUIDITY ADJUSTMENT FACILITY *(Contd.)*

(Amount in Rupees crore)

LAF Date	Repo/ Reverse Repo period (Day(s))	Repo (Injection)					Reverse Repo (Absorption)					Net injections(+)/ absorption(-) of liquidity	Outstanding Amount @
		Bids Received		Bids Accepted		Cut-off	Bids Received		Bids Accepted		Cut-Off		
		Number	Amount	Number	Amount	Rate(%)	Number	Amount	Number	Amount	Rate(%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
12-Dec-07	1	8	4,825	8	4,825	7.75	1	10	1	10	6.00	4,815	-4,815
13-Dec-07	1	19	15,570	19	15,570	7.75	1	10	1	10	6.00	15,560	-15,560
14-Dec-07	3	10	6,015	10	6,015	7.75	1	10	1	10	6.00	6,005	-6,005
17-Dec-07	1	1	85	1	85	7.75	1	5	1	5	6.00	80	-80
18-Dec-07	1	-	-	-	-	-	1	5	1	5	6.00	-5	5
19-Dec-07	1	-	-	-	-	-	1	5	1	5	6.00	-5	5
20-Dec-07	4	30	22,370	30	22,370	7.75	-	-	-	-	-	22,370	-22,370
24-Dec-07	2	16	14,960	16	14,960	7.75	1	5	1	5	6.00	14,955	-14,955
26-Dec-07	1	30	47,665	30	47,665	7.75	-	-	-	-	-	47,665	-47,665
27-Dec-07	1	30	47,125	30	47,125	7.75	-	-	-	-	-	47,125	-47,125
28-Dec-07	3	24	33,865	24	33,865	7.75	-	-	-	-	-	33,865	-33,865
31-Dec-07	1	4	7,350	4	7,350	7.75	4	3,705	4	3,705	6.00	3,645	-3,645
1-Jan-08	1	2	2,050	2	2,050	7.75	1	5	1	5	6.00	2,045	-2,045
2-Jan-08	1	1	100	1	100	7.75	9	7,185	9	7,185	6.00	-7,085	7,085
3-Jan-08	1	-	-	-	-	-	38	40,630	38	40,630	6.00	-40,630	40,630
4-Jan-08	3	-	-	-	-	-	33	32,275	33	32,275	6.00	-32,275	32,275
7-Jan-08	1	-	-	-	-	-	11	12,215	11	12,215	6.00	-12,215	12,215
8-Jan-08	1	-	-	-	-	-	6	4,560	6	4,560	6.00	-4,560	4,560
9-Jan-08	1	-	-	-	-	-	17	17,935	17	17,935	6.00	-17,935	17,935
10-Jan-08	1	-	-	-	-	-	11	11,660	11	11,660	6.00	-11,660	11,660
11-Jan-08	3	-	-	-	-	-	20	19,925	20	19,925	6.00	-19,925	19,925
14-Jan-08	1	-	-	-	-	-	15	10,615	15	10,615	6.00	-10,615	10,615
15-Jan-08	1	-	-	-	-	-	20	24,595	20	24,595	6.00	-24,595	24,595
16-Jan-08	1	-	-	-	-	-	24	28,550	24	28,550	6.00	-28,550	28,550
17-Jan-08	1	-	-	-	-	-	29	39,725	29	39,725	6.00	-39,725	39,725
18-Jan-08	3	-	-	-	-	-	13	17,320	13	17,320	6.00	-17,320	
18-Jan-08##	3	15	5,400	15	5,400	7.75	1	15	1	15	6.00	5,385	11,935
21-Jan-08	1	1	2,000	1	2,000	7.75	3	595	3	595	6.00	1,405	-1,405
22-Jan-08	1	-	-	-	-	-	9	25,285	9	25,285	6.00	-25,285	25,285
23-Jan-08	1	-	-	-	-	-	3	3,505	3	3,505	6.00	-3,505	3,505
24-Jan-08	1	7	3,070	7	3,070	7.75	4	3,415	4	3,415	6.00	-345	345
25-Jan-08	3	5	10,665	5	10,665	7.75	4	11,650	4	11,650	6.00	-985	985
28-Jan-08	1	-	-	-	-	-	9	13,780	9	13,780	6.00	-13,780	13,780
29-Jan-08	1	-	-	-	-	-	7	23,160	7	23,160	6.00	-23,160	23,160
30-Jan-08	1	-	-	-	-	-	10	24,675	10	24,675	6.00	-24,675	24,675
31-Jan-08	1	19	13,850	19	13,850	7.75	3	20,075	3	20,075	6.00	-6,225	6,225
1-Feb-08	3	20	33,075	20	33,075	7.75	9	10,300	9	10,300	6.00	22,775	-22,775
4-Feb-08	1	-	-	-	-	-	11	6,690	11	6,690	6.00	-6,690	6,690
5-Feb-08	1	-	-	-	-	-	7	9,190	7	9,190	6.00	-9,190	9,190
6-Feb-08	1	-	-	-	-	-	13	19,010	13	19,010	6.00	-19,010	19,010
7-Feb-08	1	-	-	-	-	-	24	43,150	24	43,150	6.00	-43,150	43,150
8-Feb-08	3	-	-	-	-	-	11	15,470	11	15,470	6.00	-15,470	15,470
11-Feb-08	1	-	-	-	-	-	12	23,375	12	23,375	6.00	-23,375	23,375
12-Feb-08	1	-	-	-	-	-	7	9,135	7	9,135	6.00	-9,135	9,135
13-Feb-08	1	-	-	-	-	-	5	4,235	5	4,235	6.00	-4,235	4,235
14-Feb-08	1	-	-	-	-	-	4	8,130	4	8,130	6.00	-8,130	8,130
15-Feb-08	3	1	100	1	100	7.75	4	7,585	4	7,585	6.00	-7,485	7,485
18-Feb-08	1	6	4,240	6	4,240	7.75	1	750	1	750	6.00	3,490	-3,490
19-Feb-08	1	14	27,050	14	27,050	7.75	-	-	-	-	-	27,050	-27,050
20-Feb-08	1	15	20,905	15	20,905	7.75	1	750	1	750	6.00	20,155	-20,155
21-Feb-08	1	9	18,710	9	18,710	7.75	1	2,000	1	2,000	6.00	16,710	-16,710
22-Feb-08	3	13	17,240	13	17,240	7.75	2	1,005	2	1,005	6.00	16,235	-16,235
25-Feb-08	1	18	25,190	18	25,190	7.75	1	1,000	1	1,000	6.00	24,190	-24,190
26-Feb-08	1	6	10,510	6	10,510	7.75	2	170	2	170	6.00	10,340	-10,340
27-Feb-08	1	7	14,675	7	14,675	7.75	1	175	1	175	6.00	14,500	-14,500
28-Feb-08	1	4	4,070	4	4,070	7.75	2	140	2	140	6.00	3,930	-3,930
29-Feb-08	3	-	-	-	-	-	13	8,085	13	8,085	6.00	-8,085	8,085
3-Mar-08	1	-	-	-	-	-	1	2,500	1	2,500	6.00	-2,500	2,500
4-Mar-08	1	-	-	-	-	-	2	2,515	2	2,515	6.00	-2,515	2,515
5-Mar-08	2	-	-	-	-	-	2	5,500	2	5,500	6.00	-5,500	5,500
7-Mar-08	3	-	-	-	-	-	9	8,045	9	8,045	6.00	-8,045	8,045
10-Mar-08	1	-	-	-	-	-	23	31,985	23	31,985	6.00	-31,985	31,985
11-Mar-08	1	-	-	-	-	-	23	34,805	23	34,805	6.00	-34,805	34,805
12-Mar-08	1	-	-	-	-	-	22	28,165	22	28,165	6.00	-28,165	28,165
13-Mar-08	1	-	-	-	-	-	26	30,335	26	30,335	6.00	-30,335	30,335

APPENDIX TABLE 35: REPO/REVERSE REPO AUCTIONS UNDER LIQUIDITY ADJUSTMENT FACILITY *(Contd.)*

(Amount in Rupees crore)

LAF Date	Repo/ Reverse Repo period (Day(s))	Repo (Injection)					Reverse Repo (Absorption)					Net injec-tions(+)/ absorp-tion(-) of liquidity	Outstanding Amount @
		Bids Received		Bids Accepted		Cut-off	Bids Received		Bids Accepted		Cut-Off		
		Number	Amount	Number	Amount	Rate(%)	Number	Amount	Number	Amount	Rate(%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
14-Mar-08	3	1	200	1	200	7.75	6	1,155	6	1,155	6.00	-955	
14-Mar-08#	3	-	-	-	-	-	17	5,370	17	5,370	6.00	-5,370	6,325
17-Mar-08	1	17	32,400	17	32,400	7.75	2	255	2	255	6.00	32,145	
17-Mar-08#	7	8	4,200	8	4,200	7.75	-	-	-	-	-	4,200	-36,345
18-Mar-08	1	18	24,080	18	24,080	7.75	-	-	-	-	-	24,080	-28,280
19-Mar-08	5	29	43,925	29	43,925	7.75	-	-	-	-	-	43,925	-48,125
24-Mar-08	1	20	26,785	20	26,785	7.75	-	-	-	-	-	26,785	-26,785
25-Mar-08	1	3	3,975	3	3,975	7.75	4	1,580	4	1,580	6.00	2,395	-2,395
26-Mar-08	1	5	8,025	5	8,025	7.75	-	-	-	-	-	8,025	-8,025
27-Mar-08	1	3	2,800	3	2,800	7.75	1	200	1	200	6.00	2,600	-2,600
28-Mar-08	3	11	20,585	11	20,585	7.75	2	60	2	60	6.00	20,525	-20,525
31-Mar-08	2	39	56,820	39	56,820	7.75	5	2,825	5	2,825	6.00	53,995	
31-Mar-08#	2	-	-	-	-	-	6	3,645	6	3,645	6.00	-3,645	-50,350
2008-09													
2-Apr-08	1	1	400	1	400	7.75	-	-	-	-	-	400	-400
3-Apr-08	1	-	-	-	-	-	20	19,845	20	19,845	6.00	-19,845	19,845
4-Apr-08	3	-	-	-	-	-	34	37,950	34	37,950	6.00	-37,950	37,950
7-Apr-08	1	-	-	-	-	-	42	63,155	42	63,155	6.00	-63,155	63,155
8-Apr-08	1	-	-	-	-	-	58	79,005	58	79,005	6.00	-79,005	79,005
9-Apr-08	1	-	-	-	-	-	56	73,350	56	73,350	6.00	-73,350	73,350
10-Apr-08	1	-	-	-	-	-	52	60,490	52	60,490	6.00	-60,490	60,490
11-Apr-08	4	-	-	-	-	-	37	37,370	37	37,370	6.00	-37,370	37,370
15-Apr-08	1	-	-	-	-	-	25	21,735	25	21,735	6.00	-21,735	21,735
16-Apr-08	1	-	-	-	-	-	14	13,370	14	13,370	6.00	-13,370	13,370
17-Apr-08	4	-	-	-	-	-	10	7,045	10	7,045	6.00	-7,045	7,045
21-Apr-08	1	-	-	-	-	-	14	17,995	14	17,995	6.00	-17,995	17,995
22-Apr-08	1	-	-	-	-	-	28	39,705	28	39,705	6.00	-39,705	39,705
23-Apr-08	1	-	-	-	-	-	15	17,130	15	17,130	6.00	-17,130	17,130
24-Apr-08	1	-	-	-	-	-	23	27,470	23	27,470	6.00	-27,470	27,470
25-Apr-08	3	-	-	-	-	-	33	32,765	33	32,765	6.00	-32,765	32,765
28-Apr-08	1	-	-	-	-	-	14	8,930	14	8,930	6.00	-8,930	8,930
29-Apr-08	1	-	-	-	-	-	12	5,250	12	5,250	6.00	-5,250	5,250
30-Apr-08	2	-	-	-	-	-	11	4,270	11	4,270	6.00	-4,270	4,270
2-May-08	3	-	-	-	-	-	23	20,250	23	20,250	6.00	-20,250	20,250
5-May-08	1	-	-	-	-	-	29	33,065	29	33,065	6.00	-33,065	33,065
6-May-08	1	-	-	-	-	-	42	53,430	42	53,430	6.00	-53,430	53,430
7-May-08	1	-	-	-	-	-	47	49,505	47	49,505	6.00	-49,505	49,505
8-May-08	1	-	-	-	-	-	44	46,625	44	46,625	6.00	-46,625	46,625
9-May-08	3	-	-	-	-	-	30	23,050	30	23,050	6.00	-23,050	23,050
12-May-08	1	-	-	-	-	-	7	4,270	7	4,270	6.00	-4,270	4,270
13-May-08	1	-	-	-	-	-	7	2,430	7	2,430	6.00	-2,430	2,430
14-May-08	1	-	-	-	-	-	5	2,405	5	2,405	6.00	-2,405	2,405
15-May-08	1	1	180	1	180	7.75	5	1,635	5	1,635	6.00	-1,455	1,455
16-May-08	4	12	20,705	12	20,705	7.75	4	1,065	4	1,065	6.00	19,640	-19,640
20-May-08	1	-	-	-	-	-	19	23,175	19	23,175	6.00	-23,175	23,175
21-May-08	1	-	-	-	-	-	19	27,095	19	27,095	6.00	-27,095	27,095
22-May-08	1	-	-	-	-	-	32	36,205	32	36,205	6.00	-36,205	36,205
23-May-08	3	-	-	-	-	-	28	29,610	28	29,610	6.00	-29,610	29,610
26-May-08	1	1	5,000	1	5,000	7.75	5	780	5	780	6.00	4,220	-4,220
27-May-08	1	1	13,000	1	13,000	7.75	3	225	3	225	6.00	12,775	-12,775
28-May-08	1	2	215	2	215	7.75	2	185	2	185	6.00	30	-30
29-May-08	1	22	20,790	22	20,790	7.75	-	-	-	-	-	20,790	-20,790
30-May-08	3	11	9,630	11	9,630	7.75	1	30	1	30	6.00	9,600	-9,600
2-Jun-08	1	1	10	1	10	-	2	2,310	2	2,310	6.00	-2,300	2,300
3-Jun-08	1	-	-	-	-	-	17	27,955	17	27,955	6.00	-27,955	27,955
4-Jun-08	1	-	-	-	-	-	22	29,095	22	29,095	6.00	-29,095	29,095
5-Jun-08	1	-	-	-	-	-	21	23,395	21	23,395	6.00	-23,395	23,395
6-Jun-08	3	-	-	-	-	-	19	22,025	19	22,025	6.00	-22,025	22,025
9-Jun-08	1	-	-	-	-	-	-	-	-	-	-	0	0

APPENDIX TABLE 35: REPO/REVERSE REPO AUCTIONS UNDER LIQUIDITY ADJUSTMENT FACILITY *(Concld.)*

(Amount in Rupees crore)

LAF Date	Repo/ Reverse Repo period (Day(s))	Repo (Injection)					Reverse Repo (Absorption)					Net injections(+)/ absorption(-) of liquidity	Outstanding Amount @
		Bids Received		Bids Accepted		Cut-off	Bids Received		Bids Accepted		Cut-Off		
		Number	Amount	Number	Amount	Rate(%)	Number	Amount	Number	Amount	Rate(%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
10-Jun-08	1	17	22,330	17	22,330	7.75	-	-	-	-	-	22,330	-22,330
11-Jun-08	1	6	5,695	6	5,695	7.75	-	-	-	-	-	5,695	-5,695
12-Jun-08	1	17	20,030	17	20,030	8.00	-	-	-	-	-	20,030	-20,030
13-Jun-08	3	14	12,290	14	12,290	8.00	-	-	-	-	-	12,290	-12,290
16-Jun-08	1	7	5,620	7	5,620	8.00	-	-	-	-	-	5,620	-5,620
17-Jun-08	1	7	5,015	7	5,015	8.00	-	-	-	-	-	5,015	-5,015
18-Jun-08	1	6	6,270	6	6,270	8.00	-	-	-	-	-	6,270	-6,270
19-Jun-08	1	10	11,575	10	11,575	8.00	-	-	-	-	-	11,575	-11,575
20-Jun-08	3	4	5,000	4	5,000	8.00	-	-	-	-	-	5,000	-5,000
23-Jun-08	1	25	32,215	25	32,215	8.00	-	-	-	-	-	32,215	-32,215
24-Jun-08	1	32	38,730	32	38,730	8.00	-	-	-	-	-	38,730	-38,730
25-Jun-08	1	38	46,990	38	46,990	8.50	-	-	-	-	-	46,990	-46,990
26-Jun-08	1	26	32,750	26	32,750	8.50	-	-	-	-	-	32,750	-32,750
27-Jun-08	3	23	32,090	23	32,090	8.50	-	-	-	-	-	32,090	-32,090
30-Jun-08	2	22	22,805	22	22,805	8.50	1	300	1	300	6.00	22,505	-22,505
2-Jul-08	1	2	1,625	2	1,625	8.50	1	600	1	600	6.00	1,025	-1,025
3-Jul-08	1	1	350	1	350	8.50	10	13,315	10	13,315	6.00	-12,965	12,965
4-Jul-08	3	-	-	-	-	-	18	11,700	18	11,700	6.00	-11,700	11,700
7-Jul-08	1	30	31,490	30	31,490	8.50	-	-	-	-	-	31,490	-31,490
8-Jul-08	1	26	28,735	26	28,735	8.50	-	-	-	-	-	28,735	-28,735
9-Jul-08	1	36	39,755	36	39,755	8.50	-	-	-	-	-	39,755	-39,755
10-Jul-08	1	31	42,330	31	42,330	8.50	-	-	-	-	-	42,330	-42,330
11-Jul-08	3	34	45,295	34	45,295	8.50	-	-	-	-	-	45,295	-45,295
14-Jul-08	1	20	27,365	20	27,365	8.50	-	-	-	-	-	27,365	-27,365
15-Jul-08	1	29	43,825	29	43,825	8.50	-	-	-	-	-	43,825	-43,825
16-Jul-08	1	26	36,035	26	36,035	8.50	-	-	-	-	-	36,035	-36,035
17-Jul-08	1	23	26,365	23	26,365	8.50	-	-	-	-	-	26,365	-26,365
18-Jul-08	3	27	34,330	27	34,330	8.50	1	5	1	5	6.00	34,325	-34,325
21-Jul-08	1	44	52,315	44	52,315	8.50	-	-	-	-	-	52,315	-52,315
22-Jul-08	1	39	44,265	39	44,265	8.50	-	-	-	-	-	44,265	-44,265
23-Jul-08	1	40	47,480	40	47,480	8.50	-	-	-	-	-	47,480	-47,480
24-Jul-08	1	37	40,710	37	40,710	8.50	-	-	-	-	-	40,710	-40,710
25-Jul-08	3	40	43,260	40	43,260	8.50	-	-	-	-	-	43,260	-43,260
28-Jul-08	1	28	29,110	28	29,110	8.50	-	-	-	-	-	29,110	-29,110
29-Jul-08	1	16	18,375	16	18,375	8.50	-	-	-	-	-	18,375	-18,375
30-Jul-08	1	11	11,555	11	11,555	9.00	-	-	-	-	-	11,555	-11,555
31-Jul-08	1	2	3,060	2	3,060	9.00	2	75	2	75	6.00	2,985	-2,985
1-Aug-08	3	1	8,000	1	8,000	9.00	3	1,695	3	1,695	6.00	6,305	
£	3	2	5,000	2	5,000	9.00	14	3,105	14	3,105	6.00	1,895	-8,200
4-Aug-08	1	19	23,810	19	23,810	9.00	-	-	-	-	-	23,810	-23,810
5-Aug-08	1	23	22,790	23	22,790	9.00	-	-	-	-	-	22,790	-22,790
6-Aug-08	1	17	14,855	17	14,855	9.00	-	-	-	-	-	14,855	-14,855
7-Aug-08	1	24	18,640	24	18,640	9.00	-	-	-	-	-	18,640	-18,640
8-Aug-08	3	29	32,720	29	32,720	9.00	-	-	-	-	-	32,720	-32,720

@ : Net of overnight repo. $: Second LAF auction introduced with effect from November 28, 2005.

: Additional LAF. ## : Special LAF. £: Second LAF conducted on Reporting Friday.

Note : 1. With effect from October 29, 2004 nomenclature of repo and reverse repo has been interchanged as per international usage. Till October 28, 2004, repo indicated absorption of liquidity whereas reverse repo meant injection of liquidity by the Reserve Bank.

2. Ceiling of Rs. 3,000 crore on daily reverse repo under LAF which was introduced with effect from March 5, 2007 was withdrawn with effect from August 06, 2007.

3. Second LAF auction has been discontinued with effect from August 06, 2007. Second LAF was re-introduced on Reporting Fridays with effect from August 1, 2008.

APPENDIX TABLE 36 : ISSUE OF CERTIFICATES OF DEPOSIT BY SCHEDULED COMMERCIAL BANKS

Fortnight ended		Outstanding (Rupees crore)	Rate of Discount (Per cent) @	Weighted Average Discount Rate (Per cent) @	Fortnight ended		Outstanding (Rupees crore)	Rate of Discount (Per cent) @	Weighted Average Discount Rate (Per cent) @
1		2	3	4	5		6	7	8
2006-07									
April	14	38,568	6.00-8.90	7.68	July	6	1,02,992	6.25-9.69	8.26
	28	44,059	6.00-8.45	7.03		20	1,05,317	5.50-10.82	7.86
May	12	48,515	6.50-7.90	7.05	August	3	1,03,750	6.05-10.75	7.40
	26	50,228	6.37-8.67	7.17		17	1,06,350	6.87-8.91	7.82
June	9	53,863	5.75-7.96	7.17		31	1,09,224	6.87-10.75	8.67
	23	56,390	5.50-8.16	7.19	September	14	1,13,892	6.87-10.00	8.64
July	7	57,256	6.00-8.70	7.64		28	1,18,481	6.87-10.00	8.57
	21	59,167	4.35-8.21	7.65	October	12	1,22,142	6.87-10.00	8.28
August	4	64,748	6.00-8.62	7.40		26	1,24,232	6.85-10.00	7.91
	18	65,621	4.75-8.50	7.77	November	9	1,25,653	6.87-9.00	8.30
September	1	66,340	4.60-8.50	7.57		23	1,27,142	6.87-9.03	8.48
	15	63,864	7.13-8.50	7.74	December	7	1,25,326	8.05-9.25	8.60
	29	65,274	7.25-8.50	7.80		21	1,23,466	8.05-10.00	8.81
October	13	64,482	4.75-8.50	7.79	January	4	1,27,154	6.87-9.82	8.73
	27	65,764	6.00-8.50	7.73		18	1,29,123	7.90-9.21	8.82
November	10	67,694	6.00-8.36	7.81	February	1	1,32,395	7.90-9.85	8.89
	24	68,911	7.50-8.33	7.99		15	1,35,097	6.83-9.75	8.51
December	8	69,664	6.00-8.36	7.90		29	1,39,160	9.22-10.27	9.94
	22	68,619	7.25-8.90	8.28	March	14	1,43,714	7.00-10.48	9.98
January	5	68,928	8.26-9.25	8.94		28	1,47,792	9.00-10.75	10.00
	19	70,149	8.00-9.55	9.22	**2008-09**				
February	2	70,727	8.41-9.80	9.32	April	11	1,49,986	8.00-9.72	9.07
	16	72,795	9.40-10.83	9.87		25	1,50,865	7.70-9.06	8.49
March	2	77,971	9.90-11.30	10.63	May	9	1,53,410	7.75-10.20	8.92
	16	92,468	10.30-11.25	10.77		23	1,56,780	8.00-10.20	8.95
	30	93,272	10.23-11.90	10.75	June	6	1,59,696	8.60-10.20	9.15
2007-08						20	1,63,143	8.62-9.79	9.16
April	13	93,808	9.50-11.50	10.15	July	4	1,64,557	8.30-10.60	9.68
	27	95,980	9.40-11.50	10.75		18	1,64,892	8.92-10.95	10.23
May	11	97,292	7.00-10.82	10.65					
	25	99,175	10.05-11.50	9.87					
June	8	99,287	6.13-10.95	9.31					
	22	98,337	7.00-10.20	9.37					

@: Effective discount rate per annum.

APPENDIX TABLE 37 : COMMERCIAL PAPER*

Fortnight ended		Outstanding (Rupees crore)	Amount Issued (Rupees crore)	Typical Effective Rates of Discount (Per cent)	Weighted Average Discount Rate (Per cent)	Fortnight ended		Outstanding (Rupees crore)	Amount Issued (Rupees crore)	Typical Effective Rates of Discount (Per cent)	Weighted Average Discount Rate (Per cent)
1		2	3	4		5	6	7	8	9	10
2006-07											
April	15	12,968	1,423	6.77-8.95	7.62	July	15	28,129	4,200	4.00-11.50	7.55
	30	16,550	4,642	6.35-9.25	7.30		31	30,631	6,346	2.25-11.50	7.05
May	15	17,264	2,068	6.32-7.95	6.87	August	15	31,784	3,823	6.25-13.50	7.59
	31	17,067	2,633	6.40-9.25	6.89		31	31,527	4,494	6.80-10.25	8.30
June	15	18,933	2,655	6.44-9.25	6.99	September	15	33,227	4,793	6.35-10.90	8.84
	30	19,650	2,326	6.59-9.25	7.10		30	33,614	3,515	7.70-12.00	8.95
July	15	21,652	3,389	6.25-8.30	7.18	October	15	38,495	6,977	7.00-13.00	7.99
	31	21,110	2,423	6.50-8.25	7.34		31	42,183	6,252	6.70-12.00	7.65
August	15	23,084	4,018	6.25-8.10	7.06	November	15	41,678	1,517	7.50-12.00	8.62
	31	23,299	2,442	6.60-9.00	7.31		30	41,308	3,403	8.05-11.50	9.45
September	15	24,011	2,507	6.40-8.17	7.39	December	15	40,914	3,180	8.22-11.50	9.17
	30	24,444	2,713	7.10-9.25	7.70		31	40,243	6,477	7.60-12.00	9.27
October	15	23,521	1,733	7.20-8.65	7.63	January	15	42,392	5,588	7.35-12.50	9.16
	31	23,171	1,640	7.00-8.75	7.77		31	50,062	10,330	7.55-16.00	11.83
November	15	23,450	2,361	7.25-9.25	8.08	February	15	43,970	3,036	6.95-11.00	9.31
	30	24,238	4,031	7.50-9.50	7.88		29	40,642	3,509	7.40-11.00	9.73
December	15	23,827	1,915	7.50-8.75	7.94	March	15	37,283	1,928	9.50-11.00	10.44
	31	23,536	1,165	7.74-10.00	8.52		31	32,592	2,691	9.50-14.25	10.38
January	15	23,758	1,255	8.30-9.58	8.70	**2008-09**					
	31	24,398	2,235	8.25-10.50	9.09	April	15	35,794	6,283	7.74-10.25	8.58
February	15	23,999	1,522	8.00-11.25	9.49		30	37,584	3,172	7.35-10.10	8.85
	28	21,167	1,241	8.70-12.00	10.49	May	15	41,006	4,726	7.15-10.75	8.57
March	15	19,102	2,106	7.50-13.35	10.24		31	42,032	3,863	7.70-10.50	9.02
	31	17,863	1,280	10.25-13.00	11.33	June	15	45,983	6,680	8.25-11.60	9.26
2007-08							30	46,847	5,245	9.00-12.25	10.03
April	15	19,013	1,952	10.00-14.00	10.46	July	15	48,342	5,917	9.50-12.25	10.75
	30	18,759	1,815	9.65-11.75	10.52		31	51,569	5,957	9.60-12.00	10.95
May	15	19,288	2,309	9.25-11.45	10.50						
	31	22,024	4,016	8.71-12.00	9.87						
June	15	25,500	5,238	7.00-10.80	9.13						
	30	26,256	2,287	7.35-12.00	8.93						

*: Face value.

APPENDIX TABLE 38: INDICES OF REAL EFFECTIVE EXCHANGE RATE (REER) AND NOMINAL EFFECTIVE EXCHANGE RATE (NEER) OF THE INDIAN RUPEE

Year/Month	36 - Currency Trade based weights (Base : 1993-94=100)		6 - Currency Trade based weights (Base : 1993-94 = 100)	
	REER	NEER	REER	NEER
1	2	3	4	5
1993-94	100.00	100.00	100.00	100.00
1994-95	104.32	98.91	105.82	96.96
1995-96	98.19	91.54	101.27	88.56
1996-97	96.83	89.27	101.11	86.85
1997-98	100.77	92.04	104.41	87.94
1998-99	93.04	89.05	96.14	77.49
1999-00	95.99	91.02	97.69	77.16
2000-01	100.09	92.12	102.82	77.43
2001-02	100.86	91.58	102.71	76.04
2002-03	98.18	89.12	97.68	71.27
2003-04	99.56	87.14	99.17	69.97
2004-05	100.09	87.31	101.78	69.58
2005-06	102.35	89.85	107.30	72.28
2006-07 (P)	98.43	85.89	105.57	69.49
2007-08 (P)	105.08	92.46	114.10	74.17
2006-07 (P)				
April	98.17	87.73	105.86	71.63
May	96.39	85.43	103.70	69.39
June	96.53	85.11	103.19	68.79
July	95.70	84.22	102.31	68.14
August	95.59	83.61	102.26	67.65
September	97.96	84.65	104.88	68.40
October	99.91	86.18	107.34	69.66
November	100.27	86.50	107.92	69.90
December	99.05	85.89	106.52	69.38
January	100.59	87.05	107.69	70.32
February	100.49	87.21	107.67	70.42
March	100.50	87.11	107.46	70.23
2007-08 (P)				
April	102.84	91.79	111.63	72.74
May	106.24	94.68	115.73	75.19
June	106.14	93.24	115.22	75.37
July	106.19	93.08	115.10	75.15
August	105.54	92.63	114.10	74.44
September	106.15	92.89	115.03	74.64
October	106.34	93.49	115.79	75.45
November	104.85	92.47	113.90	74.34
December	105.16	92.92	114.52	74.65
January	105.12	92.55	114.23	74.31
February	103.84	91.41	113.06	73.41
March	102.55	88.34	110.87	70.38
2008-09 (P)				
April	102.60	88.75	112.16	70.63
May	98.44	84.75	107.48	67.48
June	98.83	83.47	108.25	66.38

P : Provisional.

Note : For detailed methodology of compilation of indices, see "Revision of Nominal Effective Exchange Rate (NEER) and Real Effective Exchange Rate (REER) Indices", Reserve Bank of India Bulletin, December 2005.

APPENDIX TABLE 39: INTER-BANK AND MERCHANT TRANSACTIONS IN THE FOREIGN EXCHANGE MARKET

(US $ million)

Month	Inter-bank							Merchant						
	Spot			Forward / Swap				Spot			Forward			
	Purchases	Sales	Net	Purchases	Sales	Net	Turnover	Purchases	Sales	Net	Purchases	Sales	Net	Turnover
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2007														
Jan	121,321	123,163	-1,841	100,678	99,427	1,251	444,589	38,260	38,745	-485	44,962	44,205	757	166,173
Feb	111,310	113,771	-2,462	86,376	94,507	-8,130	405,964	34,717	32,203	2,514	34,113	32,024	2,089	133,057
Mar	140,564	139,745	819	143,524	147,993	-4,469	571,827	48,775	45,195	3,580	53,617	55,288	-1,671	202,875
Apr	159,985	160,120	-135	144,488	150,946	-6,458	615,539	56,231	54,878	1,352	54,676	53,542	1,134	219,327
May	152,110	155,983	-3,873	140,900	139,090	1,810	588,083	59,772	55,127	4,644	53,353	50,653	2,700	218,905
Jun	167,134	168,889	-1,755	153,138	152,135	1,003	641,296	67,512	59,664	7,848	64,720	66,962	-2,242	258,859
Jul	184,692	195,309	-10,617	168,511	168,385	126	716,897	71,909	59,357	12,552	67,580	72,368	-4,788	271,215
Aug	191,049	190,489	560	156,048	166,272	-10,224	703,858	63,149	62,173	976	95,318	98,013	-2,696	318,654
Sep	187,563	201,416	-13,852	173,019	173,355	-337	735,353	63,777	51,818	11,959	79,620	79,402	218	274,616
Oct (P)	215,594	223,933	-8,339	212,103	216,324	-4,221	867,954	99,767	82,081	17,686	107,731	108,111	-380	397,690
Nov (P)	173,416	178,245	-4,829	158,976	164,264	-5,288	674,901	81,537	81,105	432	95,637	93,641	1,996	351,920
Dec (P)	148,320	146,470	1,850	150,417	154,195	-3,778	599,402	88,201	78,033	10,168	80,191	86,601	-6,410	333,026
2008														
Jan (P)	226,377	233,117	-6,740	203,584	211,103	-7,519	874,181	88,847	82,379	6,468	106,148	105,973	175	383,347
Feb (P)	197,919	194,007	3,912	228,282	229,056	-774	849,264	68,498	69,266	-768	94,616	93,305	1,311	325,685
Mar (P)	194,193	187,147	7,046	194,280	196,723	-2,443	772,343	64,875	60,529	4,346	82,144	86,514	-4,370	294,062
Apr (P)	180,418	177,180	3,238	176,562	163,333	13,229	697,493	63,328	64,248	-920	80,860	76,244	4,616	284,680
May (P)	184,204	179,261	4,943	166,029	171,602	-5,573	701,096	56,532	55,773	759	84,459	88,174	-3,715	284,938
Jun (P)	194,222	181,213	13,009	213,252	211,582	1,670	800,269	55,451	57,491	-2,040	76,290	78,481	-2,191	267,713

P: Provisional.

Note : 1. Merchant turnover include cross-currency (*i.e.* foreign currency to foreign currency , both spot and forward) transactions and cancellation of forward contracts.

2. Inter-bank turnover include cross-currency (*i.e.* foreign currency to foreign currency , both spot and forward) transactions.

APPENDIX TABLE 40: SECONDARY MARKET TRANSACTIONS IN GOVERNMENT SECURITIES

(Amount in Rupees crore)

Instruments	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I. Outright Transaction																
1. Central Government Securities	69,534	68,848	93,750	2,05,731	1,06,676	87,887	91,291	68,402	1,19,408	2,97,319	1,84,044	91,158	99,855	1,36,086	1,02,523	84,840
	(86.46)	(86.77)	(81.50)	(89.17)	(86.92)	(87.10)	(74.47)	(83.14)	(89.77)	(93.90)	(94.78)	(91.40)	(90.15)	(90.49)	(91.72)	(89.37)
2. State Government Securities	1,551	1,362	912	1,044	1,166	601	986	1,400	1,293	2,634	1,817	1,117	1,501	5,464	747	2,163
	(1.93)	(1.71)	(0.79)	(0.45)	(0.95)	(0.60)	(0.80)	(1.70)	(0.97)	(0.83)	(0.94)	(1.12)	(1.36)	(3.63)	(0.67)	(2.28)
3. Treasury Bills	9,340	9,133	20,371	23,952	14,886	12,415	30,316	12,470	12,319	16,686	8,318	7,465	9,407	8,840	8,504	7,933
	(11.61)	(11.51)	(17.71)	(10.38)	(12.13)	(12.30)	(24.73)	(15.16)	(9.26)	(5.27)	(4.28)	(7.48)	(8.49)	(5.88)	(7.61)	(8.36)
(a) 91 days	5,008	5,229	12,900	10,632	5,228	2,761	12,258	3,232	3,059	2,771	1,365	2,042	4,189	5,414	5,054	2,424
	(6.23)	(6.59)	(63.32)	(44.39)	(35.12)	(22.24)	(40.43)	(25.92)	(24.83)	(16.61)	(16.41)	(27.35)	(44.53)	(61.25)	(59.43)	(30.56)
(b) 182 days	1,435	1,089	3,654	1,746	3,338	4,384	7,395	2,409	1,254	3,196	2,042	1,209	1,177	1,169	883	1,473
	(1.78)	(1.37)	(17.94)	(7.29)	(22.43)	(35.32)	(24.39)	(19.32)	(10.18)	(19.16)	(24.54)	(16.20)	(12.51)	(13.23)	(10.39)	(18.57)
(c) 364 days	2,897	2,815	3,817	11,573	6,321	5,270	10,667	6,828	8,005	10,718	4,911	4,214	4,041	2,257	2,567	4,036
	(3.60)	(3.55)	(18.74)	(48.32)	(42.46)	(42.45)	(35.19)	(54.76)	(64.98)	(64.24)	(59.05)	(56.45)	(42.96)	(25.53)	(30.18)	(50.87)
Total (1+2+3)	80,425	79,343	1,15,033	2,30,726	1,22,729	1,00,902	1,22,593	82,272	1,33,019	3,16,639	1,94,179	99,740	1,10,764	1,50,391	1,11,774	94,936
	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
II. Repo Transaction																
1. Central Government Securities	132,158	2,10,540	2,25,958	2,38,855	3,69,212	3,82,310	3,79,459	2,67,549	2,83,763	3,97,204	3,98,195	2,85,753	3,05,363	3,42,048	2,60,102	2,08,496
	(87.71)	(93.79)	(87.79)	(88.11)	(88.50)	(92.94)	(95.39)	(87.58)	(88.42)	(93.30)	(90.08)	(87.76)	(88.71)	(92.89)	(92.38)	(93.34)
2. State Government Securities	3,440	1,841	1,165	1,854	3,129	2,339	2,179	3,729	6,806	10,400	3,376	14,550	17,124	4,347	3,333	217
	(2.29)	(0.82)	(0.45)	(0.68)	(0.75)	(0.57)	(0.55)	(1.22)	(2.12)	(2.44)	(0.76)	(4.47)	(4.97)	(1.18)	(1.18)	(0.10)
3. Treasury Bills	15,071	12,104	30,250	30,372	44,858	26,709	16,161	34,210	30,366	18,122	40,467	25,294	21,733	21,842	18,111	14,658
	(10.00)	(5.39)	(11.75)	(11.20)	(10.75)	(6.49)	(4.06)	(11.20)	(9.46)	(4.26)	(9.15)	(7.77)	(6.31)	(5.93)	(6.43)	(6.56)
(a) 91 days	1,487	2,734	10,672	16,269	24,594	12,530	5,212	3,263	2,145	2,412	3,490	3,420	2,734	4,362	7,857	3,955
	(0.99)	(1.22)	(35.28)	(53.57)	(54.83)	(46.91)	(32.25)	(9.54)	(7.06)	(13.31)	(8.62)	(13.52)	(12.58)	(19.97)	(43.38)	(26.98)
(b) 182 days	1,373	462	1,034	3,187	4,315	2,931	2,642	374	2,247	913	769	1,514	1,511	695	771	1,461
	(0.91)	(0.20)	(3.42)	(10.49)	(9.62)	(10.98)	(16.35)	(1.09)	(7.40)	(5.04)	(1.90)	(5.99)	(6.95)	(3.18)	(4.25)	(9.97)
(c) 364 days	12,211	8,908	18,544	10,916	15,949	11,248	8,308	27,242	25,974	14,797	36,208	20,360	17,488	16,785	9,483	9,242
	(8.10)	(3.97)	(61.30)	(35.94)	(35.55)	(42.11)	(51.41)	(79.63)	(85.54)	(81.65)	(89.48)	(80.49)	(80.47)	(76.85)	(52.36)	(63.05)
Total (1+2+3)	150,669	2,24,485	2,57,372	2,71,081	4,17,199	411,358	3,97,799	3,05,488	3,20,935	4,25,726	4,42,037	3,25,597	3,44,220	3,68,236	2,81,546	2,23,370
	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(90.27)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
III. GRAND TOTAL (I+II)	**2,31,094**	**3,03,829**	**3,72,405**	**5,01,808**	**5,39,927**	**5,12,260**	**5,20,392**	**3,87,760**	**4,53,954**	**7,42,365**	**6,36,216**	**4,25,337**	**4,54,984**	**5,18,627**	**3,93,320**	**3,18,306**
Percentage of I to III	(34.8)	(26.11)	(30.89)	(45.98)	(22.73)	(19.70)	(23.56)	(21.22)	(29.30)	(42.65)	(30.52)	(23.45)	(24.34)	(29.00)	(28.42)	(29.83)
Percentage of II to III	(65.2)	(73.89)	(69.11)	(54.02)	(77.27)	(80.30)	(76.44)	(78.78)	(70.70)	(57.35)	(69.48)	(76.55)	(75.66)	(71.00)	(71.58)	(70.17)

Note: 1. Figures in parentheses indicate percentages to total outright/ repo transactions. Repo transactions exclude second leg of transactions.
2. 182-day Treasury Bills have been re-introduced from the year 2005-06.

APPENDIX TABLE 41: INTEREST RATE STRUCTURE OF SCHDULED COMMERCIAL BANKS

(Per cent)

Item	31-Mar 2007	30-Apr 2007	31-May 2007	30-Jun 2007	31-Jul 2007	31-Aug 2007	30-Sep 2007	31-Oct 2007	30-Nov 2007	31-Dec 2007	31-Jan 2008	28-Feb 2008	31-Mar 2008	30-Apr 2008	31-May 2008	30-Jun 2008	31-Jul 2008
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A. Lending Rates																	
Size of Credit Limit																	
1. Up to Rs. 2 lakh	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR	≤BPLR
2. Over Rs. 2 lakh:																	
BPLR*	12.25-12.50	12.75-13.25	12.75-13.25	12.75-13.25	12.75-13.25	12.75-13.25	12.75-13.25	12.75-13.25	12.75-13.25	12.75-13.25	12.75-13.25	12.50-13.25	12.25-12.75	12.25-12.75	12.25-12.75	12.50-12.75	12.75-13.25
B. Deposit Rates																	
Category of Account																	
1. Current	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2. Savings	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3. Term Deposits *																	
a) Up to and including																	
one year	3.00-7.00	3.00-7.00	3.00-7.00	3.00-9.00	3.00-9.50	3.00-7.50	3.00-7.50	3.00-7.50	3.00-7.25	3.00-7.25	3.00-7.50	3.00-7.50	3.00-7.50	3.00-7.50	3.00-7.50	3.00-8.00	3.00-8.25
b) 1-2 years	7.50-9.00	7.50-9.00	7.50-9.00	7.50-9.00	7.50-9.50	8.00-9.00	8.00-9.00	8.00-9.00	8.00-8.75	8.25-8.50	8.25-8.75	8.25-8.75	8.25-8.75	8.25-8.75	8.25-8.75	8.25-9.50	8.75-9.50
c) 2-3 years	7.50-8.50	7.50-8.50	7.50-8.50	7.50-8.50	7.50-9.50	8.25-9.00	8.25-9.00	8.25-9.00	8.25-8.75	8.25-8.75	8.25-8.75	8.25-8.75	8.25-8.75	8.25-8.75	8.25-8.75	8.50-9.50	9.00-9.50
d) > 3 years	7.75-9.00	7.75-9.00	7.75-9.00	7.75-9.00	7.75-9.60	8.25-9.50	8.25-9.50	8.25-9.50	8.25-9.00	7.50-9.00	7.50-9.00	7.50-9.00	7.50-9.00	7.50-9.00	8.00-8.75	8.00-9.00	8.75-9.50

*: Data relate to five major public sector banks. BPLR: Benchmark Prime Lending Rate. ≤: Not exceeding.

APPENDIX TABLE 42 : NEW CAPITAL ISSUES BY NON-GOVERNMENT PUBLIC LIMITED COMPANIES

(Amount in Rupees crore)

Security and Type of Issue	2005-06		2006-07		2007-08 P	
	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount
1	2	3	4	5	6	7
1) Equity Shares (a+b)	**128**	**20,899**	**114**	**29,756**	**111**	**56,848**
	(118)	**(18,793)**	**(109)**	**(19,733)**	**(103)**	**(54,732)**
a) Prospectus	92	16,801	81	27,175	85	47,477
	(89)	(15,355)	(81)	(17,640)	(83)	(46,139)
b) Rights	36	4,098	33	2,581	26	9,371
	(29)	(3,438)	(28)	(2,093)	(20)	(8,594)
2) Preference Shares (a+b)	**1**	**10**	**-**	**-**	**1**	**5,481**
a) Prospectus	1	10	-	-	-	-
b) Rights	-	-	-	-	1	5,481
3) Debentures (a+b)	**2**	**245**	**3**	**847**	**2**	**809**
a) Prospectus	1	127	-	-	-	-
b) Rights	1	118	3	847	2	809
of which:						
I) Convertible (a+b)	-	-	-	-	1	206
a) Prospectus	-	-	-	-	-	-
b) Rights	-	-	-	-	1	206
II) Non-Convertible (a+b)	2	245	3	847	1	603
a) Prospectus	1	127	-	-	-	-
b) Rights	1	118	3	847	1	603
4) Bonds (a+b)	**-**	**-**	**-**	**-**	**1**	**500**
a) Prospectus	-	-	-	-	1	500
b) Rights	-	-	-	-	-	-
5) TOTAL (1+2+3+4)	**131**	**21,154**	**117**	**30,603**	**115**	**63,638**
a) Prospectus	94	16,938	81	27,175	86	47,977
b) Rights	37	4,216	36	3,428	29	15,661

- : Nil/Negligible. P: Provisional.

Note:
1. Data are provisional.
2. Data exclude bonus shares, offers for sale and private placements.
3. Figures in parentheses indicate data in respect of premium on capital issues. These are included in respective totals.
4. Preference shares include cumulative convertible preference shares and equi-preference shares.
5. Convertible debentures include partly convertible debentures.
6. Non-convertible debentures include secured premium notes and secured deep discount bonds.
7. Data are complied from prospectus/circulars/advertisements issued by companies, replies given by the companies to the Reserve Bank's questionnaires, information received from SEBI, stock exchanges, press reports, *etc.*

APPENDIX TABLE 43 : DOMESTIC STOCK INDICES

Year/Month	BSE Index (Base: 1978-79=100)				S&P CNX Nifty (Base: Nov. 3, 1995 = 1000)			
	Average	High	Low	End of the Year/month	Average	High	Low	End of the Year/month
1	2	3	4	5	6	7	8	9
2004-05	**5,741**	**6915**	**4505**	**6493**	**1805**	**2169**	**1389**	**2036**
	(27.8)			**(16.1)**	**(26.5)**			**(14.9)**
2005-06	**8,280**	**11307**	**6135**	**11280**	**2513**	**3419**	**1903**	**3403**
	(44.2)			**(73.7)**	**(39.2)**			**(67.1)**
2006-07	**12,278**	**14652**	**8929**	**13072**	**3572**	**4224**	**2632**	**3822**
	(48.3)			**(15.9)**	**(42.1)**			**(12.3)**
2007-08	**16,569**	**20873**	**12455**	**15644**	**4897**	**6288**	**3634**	**4735**
	(35.0)			**(19.7)**	**(37.1)**			**(23.9)**
2006-07								
April	11742	12043	11237	12043	3494	3574	3346	3558
May	11599	12612	10399	10399	3437	3754	3071	3071
June	9935	10609	8929	10609	2915	3128	2633	3128
July	10557	10930	10007	10744	3092	3197	2933	3143
August	11305	11724	10752	11699	3306	3430	3148	3414
September	12036	12454	11551	12455	3492	3588	3366	3588
October	12637	13024	12204	12962	3648	3769	3515	3744
November	13416	13774	13033	13696	3869	3969	3767	3955
December	13628	13972	12995	13787	3910	4016	3717	3966
January	13984	14283	13362	14091	4037	4148	3850	4083
February	14143	14652	12938	12938	4084	4224	3745	3745
March	12858	13308	12415	13072	3731	3876	3577	3822
2007-08								
April	13478	14229	12455	13872	3947	4178	3634	4088
May	14156	14544	13765	14544	4184	4296	4067	4296
June	14334	14651	14003	14651	4222	4318	4113	4318
July	15253	15795	14664	15551	4474	4621	4314	4529
August	14779	15319	13989	15319	4301	4464	4075	4464
September	16046	17291	15422	17291	4660	5021	4475	5021
October	18500	19978	17329	19838	5457	5906	5069	5901
November	19260	19976	18526	19363	5749	5938	5519	5763
December	19827	20376	19080	20287	5964	6159	5742	6139
January	19326	20873	16730	17649	5756	6288	4899	5137
February	17728	18663	16608	17579	5202	5484	4838	5224
March	15838	16678	14809	15644	4769	4953	4503	4735
2008-09								
April	16291	17378	15343	17287	4902	5196	4647	5166
May	16946	17600	16276	16416	5029	5228	4835	4870
June	14997	16063	13462	13462	4464	4740	4041	4041
July	13717	14942	12576	14359	4125	4477	3817	4333

Note : Figures in parentheses are percentage variations over the previous year.
Source : Bombay Stock Exchange Limited (BSE) and the National Stock Exchange of India Limited (NSE).

APPENDIX TABLE 44: MAJOR INDICATORS OF DOMESTIC EQUITY MAKRETS

Year/Month	Bombay Stock Exchange Limited (BSE)					National Stock Exchange of India Ltd. (NSE)				
	Coefficient of Variation @	Dispersion (Range) @	Price/ Earning Ratio #	Market Capitalisation (Rupees crore)	Turnover (Rupees crore)	Coefficient of Variation@	Dispersion (Range) @	Price/ Earning Ratio #	Market Capitalisation (Rupees crore)	Turnover (Rupees crore)
1	2	3	4	5	6	7	8	9	10	11
2003-04	**23.0**	**3270.08**	**16.19**	**12,01,207**	**5,02,618**	**23.3**	**1057.85**	**15.24**	**11,20,976**	**10,99,535**
2004-05	**11.2**	**2409.93**	**16.56**	**16,98,428**	**5,18,716**	**11.3**	**780.00**	**14.79**	**15,85,585**	**11,40,071**
2005-06	**16.7**	**5172.18**	**16.98**	**30,22,191**	**8,16,074**	**15.6**	**1516.45**	**15.69**	**28,13,201**	**15,69,556**
2006-07	**11.1**	**5722.65**	**20.73**	**35,45,041**	**9,56,185**	**10.4**	**1591.45**	**19.51**	**33,67,350**	**19,45,285**
2007-08	**13.7**	**8417.96**	**22.65**	**51,38,015**	**15,78,856**	**14.4**	**2654.25**	**19.12**	**48,58,122**	**35,51,038**
2006-07										
April	1.9	805.33	21.35	32,55,565	87,487	1.8	228.00	20.59	29,90,200	1,77,372
May	6.8	2213.77	20.41	28,42,050	95,820	7.0	683.20	19.53	26,12,639	2,01,409
June	4.3	1679.81	17.90	27,21,678	72,013	4.3	495.40	16.65	25,24,659	1,51,051
July	2.5	922.75	19.02	27,12,144	54,698	2.6	264.35	17.95	25,14,261	1,18,698
August	2.7	972.26	19.59	29,93,780	63,084	2.8	282.55	18.55	27,77,401	1,30,796
September	2.0	903.73	20.73	31,85,680	71,629	1.7	222.25	20.09	29,94,132	1,44,339
October	1.9	820.25	21.56	33,70,676	69,627	2.0	253.75	20.92	31,38,319	1,38,382
November	1.8	740.55	22.07	35,77,308	1,01,840	1.7	201.85	20.72	33,73,652	1,89,863
December	2.0	977.01	22.41	36,24,357	85,512	2.2	299.05	20.95	34,26,236	1,70,105
January	1.8	920.56	22.63	37,79,742	87,605	1.9	297.45	21.24	35,71,487	1,75,147
February	3.1	1714.00	21.56	34,89,214	88,844	3.1	478.95	19.64	32,96,931	1,80,170
March	2.0	892.99	19.74	35,45,041	78,028	2.2	299.40	17.95	33,67,350	1,67,954
2007-08										
April	3.9	1773.51	20.75	38,28,337	78,693	4.1	544.25	19.28	36,50,368	1,68,567
May	1.9	779.00	20.84	40,74,552	98,821	1.8	229.00	19.74	38,98,078	2,07,585
June	1.4	647.48	20.67	41,68,272	95,268	1.4	205.25	20.08	39,78,381	1,93,648
July	2.2	1130.66	21.78	45,29,772	1,25,054	2.1	307.00	21.30	43,17,571	2,67,227
August	2.6	1329.49	19.95	45,38,006	1,06,042	2.7	389.10	19.47	42,96,994	2,31,241
September	4.0	1869.05	21.69	52,02,955	1,23,144	4.3	546.60	21.05	48,86,561	2,66,050
October	4.1	2649.05	24.86	63,32,093	1,99,089	4.6	836.95	24.59	57,22,227	4,55,589
November	2.1	1449.91	25.44	63,85,475	1,70,623	2.2	418.55	25.15	58,76,742	4,14,420
December	2.1	1296.23	26.94	71,69,985	1,63,516	2.2	417.00	26.55	65,43,272	3,66,385
January	7.3	4143.39	25.53	57,96,079	1,85,642	8.5	1388.55	25.33	52,95,387	4,47,138
February	3.0	2055.15	22.23	58,87,847	1,21,975	3.1	645.65	22.19	54,19,942	2,80,176
March	3.5	1868.39	20.18	51,38,015	1,10,991	2.9	449.90	20.58	48,58,122	2,53,012
2008-09										
April	3.8	2035.34	20.71	57,94,293	1,15,454	3.4	548.50	21.27	54,42,780	2,71,227
May	2.5	1324.53	20.66	54,28,879	1,21,670	2.3	392.90	21.46	50,98,873	2,77,923
June	4.7	2601.58	18.26	43,75,022	1,13,605	4.3	699.05	18.99	41,03,651	2,64,428
July	4.4	2366.48	17.06	47,32,544	1,23,916	4.4	660.10	17.56	44,32,427	2,95,816

@ : Based on BSE Sensex and S&P CNX Nifty, respectively.
\# : Based on scrips included in the BSE Sensex and the S&P CNX Nifty, respectively.
Source : Bombay Stock Exchange Limited (BSE) and the National Stock Exchange of India Limited. (NSE).

APPENDIX TABLE 45: TURNOVER IN THE EQUITY DERIVATIVES MARKET

(Rupees crore)

Year/Month	Bombay Stock Exchange Limited (BSE)				The National Stock Exchange of India Ltd. (NSE)				
	Index Futures	Index Options$	Stock Futures	Stock Options @	Index Futures	Index Options$	Stock Futures	Stock Options @	Interest Rate Futures
1	2	3	4	5	6	7	8	9	10
2003-04	**6,572**	**0**	**5,171**	**332**	**5,54,446**	**52,816**	**13,05,939**	**2,17,207**	**202**
2004-05	**13,600**	**2,297**	**213**	**3**	**7,72,147**	**1,21,943**	**14,84,056**	**1,68,836**	**0**
2005-06	**6**	**3**	**1**	**0**	**15,13,755**	**3,38,469**	**27,91,697**	**1,80,253**	**0**
20060-7	**55,490**	**0**	**3,515**	**0**	**2,539,574**	**7,91,906**	**38,30,967**	**1,93,795**	**0**
2007-08	**2,16,447**	**28**	**5,375**	**0**	**3,820,667**	**1,362,111**	**7,548,563**	**3,59,137**	**0**
2006-07									
April	1	0	0	0	2,04,236	52,421	4,60,552	20,623	0
May	0	0	0	0	2,57,326	58,789	4,09,401	16,874	0
June	18	0	0	0	2,43,572	57,969	2,43,950	11,306	0
July	26	0	0	0	1,86,760	54,711	2,22,539	13,245	0
August	68	0	0	0	1,73,333	53,103	2,29,184	14,042	0
September	265	0	0	0	1,77,518	53,647	2,75,430	16,351	0
October	196	0	0	0	1,66,974	49,744	2,72,516	16,425	0
November	7,986	0	0	0	1,80,781	60,018	3,88,800	20,229	0
December	9,270	0	234	0	2,25,288	79,719	3,47,747	16,408	0
January	9,932	0	1,020	0	1,90,592	66,646	3,50,817	19,401	0
February	12,116	0	1,073	0	2,42,237	91,817	3,52,653	16,785	0
March	15,612	0	1,188	0	2,90,957	1,13,322	2,77,378	12,106	0
2007-08									
April	14,385	0	1,200	0	2,05,458	97,150	2,96,629	17,050	0
May	15,764	0	1,252	0	2,14,523	85,465	4,00,096	23,358	0
June	16,566	28	1,161	0	2,40,797	92,503	4,51,314	21,928	0
July	-	-	-	-	2,38,577	94,561	6,47,356	34,582	0
August	18,784	0	1,227	0	3,63,988	1,40,961	5,19,385	32,398	0
September	21,431	0	72	0	2,56,470	1,07,965	6,70,968	37,485	0
October	23,962	0	23	0	4,85,079	1,73,992	11,20,263	54,328	0
November	21,960	0	307	0	3,65,564	1,16,952	9,89,113	45,676	0
December	20,293	0	20	0	2,87,357	1,03,165	8,49,996	33,711	0
January	22,235	0	47	0	4,50,657	1,18,827	8,51,213	33,183	0
February	22,515	0	50	0	3,52,226	1,10,251	4,21,838	14,901	0
March	18,552	0	16	0	3,59,970	1,20,318	3,30,390	10,536	0
2008-09									
April	4,051	9	2	0	2,80,100	1,33,565	3,36,900	15,865	0
May	5,049	0	1	0	2,67,641	1,29,067	3,80,161	21,040	0
June	1,359	0	2	0	3,77,939	3,08,709	3,75,987	21,430	0
July	765	0	1	0	3,95,380	3,57,209	3,82,601	24,985	0

@ : Notional turnover for call and put options. - : Negligible/Not available.

Note : Index futures were introduced in June 2000, index options in June 2001, stock options in July 2001 and stock futures in November 2001 both on the BSE and NSE.

Source: Bombay Stock Exchange Limited (BSE) and the National Stock Exchange of India Limited (NSE).

APPENDIX TABLE 46 : FINANCIAL ASSISTANCE SANCTIONED AND DISBURSED BY FINANCIAL INSTITUTIONS

(Rupees crore)

Institutions	2005-06		2006-07 P		2007-08 P	
	Sanctions	Disbursements	Sanctions	Disbursements	Sanctions	Disbursements
1	2	3	4	5	6	7
A. All India Term Lending Institutions (1 to 3)	**11,975**	**9,287**	**12,152**	**10,775**	**18,731**	**17,378**
1. IFCI	-	187	1,050	550	2,550	2,280
2. SIDBI	11,975	9,100	11,102	10,225	16,181	15,098
3. IIBI #	-	-	N.A.	N.A.	N.A.	N.A.
B. Specialised Financial Institutions (4 to 6)	**133**	**88**	**245**	**120**	**366**	**189**
4. IVCF	-	-	-	-	-	-
5. ICICI Venture	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
6. TFCI	133	88	245	120	366	189
C. Investment Institutions (7 to 8)	**15,558**	**11,771**	**18,862**	**27,757**	**39,617**	**28,414**
7. LIC	15,165	11,200	18,127	27,017	38,455	27,264
8. GIC @	393	571	735	740	1,162	1,150
D. Total Assistance by All-India Financial Institutions (A+B+C)	**27,666**	**21,146**	**31,259**	**38,652**	**58,714**	**45,981**
E. State-level Institutions (9 to 10)	**N.A.**	**N.A.**	**N.A.**	**N.A.**	**N.A.**	**N.A.**
9. SFCs	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10. SIDCs	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
F. Total Assistance by All Financial Institutions (D+E)	**27,666**	**21,146**	**31,259**	**38,652**	**58,714**	**45,981**

P : Provisional - : Nil/Negligible N.A. : Not available.

@ : Data include GIC and its erstwhile subsidiaries namely New India Assurance Co. Ltd., Oriental Insurance Co. Ltd., United India Insurance Co. Ltd. and National Insurance Co. Ltd.

: IIBI is in the process of voluntary winding up.

Source : Respective Financial Institutions.

APPENDIX TABLE 47 : SELECT ECONOMIC INDICATORS - WORLD

Item	2000	2001	2002	2003	2004	2005	2006	2007	2008$	2009$
1	2	3	4	5	6	7	8	9	10	11
I. World Output (Per cent change)	**4.7**	**2.2**	**2.8**	**3.6**	**4.9**	**4.4**	**5.1**	**5.0**	**4.1**	**3.9**
i) Advanced economies	3.9	1.2	1.6	1.9	3.2	2.6	3.0	2.7	1.7	1.4
ii) Other emerging market and developing countries	5.9	3.8	4.7	6.2	7.5	7.1	7.9	8.0	6.9	6.7
a) Developing Asia	6.9	5.8	6.9	8.1	8.6	9.0	9.9	10.0	8.4	8.4
b) Africa	3.5	4.9	6.1	5.3	6.5	5.7	5.9	6.5	6.4	6.4
c) Middle East	5.4	3.0	3.9	6.9	5.9	5.7	5.5	5.9	6.2	6.0
d) Western Hemisphere	4.1	0.7	0.4	2.1	6.2	4.6	5.5	5.6	4.5	3.6
II. Inflation-CPI (Per cent change)										
i) Advanced economies	2.2	2.1	1.5	1.8	2.0	2.3	2.4	2.2	3.4	2.3
ii) Other emerging market and developing countries	8.5	7.6	6.7	6.6	5.9	5.7	5.4	6.4	9.1	7.4
a) Developing Asia	1.9	2.7	2.0	2.5	4.1	3.8	4.1	5.3	5.9	4.1
III. Fiscal Balance #										
i) Advanced Economies	0.1	-0.9	-2.4	-3.1	-2.8	-2.4	-1.8	-1.7	-1.7	-
ii) Other emerging market and developing countries (Weighted Average)	-3.0	-3.1	-3.4	-2.7	-1.6	-0.9	-0.4	-1.1	-0.8	-
IV. Net Capital Flows* (US $ billion)										
Emerging market and developing countries**										
i) Net private capital flows (a+b+c)***	74.8	79.5	89.8	168.6	241.9	251.8	231.9	605.0	330.7	441.5
a) Net private direct investment	171.3	186.3	157.2	166.2	188.7	259.8	250.1	309.9	306.9	322.4
b) Net private portfolio investment	15.9	-78.7	-92.2	-13.2	16.4	-19.4	-103.8	48.5	-72.2	31.0
c) Net other private capital flows	-112.2	-27.1	25.1	17.1	38.5	13.3	87.5	248.8	98.0	90.0
ii) Net official flows	-33.9	0.9	-0.6	-50.0	-70.7	-109.9	-160.0	-149.0	-162.3	-149.8
V. World Trade @										
Imports										
i) Advanced Economies	11.7	-0.5	2.7	4.1	9.3	6.3	7.4	4.2	3.1	3.7
ii) Newly industrialised Asian economies	17.6	-5.6	9.1	10.0	16.7	7.6	9.5	8.3	6.6	6.6
Exports										
i) Advanced economies	11.7	-0.5	2.4	3.3	9.0	6.0	8.2	5.8	4.5	4.2
ii) Newly industrialised Asian economies	17.3	-3.8	10.1	13.3	17.2	9.5	10.9	8.7	6.2	6.2
Terms of Trade										
i) Advanced economies	-2.6	0.3	0.8	1.0	-0.1	-1.5	-1.1	-	-1.0	0.1
ii) Newly industrialised Asian economies	-3.3	-0.6	0.2	-1.3	-1.6	-2.2	-1.9	-0.3	-1.3	0.3
VI. Current Account Balance (US $ billion)										
i) Advanced economies	-263.3	-205.0	-208.8	-207.0	-224.2	-438.7	-525.2	-463.3	-464.2	-460.1
ii) Other emerging market and developing countries	86.9	41.1	76.6	144.3	213.6	439.5	606.7	630.9	729.4	662.2
a) Developing Asia	38.5	36.7	64.8	82.6	89.2	161.4	277.5	383.5	367.5	407.1

- : Not Available.
$: Projections.
: Central Government Balance as percentage of GDP.
* : Net capital flows comprise net direct investment, net portfolio investment, and other long-term and short term net investment flows, including official and private borrowings.
** : Emerging Market and Developing Countries include countries not classified as advanced countries.
*** : On account of data limitations, flows listed under 'net private capital flows' may include some official flows.
@ : Annual percentage change in world trade volume of goods and services.

Source : World Economic Outlook, April 2007 and 2008; World Economic Outlook Update, July 2008, IMF.

APPENDIX TABLE 48 : INDIA'S FOREIGN TRADE

Item	Rupees crore			US $ million			SDR million		
	2005-06	2006-07R	2007-08 P	2005-06	2006-07R	2007-08 P	2005-06	2006-07R	2007-08 P
1	2	3	4	5	6	7	8	9	10
I. Exports	**456,418**	**571,779**	**640,172**	**103,091**	**126,361**	**159,007**	**70,774**	**85,018**	**102,181**
	(21.6)	**(25.3)**	**(12.0)**	**(23.4)**	**(22.6)**	**(25.8)**	**(26.2)**	**(20.1)**	**(20.2)**
a. POL @	51,533	84,520	100,125	11,640	18,679	24,869	7,991	12,567	15,981
	(64.1)	(64.0)	(18.5)	(66.5)	(60.5)	(33.1)	(70.3)	(57.3)	(27.2)
b. Non-oil	404,885	487,259	540,047	91,451	107,683	134,138	62,783	72,451	86,200
	(17.7)	(20.3)	(10.8)	(19.5)	(17.7)	(24.6)	(22.2)	(15.4)	(19.0)
II. Imports	**660,409**	**840,506**	**964,850**	**149,166**	**185,749**	**239,651**	**102,405**	**124,975**	**154,005**
	(31.8)	**(27.3)**	**(14.8)**	**(33.8)**	**(24.5)**	**(29.0)**	**(36.8)**	**(22.0)**	**(23.2)**
a. Oil and POL	194,640	258,572	320,641	43,963	57,144	79,641	30,182	38,447	51,179
	(45.2)	(32.8)	(24.0)	(47.3)	(30.0)	(39.4)	(50.6)	(27.4)	(33.1)
b. Non-oil	465,769	581,935	644,208	105,203	128,606	160,009	72,224	86,528	102,826
	(26.9)	(24.9)	(10.7)	(28.8)	(22.2)	(24.4)	(31.7)	(19.8)	(18.8)
III. Trade Balance (I-II)	**-203,991**	**-268,727**	**-324,678**	**-46,075**	**-59,388**	**-80,644**	**-31,632**	**-39,957**	**-51,824**
a. Oil Balance (I.a-II.a)	-143,107	-174,052	-220,516	-32,323	-38,465	-54,772	-22,191	-25,880	-35,198
b. Non-oil Balance (I.b-II.b)	-60,884	-94,675	-104,161	-13,752	-20,923	-25,872	-9,441	-14,077	-16,626

R: Revised P: Provisional. @ : Petroleum Oil and Lubricants

Note : Figures in brackets relate to percentage variations over the previous year.

Source : DGCI&S.

APPENDIX TABLE 49 : INDIA'S EXPORTS OF PRINCIPAL COMMODITIES

	Rupees crore			Percentage Variation		US $ million			Percentage Variation	
Commodity Group	2005-06	2006-07R	2007-08P	2006-07	2007-08	2005-06	2006-07R	2007-08P	2006-07	2007-08
1	2	3	4	5	6	7	8	9	10	11
I. Primary Products	**72,508**	**89,078**	**1,08,964**	**22.9**	**22.3**	**16,377**	**19,686**	**27,065**	**20.2**	**37.5**
	(15.9)	**(15.6)**	**(17.0)**			**(15.9)**	**(15.6)**	**(17.0)**		
A. Agricultural & Allied Products	**45,220**	**57,392**	**72,710**	**26.9**	**26.7**	**10,214**	**12,683**	**18,060**	**24.2**	**42.4**
	(9.9)	**(10.0)**	**(11.4)**			**(9.9)**	**(10.0)**	**(11.4)**		
of which :										
1. Tea	1,731	1,970	2,022	13.8	2.7	391	435	502	11.3	15.4
2. Coffee	1,589	1,969	1,868	23.9	-5.1	359	435	464	21.3	6.6
3. Rice	6,221	7,036	11,731	13.1	66.7	1,405	1,555	2,914	10.7	87.4
4. Oil Meal	4,875	5,504	7,954	12.9	44.5	1,101	1,216	1,976	10.5	62.4
5. Marine Products	7,036	8,001	6,855	13.7	-14.3	1,589	1,768	1,703	11.3	-3.7
B. Ores & Minerals	**27,288**	**31,686**	**36,254**	**16.1**	**14.4**	**6,164**	**7,002**	**9,005**	**13.6**	**28.6**
	(6.0)	**(5.5)**	**(5.7)**			**(6.0)**	**(5.5)**	**(5.7)**		
II. Manufactured Goods	**3,21,261**	**3,84,261**	**4,07,033**	**19.6**	**5.9**	**72,563**	**84,921**	**101,099**	**17.0**	**19.1**
	(70.4)	**(67.2)**	**(63.6)**			**(70.4)**	**(67.2)**	**(63.6)**		
of which :										
A. Leather & Manufactures	**11,943**	**13,650**	**13,816**	**14.3**	**1.2**	**2,698**	**3,017**	**3,432**	**11.8**	**13.8**
	(2.6)	**(2.4)**	**(2.2)**			**(2.6)**	**(2.4)**	**(2.2)**		
B. Chemicals & Related Products	**65,390**	**78,442**	**82,347**	**20.0**	**5.0**	**14,770**	**17,335**	**20,453**	**17.4**	**18.0**
	(14.3)	**(13.7)**	**(12.9)**			**(14.3)**	**(13.7)**	**(12.9)**		
1. Basic Chemicals, Pharmaceuticals &	40,409	49,588	53,734	22.7	8.4	9,127	10,959	13,347	20.1	21.8
Cosmetics	12,482	14,718	13,498	17.9	-8.3	2,819	3,253	3,353	15.4	3.1
2. Plastic & Linoleum	9,320	10,737	11,355	15.2	5.8	2,105	2,373	2,820	12.7	18.9
3. Rubber, Glass, Paints & Enamels etc.	3,178	3,399	3,760	6.9	10.6	718	751	934	4.6	24.3
4. Residual Chemicals & Allied Products										
C. Engineering Goods	**96,157**	**1,33,790**	**1,47,845**	**39.1**	**10.5**	**21,719**	**29,567**	**36,722**	**36.1**	**24.2**
	(21.1)	**(23.4)**	**(23.1)**			**(21.1)**	**(23.4)**	**(23.1)**		
D. Textiles and Textile Products	**72,618**	**78,613**	**76,556**	**8.3**	**-2.6**	**16,402**	**17,373**	**19,015**	**5.9**	**9.5**
	(15.9)	**(13.7)**	**(12.0)**			**(15.9)**	**(13.7)**	**(12.0)**		
of which :										
1. Cotton Yarn, Fabrics, Made-ups, etc.	17,465	19,089	18,162	9.3	-4.9	3,945	4,219	4,511	6.9	6.9
2. Natural Silk Yarn, Fabrics, Made-ups etc.	1,915	2,000	1,538	4.4	-23.1	433	442	382	2.2	-13.6
including Silk Waste	8,668	9,975	11,510	15.1	15.4	1,958	2,204	2,859	12.6	29.7
3. Manmade Yarn, Fabrics, Made-ups, etc.	38,154	40,237	38,215	5.5	-5.0	8,618	8,892	9,492	3.2	6.7
4. Readymade Garments	1,312	1,178	1,300	-10.2	10.3	296	260	323	-12.1	24.0
5. Jute & Jute Manufactures	590	660	640	11.8	-3.1	133	146	159	9.4	8.9
6. Coir & Coir Manufactures	3,775	4,199	3,703	11.2	-11.8	853	928	920	8.8	-0.9
7. Carpets										
E. Gems and Jewellery	**68,753**	**72,295**	**79,142**	**5.2**	**9.5**	**15,529**	**15,977**	**19,657**	**2.9**	**23.0**
	(15.1)	**(12.6)**	**(12.4)**			**(15.1)**	**(12.6)**	**(12.4)**		
F. Handicrafts	**2,045**	**1,982**	**1,855**	**-3.1**	**-6.4**	**462**	**438**	**461**	**-5.2**	**5.2**
	(0.4)	**(0.3)**	**(0.3)**			**(0.4)**	**(0.3)**	**(0.3)**		
III. Petroleum, Crude & Products	**51,533**	**84,520**	**1,00,125**	**64.0**	**18.5**	**11,640**	**18,679**	**24,869**	**60.5**	**33.1**
	(11.3)	**(14.8)**	**(15.6)**			**(11.3)**	**(14.8)**	**(15.6)**		
IV. Others	**11,116**	**13,920**	**24,050**	**25.2**	**72.8**	**2,511**	**3,076**	**5,974**	**22.5**	**94.2**
	(2.4)	**(2.4)**	**(3.8)**			**(2.4)**	**(2.4)**	**(3.8)**		
Total Exports (I+II+III+IV)	**4,56,418**	**5,71,779**	**6,40,172**	**25.3**	**12.0**	**103,091**	**126,361**	**159,007**	**22.6**	**25.8**

P: Provisional. R: Revised

Note : 1. Figures in brackets represent percentage to total exports.
2. Leather & manufactures include finished leather, leather goods, leather garments, footwear of leather & its components and saddlery & harness.
3. Engineering goods comprise ferro alloys, aluminium other than products, non-ferrous metal, manufactures of metals, machine tools, machinery and equipments, transport equipments, residual engineering items, iron and steel bar/rod etc., primary and semi-finished iron and steel, electronic goods, computer software and project goods.
4. Textiles and Textile Products includes: (a) cotton yarn, fabrics, made-ups etc., (b) natural silk yarn, fabrics made-ups etc., (c) manmade yarn, fabrics, made-ups etc., (d) manmade staple fibre, (e) woolen yarn, fabrics, made-ups etc., (f) readymade garments, (g) jute and jute manufactures, (h) coir & coir manufactures and (i) carpets.

Source : DGCI& S.

APPENDIX TABLE 50 : INDIA'S IMPORTS OF PRINCIPAL COMMODITIES

	Rupees crore			Percentage Variation		US $ million			Percentage Variation	
Commodity Group	2005-06	2006-07R	2007-08P	2006-07	2007-08	2005-06	2006-07R	2007-08P	2006-07	2007-08
1	2	3	4	5	6	7	8	9	10	11
I. Bulk Imports	**2,70,450**	**3,82,060**	**4,53,684**	**41.3**	**18.7**	**61,086**	**84,434**	**112,687**	**38.2**	**33.5**
	(41.0)	**(45.5)**	**(47.0)**			**(41.0)**	**(45.5)**	**(47.0)**		
A. Petroleum, Petroleum Products & Related Material	**1,94,640**	**2,58,572**	**3,20,641**	**32.8**	**24.0**	**43,963**	**57,144**	**79,641**	**30.0**	**39.4**
	(29.5)	**(30.8)**	**(33.2)**			**(29.5)**	**(30.8)**	**(33.2)**		
B. Bulk Consumption Goods	**12,248**	**19,431**	**18,418**	**58.6**	**-5.2**	**2,767**	**4,294**	**4,575**	**55.2**	**6.5**
	(1.9)	**(2.3)**	**(1.9)**			**(1.9)**	**(2.3)**	**(1.9)**		
1. Cereals & Cereal Preparations	160	145	181	-9.2	25.0	36	32	45	-11.1	40.5
2. Edible Oil	8,961	9,540	10,299	6.5	8.0	2,024	2,108	2,558	4.2	21.3
3. Pulses	2,476	3,892	5,278	57.2	35.6	559	860	1,311	53.8	52.4
4. Sugar	652	3	2	-99.5	-	147	1	1	-	-
C. Other Bulk Items	**63,561**	**1,04,058**	**1,14,625**	**63.7**	**10.2**	**14,356**	**22,996**	**28,471**	**60.2**	**23.8**
	(9.6)	**(12.4)**	**(11.9)**			**(9.6)**	**(12.4)**	**(11.9)**		
1. Fertilisers	9,417	14,227	21,764	51.1	53.0	2,127	3,144	5,406	47.8	71.9
a) Crude	1,407	1,634	1,881	16.2	15.1	318	361	467	13.6	29.4
b) Sulphur & unroasted iron pyrites	602	495	1,457	-17.8	194.6	136	109	362	-19.6	231.1
c) Manufactured	7,408	12,098	18,425	63.3	52.3	1,673	2,674	4,576	59.8	71.2
2. Non-ferrous Metals	8,166	11,787	14,053	44.4	19.2	1,844	2,605	3,490	41.2	34.0
3. Paper, Paperboard & mgfd. incl. Newsprint	4,180	5,461	5,756	30.7	5.4	944	1,207	1,430	27.8	18.5
4. Crude Rubber, incl. Synthetic & Reclaimed	1,833	2,854	3,163	55.7	10.8	414	631	786	52.3	24.6
5. Pulp & Waste Paper	2,537	2,893	3,098	14.0	7.1	573	639	770	11.6	20.4
6. Metalliferrous Ores & Metal Scrap	17,186	37,764	31,828	119.7	-15.7	3,882	8,346	7,906	115.0	-5.3
7. Iron & Steel	20,243	29,071	34,962	43.6	20.3	4,572	6,425	8,684	40.5	35.2
II. Non-Bulk Imports	**3,89,959**	**4,58,446**	**5,11,166**	**17.6**	**11.5**	**88,080**	**101,315**	**126,964**	**15.0**	**25.3**
	(59.0)	**(54.5)**	**(53.0)**			**(59.0)**	**(54.5)**	**(53.0)**		
A. Capital Goods	**1,66,761**	**2,12,986**	**2,35,095**	**27.7**	**10.4**	**37,666**	**47,069**	**58,393**	**25.0**	**24.1**
	(25.3)	**(25.3)**	**(24.4)**			**(25.3)**	**(25.3)**	**(24.4)**		
1. Manufactures of Metals	5,362	7,256	10,700	35.3	47.5	1,211	1,604	2,658	32.4	65.7
2. Machine Tools	4,765	6,703	8,900	40.7	32.8	1,076	1,481	2,211	37.6	49.2
3. Machinery except Electrical & Electronics	44,317	62,672	79,156	41.4	26.3	10,010	13,850	19,661	38.4	42.0
4. Electrical Machinery except Electronics	6,660	8,868	12,009	33.1	35.4	1,504	1,960	2,983	30.3	52.2
5. Electronic Goods incl. Computer Software	62,619	76,651	85,932	22.4	12.1	14,144	16,940	21,344	19.8	26.0
6. Transport Equipments	39,131	42,709	33,208	9.1	-22.2	8,838	9,439	8,248	6.8	-12.6
7. Project Goods	3,908	8,126	5,191	107.9	-36.1	883	1,796	1,289	103.5	-28.2
B. Mainly Export Related Items	**82,530**	**80,869**	**83,573**	**-2.0**	**3.3**	**18,641**	**17,872**	**20,758**	**-4.1**	**16.2**
	(12.5)	**(9.6)**	**(8.7)**			**(12.5)**	**(9.6)**	**(8.7)**		
1. Pearls, Precious & Semi-precious Stones	40,441	33,881	32,108	-16.2	-5.2	9,134	7,488	7,975	-18.0	6.5
2. Chemicals, Organic & Inorganic	30,921	35,433	39,772	14.6	12.2	6,984	7,831	9,879	12.1	26.2
3. Textile Yarn, Fabrics, etc.	9,078	9,734	9,979	7.2	2.5	2,051	2,151	2,479	4.9	15.2
4. Cashew Nuts, Raw	2,089	1,821	1,714	-12.9	-5.8	472	402	426	-14.7	5.8
C. Others	**1,40,667**	**1,64,591**	**1,92,497**	**17.0**	**17.0**	**31,772**	**36,374**	**47,813**	**14.5**	**31.4**
	(21.3)	**(19.6)**	**(20.0)**			**(21.3)**	**(19.6)**	**(20.0)**		
of which :										
1. Gold and Silver	50,108	66,272	71,848	32.3	8.4	11,318	14,646	17,846	29.4	21.8
2. Artificial Resins & Plastic Materials	10,040	11,696	14,835	16.5	26.8	2,268	2,585	3,685	14.0	42.6
3. Professional, Scientific & Optical Goods	8,734	10,593	12,324	21.3	16.3	1,973	2,341	3,061	18.7	30.8
4. Coal, Coke & Briquittes etc.	17,128	20,710	25,815	20.9	24.7	3,869	4,577	6,412	18.3	40.1
5. Medicinal & Pharmaceutical Products	4,551	5,866	6,699	28.9	14.2	1,028	1,296	1,664	26.1	28.3
6. Chemical Materials & Products	4,660	5,980	6,539	28.3	9.3	1,052	1,322	1,624	25.6	22.9
7. Non-Metallic Mineral Manufactures	2,754	3,530	4,214	28.2	19.4	622	780	1,047	25.4	34.2
III. Total Imports (I+II)	**6,60,409**	**8,40,506**	**9,64,850**	**27.3**	**14.8**	**149,166**	**185,749**	**239,651**	**24.5**	**29.0**

R: Revised P: Provisional.

Note : Figures in brackets represent percentage to total imports.

Source : DGCI&S.

APPENDIX TABLE 51 : INDIA'S OVERALL BALANCE OF PAYMENTS

Item	Rupees crore			US $ million		
	2005-06 R	2006-07 PR	2007-08 P	2005-06 R	2006-07 PR	2007-08 P
1	2	3	4	5	6	7
A. CURRENT ACCOUNT						
1. Exports, f.o.b.	4,65,748	5,79,128	6,37,190	105,152	128,083	158,461
2. Imports, c.i.f.	6,95,412	8,65,404	9,99,286	157,056	191,254	248,521
3. Trade Balance	-2,29,664	-2,86,276	-3,62,096	-51,904	-63,171	-90,060
4. Invisibles, Net	1,85,927	2,40,933	2,91,739	42,002	53,405	72,657
a) 'Non-Factor' Services	1,02,611	1,43,604	1,50,923	23,170	31,810	37,550
of which :						
Software Services	98,678	1,31,144	1,48,887	22,262	29,033	37,051
b) Income	-26,116	-29,778	-23,845	-5,855	-6,573	-5,910
c) Private Transfers	1,08,565	1,26,088	1,63,709	24,493	27,941	40,778
d) Official Transfers	867	1,019	952	194	227	239
5. Current Account Balance	-43,737	-45,343	-70,357	-9,902	-9,766	-17,403
B. CAPITAL ACCOUNT						
1. Foreign Investment, Net (a+b)	68,782	70,443	1,80,152	15,528	15,541	44,806
a) Direct Investment	13,425	38,553	62,339	3,034	8,479	15,545
of which:						
i) In India	39,457	99,261	1,29,746	8,901	21,991	32,327
Equity	26,239	73,969	1,00,777	5,915	16,394	25,133
Reinvested Earnings	12,220	23,029	27,714	2,760	5,091	6,884
Other Capital	998	2,263	1,255	226	506	310
ii) Abroad	-26,032	-60,708	-67,407	-5,867	-13,512	-16,782
Equity	-16,718	-50,670	-50,179	-3,766	-11,287	-12,485
Reinvested Earnings	-4,834	-4,868	-4,363	-1,092	-1,076	-1,084
Other Capital	-4,480	-5,170	-12,865	-1,009	-1,149	-3,213
b) Portfolio Investment	55,357	31,890	1,17,813	12,494	7,062	29,261
In India	55,357	31,630	1,17,154	12,494	7,004	29,096
Abroad	0	260	659	0	58	165
2. External Assistance, Net	7,592	7,937	8,465	1,702	1,767	2,114
Disbursements	16,133	16,961	17,022	3,631	3,763	4,241
Amortisation	8,541	9,024	8,557	1,929	1,996	2,127
3. Commercial Borrowings, Net	10,505	72,596	89,317	2,508	16,155	22,165
Disbursements	63,476	94,332	1,20,173	14,343	20,973	29,851
Amortisation	52,971	21,736	30,856	11,835	4,818	7,686
4. Short term Credit, Net	16,300	30,096	70,846	3,699	6,612	17,683
5. Banking Capital	5,795	8,477	47,147	1,373	1,913	11,757
of which: NRI Deposits, Net	12,457	19,574	706	2,789	4,321	179
6. Rupee Debt Service	-2,557	-725	-488	-572	-162	-121
7. Other Capital, Net @	5,548	17,565	38,464	1,232	3,953	9,627
8. Total Capital Account	1,11,965	2,06,389	4,33,903	25,470	45,779	108,031
C. Errors & Omissions	-2,332	2,588	6,143	-516	593	1,536
D. Overall Balance [A(5)+B(8)+C]	**65,896**	**1,63,634**	**3,69,689**	**15,052**	**36,606**	**92,164**
E. Monetary Movements (F+G)	-65,896	-1,63,634	-3,69,689	-15,052	-36,606	-92,164
F. IMF, Net	0	0	0	0	0	0
G. Reserves and Monetary Gold (Increase -, Decrease +)	**-65,896**	**-1,63,634**	**-3,69,689**	**-15,052**	**-36,606**	**-92,164**

R : Revised. PR : Partially Revised. P : Provisional.

@ : Includes delayed export receipts, advance payments against imports, net funds held abroad and advances received pending issue of shares under FDI.

Note : 1. Gold and silver brought by returning Indians have been included under imports, with a contra entry in private transfer receipts.
2. Data on exports and imports differ from those given by DGCI&S on account of differences in coverage, valuation and timing.

APPENDIX TABLE 52: INVISIBLES BY CATEGORY OF TRANSACTIONS

Item	Rupees crore			US $ million		
	2005-06 R	2006-07 PR	2007-08 P	2005-06 R	2006-07 PR	2007-08 P
1	2	3	4	5	6	7
I. Non Factor Services, net	**1,02,611**	**1,43,604**	**1,50,923**	**23,170**	**31,810**	**37,550**
Receipts	2,55,668	3,43,895	3,52,315	57,659	76,181	87,687
Payments	1,53,057	2,00,291	2,01,392	34,489	44,371	50,137
Travel, net	5,439	10,874	8,441	1,215	2,438	2,118
Receipts	34,871	41,127	45,524	7,853	9,123	11,349
Payments	29,432	30,253	37,083	6,638	6,685	9,231
Transportation, net	-8,905	-110	-8,509	-2,012	-18	-2,107
Receipts	28,023	36,394	38,156	6,325	8,050	9,503
Payments	36,928	36,504	46,665	8,337	8,068	11,610
Insurance, net	-271	2,531	2,185	-54	560	543
Receipts	4,694	5,434	6,371	1,062	1,202	1,585
Payments	4,965	2,903	4,186	1,116	642	1,042
G.N.I.E., net	-947	-695	-210	-215	-153	-51
Receipts	1,396	1,130	1,334	314	250	331
Payments	2,343	1,825	1,544	529	403	382
Miscellaneous, net	1,07,295	1,31,004	1,49,016	24,236	28,983	37,047
Receipts	1,86,684	2,59,810	2,60,930	42,105	57,556	64,919
Payments	79,389	1,28,806	1,11,914	17,869	28,573	27,872
II. Income, net	**-26,116**	**-29,778**	**-23,845**	**-5,855**	**-6,573**	**-5,910**
Receipts	28,426	42,000	57,114	6408	9,304	14,227
Payments	54,542	71,778	80,959	12,263	15,877	20,137
III. Private Transfers, net	**1,08,565**	**1,26,088**	**1,63,709**	**24,493**	**27,941**	**40,778**
Receipts	1,10,596	1,30,653	1,70,966	24,951	28,951	42,589
Payments	2,031	4,565	7,257	458	1,010	1811
IV. Official Transfers, net	**867**	**1,019**	**952**	**194**	**227**	**239**
Receipts	2,970	2,877	3,029	669	638	754
Payments	2,103	1,858	2,077	475	411	515
V. Invisibles, net (I to IV)	**1,85,927**	**2,40,933**	**2,91,739**	**42,002**	**53,405**	**72,657**
Receips	3,97,660	5,19,425	5,83,424	89,687	115,074	145,257
Payments	2,11,733	2,78,492	2,91,685	47,685	61,669	72,600

R : Revised. PR : Partially Revised. P : Provisional.

GNIE : Government Not Included Elsewhere.

APPENDIX TABLE 53: COMPOSITION OF CAPITAL INFLOWS

Item	1995-96	2001-02	2002-03	2003-04	2004-05	2005-06 R	2006-07 PR	2007-08 P
1	2	3	4	5	6	7	8	9
Total Capital Inflows (Net) US $ Million	**4089**	**8551**	**10840**	**16736**	**28022**	**25470**	**45779**	**108031**
of which:								
1. Non- Debt Creating Inflows	**117.5**	**95.2**	**55.5**	**93.7**	**54.6**	**84.0**	**63.3**	**56.9**
a) Foreign Direct Investment **	52.4	71.6	46.5	25.8	21.4	34.9	48.0	29.9
b) Portfolio Investment	65.1	23.6	9.0	67.9	33.2	49.1	15.3	26.9
2. Debt Creating Inflows	**57.7**	**12.4**	**-12.3**	**-6.0**	**35.2**	**41.0**	**63.4**	**38.9**
a) External Assistance	21.6	14.1	-28.6	-16.5	7.2	6.9	3.9	2.0
b) External Commercial Borrowings #	31.2	-18.6	-15.7	-17.5	19.4	10.8	35.9	20.5
c) Short term Credits	1.2	-9.3	8.9	8.5	13.5	14.5	14.4	16.4
d) NRI Deposits $	27.0	32.2	27.5	21.8	-3.4	11.0	9.4	0.2
e) Rupee Debt Service	-23.3	-6.1	-4.4	-2.2	-1.5	-2.2	-0.4	-0.1
3. Other Capital @	**-75.2**	**-7.6**	**56.8**	**12.3**	**10.2**	**-25.0**	**-26.7**	**4.2**
4. Total (1 To3)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Memo:								
Stable flows +	**33.7**	**85.6**	**82.0**	**23.7**	**53.2**	**36.4**	**70.3**	**56.7**

R : Revised. PR : Partially Revised. P : Provisional.

** : Data on FDI have been revised since 2000-01 with expanded coverage to approach international best practices. FDI data for previous years would not be comparable with those figures.

: Refers to medium and long-term Borrowings.

$: Including NR (NR) Rupee Deposits.

@ : Includes leads and lags in exports (difference between the custom and the Banking channel data), Banking Capital (assets and liabilities of Banks excluding NRI deposits), Loans to Non-residents by residents. India's subscription to International Institutions and quota payments to IMF.

+ : Stable Flows are defined to represent all capital flows excluding portfolio flows and short-term trade credits.

APPENDIX TABLE 54 :EXTERNAL ASSISTANCE

Item	Rupees crore			US $ million		
	2005-06	2006-07	2007-08P	2005-06	2006-07	2007-08P
1	2	3	4	5	6	7
1. Loans	16,098	16,803	17,171	3,639	3,691	4,265
2. Grants	2,733	2,485	2,606	618	546	647
3. Gross Utilisation (1+2)	18,831	19,288	19,777	4,257	4,237	4,912
4. Repayments	8,360	8,980	8,593	1,887	1,970	2,134
5. Interest Payments	3,655	4,453	4,621	825	977	1,148
6. Net (3-4-5)	6,816	5,855	6,563	1,545	1,290	1,630

P : Provisional

Note : 1. Loans are inclusive of non-government loans but exclusive of suppliers' credits and commercial borrowings.
2. Grants are exclusive of PL 480-II grants.
3. Repayments include amortisation of civillian debt owed to Russia and hence do not tally with the data given in Appendix Table 50.

Source : Controller of Aid, Accounts and Audit, Government of India.

APPENDIX TABLE 55 : INDIA'S EXTERNAL DEBT

(As at end-March)

Item	Rupees crore			US $ million		
	2006	2007	2008P	2006	2007	2008P
1	2	3	4	5	6	7
I. Multilateral	**1,45,503**	**1,54,053**	**1,57,181**	**32,620**	**35,337**	**39,312**
A. Government borrowing	1,33,800	1,41,746	1,43,961	29,996	32,514	36,005
i) Concessional	1,05,852	1,08,448	1,06,901	23,731	24,876	26,736
a) IDA	1,04,457	1,07,019	1,05,459	23,418	24,548	26,375
b) Others #	1,395	1,429	1,442	313	328	361
ii) Non-concessional	27,948	33,298	37,060	6,265	7,638	9,269
a) IBRD	19,626	21,864	22,526	4,400	5,015	5,634
b) Others ##	8,322	11,434	14,534	1,865	2,623	3,635
B. Non-Government borrowing	**11,703**	**12,307**	**13,220**	**2,624**	**2,823**	**3,307**
i) Concessional	0	0	0	0	0	0
ii) Non-concessional	11,703	12,307	13,220	2,624	2,823	3,307
a) Public sector	8,510	9,315	10,307	1,908	2,136	2,578
IBRD	4,594	4,550	4,669	1,030	1,043	1,168
Others ##	3,916	4,765	5,638	878	1,093	1,410
b) Financial institutions	2,628	2,414	2,341	589	554	586
IBRD	630	655	590	141	150	148
Others ##	1,998	1,759	1,751	448	404	438
c) Private sector	565	578	572	127	133	143
IBRD	0	0	0	0	0	0
Others	565	578	572	127	133	143
II. Bilateral	**70,302**	**70,019**	**78,428**	**15,761**	**16,061**	**19,613**
A. Government borrowing	54,593	53,810	59,117	12,239	12,343	14,785
i) Concessional	54,468	53,810	59,117	12,211	12,343	14,785
ii) Non-concessional	125	0	0	28	0	0
B. Non-Government borrowing	15,709	16,209	19,311	3,522	3,718	4,828
i) Concessional	6,949	1,727	1,729	1,558	396	432
a) Public sector	5,285	1,241	1,220	1,185	285	305
b) Financial institutions	1,664	486	509	373	111	127
c) Private sector	0	0	0	0	0	0
ii) Non-concessional	8,760	14,482	17,582	1,964	3,322	4,396
a) Public sector	3,628	7,420	10,031	813	1,702	2,508
b) Financial institutions	2,386	3,828	3,724	535	878	931
c) Private sector	2,746	3,234	3,827	616	742	957
III. International Monetary Fund	**0**	**0**	**0**	**0**	**0**	**0**
IV. Trade Credit	**24,175**	**30,740**	**41,051**	**5,420**	**7,051**	**10,267**
a) Buyers' credit	16,088	23,127	32,860	3,607	5,305	8,218
b) Suppliers' credit	3,351	2,934	3,050	751	673	763
c) Export credit component of bilateral credit	4,736	4,679	5,141	1,062	1,073	1,286
d) Export credit for defence purposes	0	0	0	0	0	0
V. COMMERCIAL BORROWING	**1,17,991**	**1,81,602**	**2,47,986**	**26,452**	**41,657**	**62,019**
a) Commercial bank loans	73,508	1,08,045	1,60,507	16,479	24,784	40,142
b) Securitised borrowings @ (including FCCBs)	41,112	68,036	81,428	9,217	15,606	20,364
c) Loans/securitized borrowings, etc. with multilateral/bilateral guarantee and IFC (W)	3,371	5,521	6,051	756	1,267	1,513
d) Self Liquidating Loans	0	0	0	0	0	0

(Continued)

APPENDIX TABLE 55 : INDIA'S EXTERNAL DEBT *(Concld)*

(As at end-March)

Item	Rupees crore			US $ million		
	2006	2007	2008 P	2006	2007	2008 P
1	8	9	10	11	12	13
VI. NRI Deposits (above one-year maturity)	**1,61,834**	**1,79,788**	**1,74,623**	**36,282**	**41,240**	**43,672**
VII. Rupee Debt *	**9,184**	**8,485**	**8,062**	**2,059**	**1,947**	**2,016**
a) Defence	8,112	7,510	7,173	1,819	1,723	1,794
b) Civilian +	1,072	975	889	240	224	222
VIII. Total Long-term Debt (I to VII)	**5,28,989**	**6,24,687**	**7,07,331**	**118,594**	**143,293**	**176,899**
IX. Short-term Debt	**87,155**	**1,15,008**	**1,77,185**	**19,539**	**26,376**	**44,313**
a) Trade related credits upto 180 days	47,743	61,088	83,081	10,703	14,008	20,778
b) Trade related credits above 180 days	38,788	52,188	91,501	8,696	11,971	22,884
c) FII Investment in Govt. Treasury Bills and other instruments	624	1,732	2,603	140	397	651
X. GROSS TOTAL	**6,16,144**	**7,39,695**	**8,84,516**	**138,133**	**169,669**	**221,212**
Concessional Debt	**1,76,453**	**1,72,470**	**1,75,809**	**39,559**	**39562**	**43,969**
As percentage of Total Debt	28.6	23.3	19.9	28.6	23.3	19.9
Short Term Debt						
As percentage of Total Debt	14.1	15.5	20.0	14.1	15.5	20.0
Memo :						
Debt Indicators :						
1. Debt Stock - GDP Ratio (in per cent)	17.2	17.8	18.8	17.2	17.8	18.8
2. Debt Service Ratio (per cent) (for fiscal year)	9.9	4.8	5.4	9.9	4.8	5.4
(including debt-servicing on non-civilian credits)						

P : Provisional.

: Refers to Debt outstanding to Institutions like IFAD, OPEC and EEC(SAC).

: Refers to debt outstanding against loans from ADB.

@ : Includes net investment by 100 per cent FII debt funds, and India Millennium Deposits (IMDs).

* : Debt owed to Russia denominated in Rupees and converted at current exchange rates, payable in exports.

+ : Includes Rupee suppliers' credit from end-March 1990 onwards.

Notes : Multilateral loans do not include revaluation of IBRD pooled loans and exchange rate adjustment under IDA loans for Pre-1971 credits.

APPENDIX TABLE 56: INDIA'S FOREIGN EXCHANGE RESERVES

End of Month	Foreign Exchange Reserves (Rupees crore)					Foreign Exchange Reserves (US $ million)					Total Foreign Exchange Reserves (in SDR million)	Movement in Foreign Exchange Reserves (in SDR million) *
	SDRs	Gold #	Foreign Currency Assets	Reserve Tranche Position in IMF	Total (2+3+4+5)	SDRs	Gold #	Foreign Currency Assets	Reserve Tranche Position in IMF	Total (7+8+9+10)		
1	2	3	4	5	6	7	8	9	10	11	12	13
Mar-94	339	12,794	47,287	938	61,358	108	4,078	15,068	299	19,553	13,841	6,595
Mar-95	23	13,752	66,005	1,050	80,830	7	4,370	20,809	331	25,517	16,352	2,511
Mar-96	280	15,658	58,446	1,063	75,447	82	4,561	17,044	310	21,997	15,054	-1,298
Mar-97	7	14,557	80,368	1,046	95,978	2	4,054	22,367	291	26,714	19,272	4,218
Mar-98	4	13,394	1,02,507	1,117	1,17,022	1	3,391	25,975	283	29,650	22,200	2,929
Mar-99	34	12,559	1,25,412	2,816	1,40,821	8	2,960	29,522	663	33,153	24,413	2,213
Mar-00	16	12,973	1,52,924	2,870	1,68,783	4	2,974	35,058	658	38,694	28,728	4,315
Mar-01	11	12,711	1,84,482	2,873	2,00,077	2	2,725	39,554	616	42,897	34,034	5,306
Mar-02	50	14,868	2,49,118	2,977	2,67,013	10	3,047	51,049	610	54,716	43,876	9,842
Mar-03	19	16,785	3,41,476	3,190	3,61,470	4	3,534	71,890	672	76,100	55,394	11,518
Mar-04	10	18,216	4,66,215	5,688	4,90,129	2	4,198	107,448	1,311	112,959	76,298	20,904
Mar-05	20	19,686	5,93,121	6,289	6,19,116	5	4,500	135,571	1,438	141,514	93,666	17,368
Jun-05	18	19,375	5,75,864	6,791	6,02,048	4	4,453	132,352	1,561	138,370	94,995	1,329
Sep-05	19	20,727	6,02,309	6,260	6,29,315	4	4,712	136,920	1,423	143,059	98,698	5,032
Dec-05	20	23,770	5,90,497	4,096	6,18,383	5	5,274	131,018	909	137,206	95,997	2,331
Mar-06	12	25,674	6,47,327	3,374	6,76,387	3	5,755	145,108	756	151,622	105,231	11,565
Jun-06	2	28,479	7,18,701	3,518	7,50,700	-	6,180	155,968	764	162,912	110,123	4,892
Sep-06	6	28,506	7,27,733	3,502	7,59,747	1	6,202	158,340	762	165,305	111,967	6,736
Dec-06	4	28,824	7,52,738	2,416	7,83,982	1	6,517	170,187	546	177,251	117,822	12,591
Mar-07	8	29,573	8,36,597	2,044	8,68,222	2	6,784	191,924	469	199,179	131,890	26,659
Jun-07	6	27,655	8,39,913	1,875	8,69,449	1	6,787	206,114	460	213,362	140,780	8,890
Sep-07	8	29,275	9,53,581	1,740	9,84,604	2	7,367	239,955	438	247,762	159,164	27,274
Dec-07	13	32,819	10,50,485	1,703	10,85,020	3	8,328	266,553	432	275,316	174,223	42,333
Mar-08	74	40,124	11,96,023	1,744	12,37,965	18	10,039	299,230	436	309,723	188,339	56,449
Jun-08	48	39,548	12,98,552	2,269	13,40,417	11	9,208	302,340	528	312,087	191,040	2,701

- : Negligible.

: Gold has been valued close to international market price.

* : Variations over the previous March.

Note : 1. Gold holdings include acquisition of gold worth US $ 191million from the Government during 1991-92, US $ 29.4 million during 1992-93, US $ 139.3 million during 1993-94, US $ 315.0 million during 1994-95 and US $ 17.9 million during 1995-96. On the other hand, 1.27 tonnes of gold amounting to Rs 43.55 crore (US $11.97 million), 38.9 tonnes of gold amounting to Rs 1,485.22 crore (US $ 376.0 million) and 0.06 tonnes of gold amounting to Rs. 2.13 crore (US $ 0.5 million) were repurchased by the Central Government on November 13, 1997, April 1, 1998 and October 5, 1998 respectively for meeting its redemption obligation under the Gold Bond Scheme.

2. Conversion of foreign currency assets into US dollar was done at exchange rates supplied by the IMF up to March 1999. Effective April 1, 1999, the conversion is at New York closing exchange rate.

APPENDIX TABLE 57 : INTEREST RATES ON EXPORT CREDIT

(Per cent per annuam)

Export Credit	Rates Effective										
	January 01, 1998	April 30, 1998	August 06, 1998	April 01, 1999	October 29, 1999	May 26, 2000	January 6 2001	May 5, 2001#	September 26, 2001#	May 18, 2004 #	May 01, 2006 #
1	2	3	4	5	6	7	8	9	10	11	12
1. Pre-shipment Credit											
i) Up to 180 days*	12.00	11.00	9.00	10.00	10.00	10.00	10.00	≤ PLR-1.5 PP	≤ PLR-2.5 PP	≤ BPLR-2.5 PP	≤ BPLR-2.5 PP
ii) Beyond 180 days and up to 270 days	14.00	14.00	12.00	13.00	13.00	13.00	13.00	≤ PLR+1.5 PP	≤ PLR+0.5 PP	Free	Free
iii) Against incentives receivable from Government covered by ECGC Guarantee up to 90 days	12.00	11.00	9.00	10.00	10.00	10.00	10.00	≤ PLR-1.5 PP	≤ PLR-2.5 PP	≤ BPLR-2.5 PP	≤ BPLR-2.5 PP
2. Post-shipment Credit											
i) Demand Bills for transit period (as specified by FEDAI)*	≤ 11.00	≤ 11.00	9.00	≤ 10.00	≤ 10.00	≤ 10.00	≤ 10.00	≤ PLR-1.5 PP	≤ PLR-2.5 PP	≤ BPLR-2.5 PP	≤ BPLR-2.5 PP
ii) Usance Bills (for total period comprising usance period of export bills, transit period as specified by FEDAI and grace period wherever applicable)											
a) Up to 90 days *	≤11.00	≤ 11.00	9.00	≤ 10.00	≤ 10.00	≤ 10.00	≤ 10.00	≤ PLR-1.5 PP	≤ PLR-2.5 PP	≤ BPLR-2.5 PP	≤ BPLR-2.5 PP
b) Beyond 90 days and up to six months from the date of shipment	13.00	13.00	11.00	12.00	12.00	12.00	12.00	≤ PLR+1.5 PP	≤ PLR+0.5 PP	Free	Free
c) Beyond six months from the date of shipment	20.00$ (Min.)										
d) Upto 365 days for exporters under the Gold Card Scheme										≤ BPLR-2.5 PP	≤ BPLR-2.5 PP
iii) Against incentives receivable from Government covered by ECGC Guarantee (up to 90 days)	≤ 11.00	≤ 11.00	9.00	≤ 10.00	≤ 10.00	≤ 10.00	≤ 10.00	≤ PLR-1.5 PP	≤ PLR-2.5 PP	≤ BPLR-2.5 PP	≤ BPLR-2.5 PP
iv) Against undrawn balance (up to 90 days)	≤ 11.00	≤ 11.00	9.00	≤ 10.00	≤ 10.00	≤ 10.00	≤ 10.00	≤ PLR-1.5 PP	≤ PLR-2.5 PP	≤ BPLR-2.5 PP	≤ BPLR-2.5 PP
v) Against retention money (for supplies portion only) payable within one year from the date of shipment (up to 90 days)	≤11.00	≤11.00	9.00	≤ 10.00	≤ 10.00	≤ 10.00	≤ 10.00	≤ PLR-1.5 PP	≤ PLR-2.5 PP	≤ BPLR-2.5 PP	≤ BPLR-2.5 PP
3. Deferred Credit											
Deferred credit for the period beyond 180 days	Free (FDA)	Free (FDA)	Free	Free	Free	Free	Free	Free	Free	Free	Free
4. Export Credit, not otherwise specified											
a) Pre-shipment credit		Free	Free	Free	Free	Free	Free	Free	Free	Free	@
b) Post-shipment credit	20.00 (Min.)	20.00 (Min.)	20.00 (Min.)	20.00 (Min.)	Free	25.00 (Min.)	Free	Free	Free	Free	@

FDA : From the date of advance. Min. : Minimum. PLR : Prime Lending Rate. BPLR : Benchmark Prime Lending Rate. $: Chronic cases, *i.e.,* overdues as on July 1, 1997 are exempted.
≤ : Not Exceeding. PP : Percentage Points. # : These are ceiling rates, banks would be free to charge any rate below the ceiling rate.
* : Interest rates for the above-mentioned categories beyond the tenors as prescribed above are free effective May 1, 2006.
@ ECNOS abolished w.e.f. May 1, 2006. Banks are free to set their own interest rates.

Note :

1. 'Free' means banks are free to charge interest rates keeping in view the BPLR and spread guidelines.
2. Following the Government's decision to provide interest subvention of 2 percentage points per annum to all scheduled commercial banks in respect of rupee export credit to the specified categories of exporters, the Reserve Bank on July 13, 2007, accordingly issued amended instructions relating to interest rates on rupee export credit for exporters of nine categories of exports viz., Textiles (including Handlooms), Readymade Garments, Leather Products, Handicrafts, Engineering Products, Processed Agricultural Products, Marine Products, Sports Goods and Toys and all exporters from SME sectors defined as micro enterprises, small enterprises and medium enterprises. Accordingly, banks would charge interest rate not exceeding BPLR *minus* 4.5 percentage points on pre-shipment credit up to 180 days and post-shipment credit up to 90 days on the outstanding amount for the period April 1, 2007 to December 31, 2007 to all SME sectors and the nine categories of exports as mentioned above.
3. On October 6, 2007, the Government of India partially modified the interest rate subvention to exporters to extend the scheme by three months up to March 31, 2008 and increased the coverage of the scheme to include jute and carpets, processed cashew, coffee, tea, solvent extracted de-oiled
4. On November 30, 2007, the interest rate subvention on rupee export credit was further extended by additional 2 percentage points (in addition to the 2 percentage points subvention offered earlier) in pre-shipment and post-shipment export credit for the following sectors *viz*., Leather and Leather manufacturers, Marine Products, All categories of textiles under the existing scheme including RMG and carpets but excluding man-made fibre and Handicrafts. Banks are to charge interest rates not exceeding BPLR *minus* 6.5 percentage points on pre-shipment credit up to 180 days and post-shipment credit up to 90 days on the outstanding amount in respect of the above-mentioned sectors. However, the total subvention will be subject to the condition that the interest rate, after subvention will not fall below 7 per cent which is the rate applicable to the agriculture sector under priority sector lending. The above dispensation was valid from November 1, 2007 to March 31, 2008.
5. The above interest rate subvention on export credit was extended for one more year from April 1, 2008 till March 31, 2009. Subsequently, the Government of India has decided to terminate the scheme with effect from September 30, 2008 which was communicated by the Reserve Bank on August 1, 2008.

APPENDIX TABLE 58 : PROFILE OF TREASURY BILLS

(Amount in Rupees crore)

Item	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5
1. Implicit Yield at cut-off Price (Per cent)				
91-day Treasury Bills				
Minimum	4.37	5.12	5.41	4.46
Maximum	5.61	6.69	8.10	7.94
Weighted Average	4.89	5.51	6.80	7.11
182-day Treasury Bills				
Minimum	..	5.29	5.61	5.82
Maximum	..	6.74	8.20	7.99
Weighted Average	..	5.65	6.87	7.38
364-day Treasury Bills				
Minimum	4.43	5.58	5.90	6.58
Maximum	5.77	6.81	7.98	7.80
Weighted Average	5.15	5.87	7.07	7.50
2. Gross Issues				
91-day Treasury Bills	1,00,592	1,03,424	1,31,577	2,10,365
	(67,955)	(52,057)	(48,222)	(64,841)
182-day Treasury Bills	..	26,828	36,912	46,926
		(13,078)	(16,125)	(20,605)
364-day Treasury Bills	47,132	45,018	53,813	57,205
	(20,981)	(16,000)	(20,440)	(25,000)
3. Net Issues				
91-day Treasury Bills	20,653	-11,474	28,911	-5,272
	(19,500)	(-19,500)	(14,473)	(-4,841)
182-day Treasury Bills	..	9,771	7,435	-421
		(3,000)	(4,950)	(-345)
364-day Treasury Bills	20,997	-2,114	8,795	3,392
	(20,981)	(-4,981)	(4,440)	(4,560)
4. Outstanding at Year/Period End				
91-day Treasury Bills	27,792	16,318	45,229	39,957
	(19,500)	(0)	(14,473)	(9,632)
182-day Treasury Bills	..	9,771	17,206	16,785
		(3,000)	(7,950)	(7,605)
364-day Treasury Bills	47,132	45,018	53,813	57,205
	(20,981)	(16,000)	(20,440)	(25,000)

.. : Not applicable

Note : 1. Figures in parentheses indicate issuances under the MSS.
2. Auctions of 182-day Treasury Bills were re-introduced on April 6, 2005.

APPENDIX TABLE 59 : PROFILE OF CENTRAL GOVERNMENT DATED SECURITIES

(Amount in Rupees crore)

Item	2005-06	2006-07	2007-08
1	2	3	4
1. Gross Borrowing	1,31,000	1,46,000	1,56,000
2. Repayments	35,630	39,084	45,329
3. Net Borrowing	95,370	1,06,916	1,10,671
4. Weighted Average Maturity (in years)	16.90	14.72	14.90
5. Weighted Average Yield (per cent)	7.34	7.89	8.12
6. A. Maturity Distribution- Amount			
(a) Up to 5 years	0	10,000	0
(b) Above 5 and up to 10 years	34,000	69,000	89,000
(c) Above 10 years	97,000	67,000	67,000
Total	1,31,000	1,46,000	1,56,000
B. Maturity Distribution (per cent)			
(a) Up to 5 years	0	7	0
(b) Above 5 and up to 10 years	26	47	57
(c) Above 10 years	74	46	43
Total	100	100	100
7. Price Based Auctions - Amount	1,25,000	1,32,000	1,50,000
8. Yield - Per cent			
(a) Minimum	6.69	7.06	7.55
	(5 years, 6 months)	(6 years, 1 month)	(9 years, 6 months)
(b) Maximum	7.98	8.75	8.64
	(29 years, 3 months)	(28 years, 1 month)	(29 years, 7 months)
9. Yield-Maturity Distribution - wise			
(a) Less than 10 years			
Minimum	6.69	7.06	7.55
	(5 years, 6 months)	(6 years, 1 month)	(9 years, 6 months)
Maximum	7.06	8.29	8.44
	(8 years, 2 months)	(9 years, 9 months)	(9 years, 10 months)
(b) 10 Years			
Minimum	nil	7.59	7.99
Maximum	nil	7.59	7.99
(c) Above 10 Years			
Minimum	6.91	7.43	7.62
	(10 years, 10 months)	(10 years, 1 month)	(14 years)
Maximum	7.98	8.75	8.64
	(29 years, 3 months)	(28 years, 1 month)	(29 years)
Memo item :			
1. Initial Subscription by RBI	10,000	0	0
2. Open Market Operations by RBI- Net Sales	3,913	5,125	5,923
3. Ways and Means Advances to the Centre (Outstanding) (as on March 31)	nil	nil	1,203

@ : Pertains to FRBs.

Note : Figures in parentheses represent residual maturity.

APPENDIX TABLE 60 : ISSUANCES OF CENTRAL GOVERNMENT DATED SECURITIES

(Amount in Rupees crore)

Auction Particulars					Bids/Applications Received				Bids/Applications Accepted						Gross	Cut-Off	Nomenclature
Date of Auction	Date of Issue	Tenor (years)	Residual Maturity (years)	Notified Amount	Competitive		Non-Competitive		Competitive		Non-Competitive		Total (11+13)	Allocation to PDs (Devolve-ment)	Amount Raised (14+15)	Price (Rs)/ Yield (%)	of loan
					No. +	Face Value	No. +	Face Value	No. +	Face Value	No. +	Face Value					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2007- 08																	
12-Apr-07	13-Apr-07	13	8.39	6000	274	11277.00	11	8.62	181	5991.38	11	8.62	6000	-	6000	95.31/8.1609	7.38% GS, 2015
12-Apr-07	13-Apr-07	30	29.15	4000	261	10642.00	8	8.06	81	3991.94	8	8.06	4000	-	4000	97.37/8.5752	8.33% GS, 2036
27-Apr-07	30-Apr-07	15	9.71	6000	330	12925.93	11	10.22	243	5989.78	11	10.22	6000	-	6000	99.40/8.1577	8.07% GS, 2017
11-May-07	14-May-07	15	9.92	6000	228	9454.00	5	4.04	181	5995.96	5	4.04	6000	-	6000	94.51/8.3118	7.49% GS, 2017
11-May-07	14-May-07	30	29.06	4000	244	10047.94	3	2.51	39	3997.50	3	2.51	4000	-	4000	96.71/8.6399	8.33% GS, 2036
25-May-07	28-May-07	13	8.26	5000	292	17864.00	4	8.00	50	4992.00	4	8.00	5000	-	5000	94.90/8.2399	7.38% GS, 2015
25-May-07	28-May-07	20	14.96	3000	258	8556.00	12	20.00	45	2980.00	12	20.00	3000	-	3000	99.51/8.4074	8.35% GS, 2022
05-Jun-07	06-Jun-07	15	9.86	6000	331	14982.50	5	5.80	139	5994.20	5	5.80	6000	-	6000	95.40/8.1763	7.49% GS, 2017
05-Jun-07	06-Jun-07	30	29.00	3000	199	7265.75	5	8.50	84	2991.50	5	8.50	3000	-	3000	97.96/8.5207	8.33% GS, 2036
12-Jun-07	13-Jun-07	15	9.84	5000	405	16505.25	5	7.20	88	4992.80	5	7.20	5000	-	5000	93.72/8.4395	7.49% GS, 2017
15-Jun-07	18-Jun-07	15	9.83	6000	410	28577.17	15	22.72	31	5977.28	15	22.72	6000	-	6000	94.27/8.3536	7.49% GS, 2017
06-Jul-07	09-Jul-07	10	10.00	6000	308	18088.00	14	21.48	101	5978.52	14	21.48	6000	-	6000	7.9900	7.99% G S 2017*
06-Jul-07	09-Jul-07	30	28.91	4000	215	8271.00	9	14.70	134	3985.30	9	14.70	4000	-	4000	98.72/8.4478	8.33% GS, 2036
20-Jul-07	23-Jul-07	11	6.11	6000	227	13972.50	9	15.57	114	5984.43	9	15.57	6000	-	6000	98.47/7.5851	7.27% GS, 2013
20-Jul-07	23-Jul-07	30	25.10	3000	235	11285.00	6	9.50	40	2990.50	6	9.50	3000	-	3000	95.82/8.3425	7.95% GS, 2032
03-Aug-07	06-Aug-07	10	9.93	6000	380	19947.82	7	12.25	86	5987.75	7	12.25	6000	-	6000	100.40/7.9296	7.99% G S 2017
03-Aug-07	06-Aug-07	30	25.06	4000	210	9812.00	5	5.35	85	3994.65	5	5.35	4000	-	4000	94.83/8.4487	7.95% GS, 2032
24-Aug-07	27-Aug-07	11	6.02	5000	224	14481.81	7	12.00	32	4988.00	7	12.00	5000	-	5000	97.16/7.8712	7.27% GS, 2013
24-Aug-07	27-Aug-07	10	9.89	2000	194	5854.50	10	13.70	69	1986.30	10	13.70	2000	-	2000	100.53/7.9094	7.99% G S 2017
07-Sep-07	10-Sep-07	15	14.43	4000	211	15358.62	9	8.52	13	3991.49	9	8.52	4000	-	4000	100.35/8.1571	8.20% GS 2022
07-Sep-07	10-Sep-07	30	28.74	3000	207	8673.25	7	11.50	80	2988.50	7	11.50	3000	-	3000	99.13/8.4087	8.33% GS 2036
12-Oct-07	15-Oct-07	10	9.73	6000	277	16425.60	11	15.52	93	5984.48	11	15.52	6000	-	6000	100.54/7.9065	7.99 % G S, 2017
12-Oct-07	15-Oct-07	30	24.87	4000	213	10257.57	5	8.00	79	3992.00	5	8.00	4000	-	4000	94.82/8.4503	7.95 % G S, 2032
26-Oct-07	29-Oct-07	11	5.84	4000	218	11772.00	5	8.50	102	3991.50	5	8.50	4000	-	4000	97.80/7.7419	7.27% GS, 2013
26-Oct-07	29-Oct-07	20	14.54	4000	169	14348.70	9	11.52	24	3988.48	9	11.52	4000	-	4000	101.81/8.1347	8.35% GS, 2022
08-Nov-07	12-Nov-07	15	14.26	5000	143	9025.00	3	4.70	92	4038.00	3	4.70	4043	957	5000	99.50/8.2578	8.20% GS, 2022
08-Nov-07	12-Nov-07	30	28.57	3000	209	9310.00	4	7.00	10	2993.00	4	7.00	3000	-	3000	99.34/8.3903	8.33% GS, 2036
23-Nov-07	26-Nov-07	10	9.62	3000	172	6676.00	5	8.16	75	2991.84	5	8.16	3000	-	3000	100.61/7.8962	7.99% GS, 2017
23-Nov-07	26-Nov-07	20	14.47	4000	258	13398.00	7	10.95	57	3989.05	7	10.95	4000	-	4000	101.26/8.1991	8.35% GS, 2022
14-Dec-07	17-Dec-07	10	9.56	5000	218	10587.00	10	11.76	134	4988.24	10	11.76	5000	-	5000	100.47/7.9177	7.99% GS, 2017
14-Dec-07	17-Dec-07	30	28.47	2000	216	7384.00	7	10.00	15	1990.00	7	10.00	2000	-	2000	100.76/8.2599	8.33% GS, 2036
11-Jan-08	14-Jan-08	10	9.49	6000	290	14001.00	19	23.58	130	5976.42	19	23.58	6000	-	6000	102.91/7.5545	7.99% GS, 2017
11-Jan-08	14-Jan-08	30	28.40	4000	241	14926.00	6	9.50	10	3990.50	6	9.50	4000	-	4000	104.90/7.8938	8.33% GS, 2036
08-Feb-08	11-Feb-08	30	28.32	4000	245	11652.00	6	9.10	87	3990.90	6	9.10	4000	-	4000	106.36/7.7698	8.33% GS, 2036
08-Feb-08	11-Feb-08	15	14.01	5000	207	13844.00	10	15.50	61	4984.50	10	15.50	5000	-	5000	104.97/7.6166	8.20% GS, 2022

APPENDIX TABLE 60 : ISSUANCES OF CENTRAL GOVERNMENT DATED SECURITIES *(Concld)*

(Amount in Rupees crore)

Auction Particulars					Bids/Applications Received				Bids/Applications Accepted						Gross	Cut-Off	Nomenclature
Date of Auction	Date of Issue	Tenor (years)	Residual Maturity (years)	Notified Amount	Competitive		Non-Competitive		Competitive		Non-Competitive		Total (11+13)	Allocation to PDs (Devolve-ment)	Amount Raised (14+15)	Price (Rs)/ Yield (%)	of loan
					No. +	Face Value	No. +	Face Value	No. +	Face Value	No. +	Face Value					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2008-09																	
11-Apr-08	15-Apr-08	13	7.38	6000	222	11114.02	13	14.95	156	5985.05	13	14.95	6000	-	6000	95.83/8.1401	7.38% GS, 2015
11-Apr-08	15-Apr-08	30	24.37	4000	241	11994.66	13	18.75	36	3981.25	13	18.75	4000	-	4000	92.63/8.6734	7.95% GS, 2032
21-Apr-08	22-Apr-08	10	10.00	6000	354	20964.00	12	14.80	109	5985.20	12	14.80	6000	-	6000	8.2400	8.24% GS, 2018 *
21-Apr-08	22-Apr-08	30	28.13	4000	254	12741.00	8	9.55	61	3990.45	8	9.55	4000	-	4000	95.44/8.7675	8.33% GS, 2036
09-May-08	12-May-08	10	7.92	6000	345	15406.01	21	25.90	134	5974.10	21	25.90	6000	-	6000	97.85/7.9595	7.49% GS, 2016
09-May-08	12-May-08	30	24.29	4000	216	10934.60	14	21.66	13	3978.34	14	21.66	4000	-	4000	95.76/8.352	7.95% GS, 2032
23-May-08	26-May-08	10	9.91	6000	409	18970.02	10	14.60	125	5985.40	10	14.60	6000	-	6000	101.15/8.0673	8.24% GS, 2018
23-May-08	26-May-08	25	23.72	4000	142	11761.00	1	2.00	26	3998.00	1	2.00	4000	-	4000	97.56/8.5191	8.28% GS, 2032
06-Jun-08	09-Jun-08	10	9.87	6000	378	18782.02	18	22.45	83	5977.55	18	22.45	6000	-	6000	99.88/8.2556	8.24% GS, 2018
06-Jun-08	09-Jun-08	30	24.22	4000	152	8571.00	4	8.00	90	3992.00	4	8.00	4000	-	4000	92.18/8.722	7.95% GS, 2032
20-Jun-08	23-Jun-08	20	18.64	6000	156	10311.61	9	11.76	56	5209.61	9	11.76	5221	779	6000	91.08/9.2506	8.24% GS, 2027
04-Jul-08	07-Jul-08	10	9.79	6000	292	12154.50	9	10.40	192	5989.60	9	10.40	6000	-	6000	94.28/9.1327	8.24% GS, 2018
04-Jul-08	07-Jul-08	25	23.61	4000	156	6501.70	2	4.00	106	3996.00	2	4.00	4000	-	4000	84.30/10.0258	8.28% GS, 2032
24-Jul-08	25-Jul-08	10	9.74	6000	214	12428.50	17	16.10	115	5983.90	17	16.10	6000	-	6000	94.63/9.0785	8.24% GS, 2028U
8-Aug-08	11-Aug-08	10	9.70	6000	236	15021.30	13	16.35	49	5983.65	13	16.35	6000	-	6000	94.27/9.1400	8.24% GS, 2018U
8-Aug-08	11-Aug-08	30	24.05	4000	166	8288.20	3	4.50	94	3995.50	3	4.50	4000	-	4000	82.30/9.8813	7.95% GS,2032U

+ : Number of applicants - : Nil * : New issue (yield based auction) U: Uniform Price

Note : 1. Allotment to non-competitive bidders were at weighted average yield/price of competitive bids.
2. All auctions were re-issues barring those indicated by *.

APPENDIX TABLE 61: MARKET BORROWINGS PROGRAMME OF THE STATE GOVERNMENTS/UNION TERRITORIES - 2007-08

(Amount in Rupees crore)

Name of the State/ Union Territory		Gross Allocations (=3+4+5+6)	Repayment	Net Allocations	Additional Allocations	Additional Allocations (to cover shorfall in NSSF collections)	Gross Borrowings	Net Borrowings (=7-3)
1		2	3	4	5	6	7	8
1.	Andhra Pradesh	5,936	1,008	4,928	-	2,389	6,650	5,642
2.	Arunachal Pradesh	149	10	139	-	35	185	174
3.	Assam	727	333	394	-	237	963	630
4.	Bihar	1,622	779	842	-	575	1,092	313
5.	Chhattisgarh	407	157	250	-	571	#	-157
6.	Goa	636	31	605	-	-	400	369
7.	Gujarat	1,755	475	800	480	5,021	6,775	6,300
8.	Haryana	750	253	496	-	522	#	-253
9.	Himachal Pradesh	675	77	598	-	724	1,399	1,322
10.	Jammu & Kashmir	1,919	118	275	1,525	307	2,226	2,108
11.	Jharkhand	648	264	384	-	905	1,192	928
12.	Karnataka	1,556	462	1,094	-	906	750	288
13.	Kerala	2,026	663	773	590	2,271	4,297	3,634
14.	Madhya Pradesh	2,514	538	1,776	200	1,168	1,875	1,337
15.	Maharashtra	3,820	775	2,044	1,000	4,748	8,520	7,744
16.	Manipur	247	37	210	-	-	247	210
17.	Meghalaya	176	48	128	-	19	196	147
18.	Mizoram	134	18	116	-	13	147	129
19.	Nagaland	359	71	287	-	11	369	298
20.	Orissa	1,241	874 *	367	-	-	#	-874 *
21.	Punjab	2,350	328	1,591	432	1,771	4,121	3,794
22.	Rajasthan	2,296	754	1,543	-	1,691	3,987	3,233
23.	Sikkim	274	26	199	49	34	250	224
24.	Tamil Nadu	2,367	813	1,554	-	2,576	4,942	4,130
25.	Tripura	86	45	40	-	153	#	-45
26.	Uttar Pradesh	6,494	1,791	4,703	-	-	4,422	2,631
27.	Uttarakhand	544	95	449	-	428	830	735
28.	West Bengal	3,063	867	2,196	-	8,544	11,607	10,740
29.	Union Territory of Puducherry	177	-	-	177	160	337	337
	Total	**44,946**	**11,711**	**28,781**	**4,454**	**35,780**	**67,779**	**56,068**

: States did not participate in the Market Borrowing Programme during 2007-08.

* : includes buyback of securities worth Rs.156 crore.

APPENDIX TABLE 62: MARKET BORROWINGS OF THE STATE GOVERNMENTS/ U.T. RAISED THROUGH AUCTIONS

(Amount in Rupees crore)

Sr. No.	Date of Auction	State/U.T.	Notified Amount	Amount Accepted	Market Rate(%)*	No. of Bids Received	Amount Offered	Weighted Average Rate (%)	Cut Off Rate(%)	Spread (Percentage points)
1	2	3	4	5	6	7	8	9	10	11 (=10-6)
	2007-08									
1.	19-04-2007	Gujarat	400	400	8.08	51	1735	8.29	8.30	0.22
2.	19-04-2007	Maharashtra	500	500	8.08	55	2017	8.30	8.30	0.22
3.	19-04-2007	Mizoram	47	47	8.08	10	191	8.30	8.30	0.22
4.	19-04-2007	Nagaland	140	140	8.08	13	510	8.30	8.30	0.22
5.	19-04-2007	Rajasthan	750	750	8.08	62	3012	8.30	8.30	0.22
6.	10-05-2007	Kerala	350	350	8.11	47	1767	8.29	8.34	0.23
7.	17-05-2007	Andhra pradesh	400	400	8.12	52	933	8.36	8.40	0.28
8.	17-05-2007	West Bengal	1000	1000	8.12	97	2702	8.35	8.40	0.28
9.	19-06-2007	Andhra pradesh	600	600	8.22	86	1824	8.41	8.45	0.23
10.	19-06-2007	Arunachal Pradesh	20	20	8.22	4	65	8.47	8.48	0.26
11.	19-06-2007	Assam	443	401	8.22	9	401	8.46	8.52	0.30
12.	19-06-2007	Jammu & Kasmir	100	100	8.22	10	145	8.46	8.57	0.35
13.	19-06-2007	Kerala	300	300	8.22	48	970	8.41	8.45	0.23
14.	19-06-2007	Madhya Pradesh	500	625	8.22	50	1194	8.44	8.49	0.27
15.	19-06-2007	Meghalaya	55	55	8.22	3	110	8.47	8.48	0.26
16.	19-06-2007	Rajasthan	500	500	8.22	62	1533	8.43	8.46	0.24
17.	19-06-2007	West Bengal	965	965	8.22	87	3464	8.46	8.48	0.26
18.	26-7-2007	Andhra pradesh	600	600	7.81	74	2291	7.98	8.00	0.19
19.	26-7-2007	Gujarat	400	400	7.81	62	2013	7.98	8.00	0.19
20.	26-7-2007	Jammu & Kasmir	122	122	7.81	17	253	8.16	8.25	0.44
21.	26-7-2007	Jharkhand	192	192	7.81	22	894	8.02	8.04	0.23
22.	26-7-2007	Nagaland	75	75	7.81	6	189	8.04	8.04	0.23
23.	16-8-2007	Jammu & Kasmir	372	372	8.00	28	591	8.64	8.90	0.90
24.	16-8-2007	Kerala	350	350	8.00	53	1004	8.32	8.36	0.36
25.	16-8-2007	Madhya Pradesh	600	750	8.00	36	1011	8.35	8.40	0.40
26.	16-8-2007	Manipur	86	86	8.00	6	111	8.35	8.35	0.35
27.	16-8-2007	Mizoram	29	29	8.00	8	110	8.35	8.35	0.35
28.	16-8-2007	Punjab	500	500	8.00	35	1533	8.31	8.35	0.35
29.	16-8-2007	Tamil Nadu	300	300	8.00	66	1002	8.27	8.30	0.30
30.	16-8-2007	West Bengal	1098	1098	8.00	95	2620	8.34	8.39	0.39
31.	20-9-2007	Assam	116	116	7.82	8	482	8.20	8.20	0.38
32.	20-9-2007	Gujarat	475	475	7.82	32	750	8.16	8.20	0.38
33.	20-9-2007	Himachal Pradesh	300	300	7.82	27	1202	8.13	8.16	0.34
34.	20-9-2007	Jammu & Kashmir	135	135	7.82	36	869	8.45	8.50	0.68
35.	20-9-2007	Kerala	436	436	7.82	27	841	8.13	8.19	0.37
36.	20-9-2007	Punjab	1000	1000	7.82	70	2484	8.16	8.22	0.40
37.	20-9-2007	Sikkim	112	112	7.82	10	469	8.20	8.20	0.38
38	20-9-2007	Tamil Nadu	500	500	7.82	45	1119	8.09	8.14	0.32
39.	04-10-2007	Kerala	590	590	7.91	67	1925	8.19	8.20	0.29
40.	08-10-2007	Gujarat	1000	1000	7.94	67	1639	8.27	8.32	0.38
41.	08-10-2007	Maharashtra	722	722	7.94	58	1465	8.27	8.31	0.37
42.	08-10-2007	Rajasthan	1250	950	7.94	62	1590	8.28	8.32	0.38
43.	08-10-2007	West Bengal	2000	2000	7.94	128	4913	8.36	8.40	0.46
44.	13-11-2007	Andhra Pradesh	750	750	7.88	53	1078	8.36	8.40	0.52
45.	13-11-2007	Goa	150	150	7.88	13	358	8.38	8.40	0.52
46.	13-11-2007	Kerala	800	800	7.88	35	885	8.44	8.69	0.81
47.	13-11-2007	Tamil Nadu	500	500	7.88	44	700	8.34	8.39	0.51
48.	13-11-2007	Uttar Pradesh	1000	1000	7.88	64	1920	8.49	8.55	0.67
49.	13-11-2007	West Bengal	2100	2100	7.88	159	6887	8.45	8.48	0.60

APPENDIX TABLE 62: MARKET BORROWINGS OF THE STATE GOVERNMENTS/ U.T. RAISED THROUGH AUCTIONS *(Contd.)*

(Amount in Rupees crore)

Sr. No.	Date of Auction	State/U.T.	Notified Amount	Amount Accepted	Market Rate(%)*	No. of Bids Received	Amount Offered	Weighted Average Rate (%)	Cut Off Rate(%)	Spread (Percentage points)
1	2	3	4	5	6	7	8	9	10	11 (=10-6)
50.	30-11-2007	Andhra Pradesh	500	500	7.90	94	2043	8.45	8.48	0.58
51.	30-11-2007	Himachal Pradesh	200	200	7.90	33	899	8.47	8.50	0.60
52.	30-11-2007	Maharashtra	1597	1597	7.90	154	4799	8.47	8.50	0.60
53.	30-11-2007	Rajasthan	500	215	7.90	76	2273	8.45	8.45	0.55
54.	30-11-2007	Tamil Nadu	600	600	7.90	114	2845	8.45	8.47	0.57
55.	30-11-2007	West Bengal	2100	2100	7.90	174	8125	8.47	8.50	0.60
56.	18-12-2007	Arunachal Pradesh	50	50	7.89	14	221	8.41	8.42	0.53
57.	18-12-2007	Assam	200	200	7.89	26	731	8.40	8.40	0.51
58.	18-12-2007	Himachal Pradesh	100	100	7.89	20	460	8.39	8.40	0.51
59.	18-12-2007	Jammu & Kashmir	307	307	7.89	56	1154	8.54	8.58	0.69
60.	18-12-2007	Madhya Pradesh	500	500	7.89	60	1249	8.41	8.43	0.54
61.	18-12-2007	Meghalaya	50	50	7.89	9	146	8.39	8.42	0.53
62.	18-12-2007	Mizoram	29	29	7.89	7	115	8.42	8.42	0.53
63.	18-12-2007	Nagaland	77	77	7.89	10	203	8.41	8.42	0.53
64.	18-12-2007	Punjab	900	900	7.89	111	3845	8.40	8.41	0.52
65.	18-12-2007	Tamil Nadu	500	500	7.89	122	2990	8.38	8.39	0.50
66.	18-12-2007	Uttarakhand	250	250	7.89	44	1240	8.39	8.39	0.50
67.	07-01-2008	Gujarat	1000	1000	7.68	136	4011	8.03	8.07	0.39
68.	07-01-2008	Himachal Pradesh	300	300	7.68	55	1405	8.01	8.03	0.35
69.	07-01-2008	Kerala	833	833	7.68	122	2662	8.08	8.12	0.44
70.	07-01-2008	Maharashtra	2000	2000	7.68	174	8236	8.05	8.08	0.40
71.	07-01-2008	Rajasthan	600	600	7.68	92	3140	8.04	8.06	0.38
72.	07-01-2008	Uttar Pradesh	1100	1100	7.68	85	3706	8.05	8.07	0.39
73.	24-01-2008	Andhra Pradesh	500	500	7.38	51	1112	7.85	7.92	0.54
74.	24-01-2008	Assam	246	246	7.38	13	661	7.83	7.97	0.59
75.	24-01-2008	Gujarat	1000	1000	7.38	84	2332	7.83	7.87	0.49
76.	24-01-2008	Jammu & Kashmir	100	100	7.38	26	670	7.95	7.98	0.60
77.	24-01-2008	Jharkhand	1000	1000	7.38	36	1614	7.84	7.89	0.51
78.	24-01-2008	Maharashtra	1350	1350	7.38	105	3048	7.84	7.89	0.51
79.	24-01-2008	Puducherry	177	177	7.38	20	410	7.85	7.90	0.52
80.	24-01-2008	Punjab	456	456	7.38	34	996	7.82	7.86	0.48
81.	24-01-2008	Rajasthan	549	549	7.38	33	1142	7.82	7.84	0.46
82.	24-01-2008	Tamil Nadu	600	750	7.38	58	1555	7.81	7.85	0.47
83.	24-01-2008	Uttarakhand	250	250	7.38	13	430	7.84	7.87	0.49
84.	24-01-2008	West Bengal	1400	1400	7.38	122	5089	7.84	7.87	0.49
85.	15-02-2008	Andhra Pradesh	800	800	7.54	72	1306	7.94	7.98	0.44
86.	15-02-2008	Arunachal Pradesh	106	106	7.54	13	459	7.99	8.00	0.46
87.	15-02-2008	Himachal Pradesh	274	274	7.54	22	756	7.94	8.00	0.46
88.	15-02-2008	Kerala	637	637	7.54	64	1369	7.95	8.00	0.46
89.	15-02-2008	Maharashtra	2350	2350	7.54	124	3548	7.97	8.00	0.46
90.	15-02-2008	Manipur	124	124	7.54	12	361	8.02	8.02	0.48
91.	15-02-2008	Meghalaya	50	50	7.54	9	177	8.00	8.02	0.48
92.	15-02-2008	Nagaland	77	77	7.54	10	246	8.00	8.02	0.48
93.	15-02-2008	Punjab	500	500	7.54	49	1335	7.93	7.96	0.42
94.	15-02-2008	Rajasthan	423	220	7.54	34	632	7.92	7.93	0.39
95.	15-02-2008	Sikkim	138	138	7.54	11	488	8.00	8.02	0.48
96.	15-02-2008	Tamil Nadu	800	1000	7.54	90	2307	7.93	7.96	0.42
97.	15-02-2008	Uttar Pradesh	1500	1500	7.54	69	2329	7.98	8.01	0.47
98.	22-02-2008	Bihar	1196	1092	7.65	42	1832	8.21	8.25	0.60
99.	22-02-2008	Gujarat	1000	1000	7.65	66	1397	8.10	8.14	0.49

APPENDIX TABLE 62: MARKET BORROWINGS OF THE STATE GOVERNMENTS/ U.T. RAISED THROUGH AUCTIONS *(Concld.)*

(Amount in Rupees crore)

Sr. No.	Date of Auction	State/U.T.	Notified Amount	Amount Accepted	Market Rate(%)*	No. of Bids Received	Amount Offered	Weighted Average Rate (%)	Cut Off Rate(%)	Spread (Percentage points)
1	2	3	4	5	6	7	8	9	10	11 (=10-6)
100.	22-02-2008	Jammu & Kashmir	976	976	7.65	34	1939	8.18	8.48	0.83
101.	22-02-2008	Mizoram	42	42	7.65	6	73	8.25	8.25	0.60
102.	22-02-2008	Tamil Nadu	650	792	7.65	62	1380	8.09	8.12	0.47
103.	22-02-2008	Uttar Pradesh	1700	822	7.65	50	1362	8.18	8.25	0.60
104.	22-02-2008	Uttarakhand	250	250	7.65	23	551	8.10	8.12	0.47
105.	07-03-2008	Andhra Pradesh	1500	1500	7.65	59	1570	8.36	8.45	0.80
106.	07-03-2008	Gujarat	1140	1140	7.65	59	1572	8.27	8.43	0.78
107.	07-03-2008	Punjab	765	765	7.65	38	1638	8.24	8.28	0.63
108.	07-03-2008	West Bengal	944	944	7.65	62	2661	8.23	8.30	0.65
109.	26-03-2008	Andhra Pradesh	1000	1000	7.81	130	3317	8.38	8.41	0.60
110.	26-03-2008	Arunachal Pradesh	9	9	7.81	3	14	8.46	8.46	0.65
111.	26-03-2008	Goa	250	250	7.81	21	605	8.35	8.35	0.54
112.	26-03-2008	Gujarat	360	360	7.81	67	1032	8.36	8.39	0.58
113.	26-03-2008	Himachal Pradesh	225	225	7.81	28	659	8.35	8.35	0.54
114.	26-03-2008	Jammu & Kashmir	115	115	7.81	15	290	8.67	8.70	0.89
115.	26-03-2008	Karnataka	750	750	7.81	90	2441	8.38	8.40	0.59
116.	26-03-2008	Manipur	37	37	7.81	6	82	8.46	8.46	0.65
117.	26-03-2008	Meghalaya	41	41	7.81	6	91	8.46	8.46	0.65
118.	26-03-2008	Puducherry	160	160	7.81	14	240	8.40	8.40	0.59
119.	26-03-2008	Rajasthan	203	203	7.81	40	590	8.39	8.40	0.59
120.	26-03-2008	Uttarakhand	221	80	7.81	12	80	8.55	8.68	0.87
	2008-09									
1.	22-04-2008	Kerala	385	385	8.15	112	2499	8.45	8.50	0.35
2.	22-04-2008	Nagaland	160	160	8.15	17	570	8.49	8.58	0.43
3.	22-04-2008	Uttarakhand	250	250	8.15	60	1567	8.45	8.50	0.35
4.	22-04-2008	West Bengal	1853	1853	8.15	182	8393	8.53	8.60	0.45
5.	27-05-2008	Jammu & Kashmir	564	564	8.09	52	960	8.64	8.68	0.59
6.	27-05-2008	Kerala	500	500	8.09	90	1809	8.46	8.50	0.41
7.	27-05-2008	Uttar Pradesh	1000	1000	8.09	96	3568	8.49	8.51	0.42
8.	27-05-2008	Uttarakhand	200	200	8.09	45	1097	8.39	8.39	0.30
9.	27-05-2008	West Bengal	1000	1000	8.09	132	4192	8.49	8.52	0.43
10.	27-06-2008	Andhra Pradesh	500	500	8.61	81	1246	9.28	9.40	0.79
11.	27-06-2008	Uttar Pradesh	1000	1000	8.61	76	1822	9.47	9.59	0.98
12.	27-06-2008	West Bengal	800	800	8.61	120	2411	9.21	9.38	0.77
13.	10-07-2008	Punjab	500	500	9.32	82	1422	9.73	9.81	0.49
14.	31-07-2008	Andhra Pradesh	1000	1000	9.38	134	3163	9.85	9.89	0.51
15.	31-07-2008	Kerala	300	300	9.38	66	1532	9.84	9.86	0.48
16.	31-07-2008	West Bengal	800	800	9.38	123	3452	9.87	9.90	0.52

* : Secondary market yield of Central Government securities of similar maturity.

APPENDIX TABLE 63: WEIGHTED AVERAGE YIELD OF MARKET BORROWINGS BY STATES/U.T.

(Per cent)

Name of the State/Union Territory	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5
1. Andhra Pradesh	6.47	7.36	8.13	8.30
2. Arunachal Pradesh	6.68	7.39	8.06	8.19
3. Assam	6.53	7.56	8.04	8.32
4. Bihar	6.63	7.39	N.A.	8.25
5. Chhattisgarh	6.21	N.A.	N.A.	N.A.
6. Goa	6.46	7.65	7.99	8.37
7. Gujarat	6.22	7.33	N.A.	8.18
8. Haryana	6.34	7.33	N.A.	N.A.
9. Himachal Pradesh	6.40	7.39	7.99	8.20
10. Jammu & Kashmir	6.56	7.75	8.13	8.55
11. Jharkhand	6.39	7.46	8.11	7.91
12. Karnataka	6.41	N.A.	N.A.	8.40
13. Kerala	6.42	7.46	7.96	8.29
14. Madhya Pradesh	6.51	7.50	8.31	8.44
15. Maharashtra	6.45	7.50	8.05	8.14
16. Manipur	6.62	7.60	7.91	8.20
17. Meghalaya	6.78	7.70	8.21	8.34
18. Mizoram	6.97	7.71	8.29	8.32
19. Nagaland	6.42	7.69	8.05	8.21
20. Orissa	6.51	7.77	N.A.	N.A.
21. Punjab	6.29	7.73	8.00	8.22
22. Rajasthan	6.43	7.65	8.08	8.22
23. Sikkim	7.03	7.70	8.29	8.10
24. Tamil Nadu	6.29	7.68	8.10	8.16
25. Tripura	6.95	7.55	8.11	N.A.
26. Uttar Pradesh	6.54	7.85	8.22	8.19
27. Uttarakhand	6.16	7.71	8.20	8.18
28. West Bengal	6.53	7.39	7.86	8.37
29. Puducherry	N.A.	N.A.	N.A.	8.14
Maximum	**7.03**	**7.85**	**8.31**	**8.55**
Minimum	**6.16**	**7.33**	**7.86**	**7.91**
Average	**6.45**	**7.63**	**8.10**	**8.25**

U.T. : Union Territory N.A. : Not Applicable.