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Stanford University

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Emerging Challenges in Indian Banking

by

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Abstract

The paper examines the process of banking sector reforms in India. It notes the beneficial impact to the financial system consequent upon the reforms and highlights the current weaknesses in the banking system. Against this background, the paper identifies the emerging challenges and discusses ways in which they could be tackled.

In order to evaluate the efficacy of the prudential norms, we conduct a stress test of credit risk. Our analysis reveals that, depending on the percentage of loans that graduate into non-performance and the provisioning made, the immediate hit is a loss of interest income between Rs.21-55 billion. The maximum level of additional provisioning that can support the present capital adequacy ratio is determined.

The paper has benefited with comments from Dr.Y.V.Reddy, Prof. Anne O. Krueger, Mr. Ashok V.Desai, Dr. Ajay Shah and Mr. Sajjid Chinoy on an earlier draft. The views expressed in the paper are entirely personal and do not, in any way, reflect those of the institutions to which the authors' belong.

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One of the major areas of the economy that has received renewed focus in recent times has been the financial sector. And within the broad ambit of the financial sector, it is the banking sector that has been the cynosure of academia and policymakers alike. With concerns about financial stability emerging to the forefront of policy challenges facing central banks worldwide, it is being increasingly realized that promoting healthy financial institutions, especially banks, is a crucial prerequisite towards this end. Not surprisingly therefore, the banking sector in most emerging economies is passing through challenging yet exciting times and India is no exception to this rule.

In the light of the importance of financial intermediation and the difficulties that several countries have encountered in restructuring their fragile banking systems, it would be useful to examine the performance of the banking sector in India during the nineties. The rest of the paper proceeds as follows. Section I provides an overview of the situation in the pre-reform period. Section II examines the impact of the reforms process. The weaknesses in the banking system are discussed in Section III. This is followed by a discussion of the emerging challenges in the Indian banking system in Section IV. The concluding remarks are gathered in Section V. Needless to say, banking sector is a crucial link in the reform process, but not the only one. Supporting reforms in the rest of the financial sector, real sector, including agriculture, trade and industrial policies along with macroeconomic control and supportive fiscal and external sector policies are as much important for successful reforms, as reforms in the financial sector themselves (Rangarajan, 1994). These are beyond the scope of the present paper are therefore sidestepped for the present.

I. Banking and Finance in the Pre-Reform Period

At independence, saving and investment in India were low and only two-thirds of the economy was monetised. For example, net domestic saving as percent of Net Domestic Product (NDP) at market prices was only 9.3 per cent in 1960-61, which rose to 11.8 per cent in 1969-70 (Reserve Bank of India, 1978). With limited foreign saving and the negligible contribution of the public and private corporate sectors, the burden of saving mobilisation fell on the household sector. The bulk of the saving of household sector was in the form of financial assets, and bank deposits dominated the financial asset portfolio of households (Table 1).

By the fifties, the banking system was concentrated primarily in the urban and metropolitan areas.[1] The disconcerting findings of the All-India Debt and Investment Survey in 1954 of the inequitable

[1] The banking system in India comprises of commercial and cooperative banks. The former include foreign banks operating in India, in addition to Indian banks in the public and the private sectors. The public sector banks, in turn,

distribution of bank credit[2], notwithstanding the existence of a branch licensing policy (where the central bank issued bank licences which emphasized the spread of branches to rural and semi-urban areas) meant that these features of bank credit were not in consonance with the goal of achieving an equitable allocation of credit as envisaged in the Five Year Plans. After the establishment of the State Bank of India (a scheduled commercial bank) in 1955[3], there were distinct efforts on its part to expand rural branches, though there was no statutory requirement to this effect.

The bank nationalisation in July 1969 with its objective to 'control the commanding heights of the economy and to meet progressively…the needs of development of the economy in conformity with national policy and objectives' (Reserve Bank of India, 1983) served to intensify the social objective of ensuring that financial intermediaries fully met the credit demands for productive purposes. Two significant aspects of nationalisation were (i) rapid branch expansion and (ii) channelling of credit according to plan priorities. To meet the broad objectives, banking facilities were made available in hitherto uncovered areas, so as to enable them to not only mop up potential savings and meet the credit gaps in agriculture and small-scale industries,[4] thereby helping to bring large areas of economic activities within the organised banking system. Towards this end, the Lead Bank Scheme introduced in December 1969 represented an important step towards implementation of the two-fold objective of mobilisation of deposits on an extensive scale throughout the country and striving for planned expansion of banking facilities to bring about greater regional balance[5]. As a consequence, the perceived need of the borrower

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comprises of nationalized banks (the majority holding being with the Government) and the State Bank of India (the majority holding being with the Reserve Bank of India, the central bank) and its seven associate banks (the majority holding being with the State Bank of India). Regional Rural Banks are subsidiaries of commercial banks which are specially set up in the rural areas to provide credit and other facilities to weaker sections for productive activities in agriculture, industry, trade, etc. The co-operative banks essentially follow the unit banking principle and provide short-term credit to the rural sector. Among the co-operative banks, while the Land Development Banks fund the activities related to capital formation in agriculture, urban co-operative banks finance small business in the urban areas. Additionally, Government-owned post-offices mobilize deposits, but do not undertake any lending activity. Besides, there is an extensive network of all-India and state-level development financial institutions catering to agriculture, industry, housing and exports. In addition, there are the investment institutions, catering to both life and general insurance as well as non-bank financial companies-all engaged in mobilizing resources and providing financial services as well as undertaking medium and long-term investment.

[2] According to the findings of the Committee, out of the total borrowings of farmers in 1951-52, which was estimated at Rs.750 crore, commercial banks provided only 0.9 per cent, while money lenders provided 70 per cent.

[3] The State Bank of India was created by nationalizing the Imperial Bank of India and in 1959, eight major state associated banks were made its subsidiaries.

[4] The definition of a small-scale industry has undergone a transformation over the years. In 1960, a small-scale industry was defined as one with gross value of fixed assets not exceeding Rs 5 lakh. This figure has been gradually revised upwards and presently stands at Rs. 0.01 billion.

[5] Under the Lead Bank Scheme, individual banks in a given geographical area were entrusted with the responsibility to locate growth centers, assess deposit potential and identify credit gaps, and in concert with other banks and credit agencies operating there, evolve a coordinated programme of credit deployment for each district.

gained primacy over commercial considerations in the banking sector[6]. In April 1980, six more private sector banks were nationalised, thus extending the domain of public control over the banking system. Such control also resulted in several inefficiencies creeping into the banking system. Repression assumed the form of high and administered interest rate structure with a large measure of built-in cross-subsidisation (in the form of minimum lending rates for commercial sector), high levels of pre-emptions of primary and secondary reserve requirements, in the form of cash reserve ratio (CRR) and statutory liquidity ratio (SLR) (Table 2)[7].

As is evident from Table 2, the CRR and SLR, which were initially pegged at 4 per cent and 33 per cent of Net Demand and Time Liabilities (NDTL) were gradually raised over a period of time; at the onset of the reforms in 1991-92, CRR and SLR taken together pre-empted 63.5 per cent of NDTL. Since then, pre-emptions have been reduced and SLR presently stands at its statutory minimum of 25 per cent. Likewise, the structure of administered interest rates has gradually been dismantled. Prescriptions of rates on term deposits, including conditions of premature withdrawal, have been dispensed with. The only prescribed rate at present is the 4 percent rate on savings bank account. Likewise, on the lending front, in the pre-reform period, lending rate structure consisted of six categories based on the size of loans and under each category, a minimum lending rate was prescribed. Lending rates have since been gradually deregulated and at present, banks are required to announce the Prime Lending Rate (PLR) and are allowed a maximum spread (not exceeding 4 per cent) on loans. The Bank Rate, which had for long remained a dormant policy tool, was activated in 1997 as a signalling rate and the entire spectrum of interest rates for any refinance or liquidity support from the RBI, have since been linked to the Bank Rate.

Secondly, retail lending to riskier areas of business on the 'free' portion of bank's resources engendered 'adverse selection' of borrowers. With limited prospects of recovery, this raised costs and affected the quality of bank assets. Quantitative restrictions (branch licensing and restrictions on new lines of business) and inflexible management structures severely constrained the operational independence and functional autonomy of banks. The inflationary expectations and the inequitable tax structures exacerbated the strains on the exchequer, since resources for developmental purposes were not readily forthcoming. As the quality of asset portfolio of banks rapidly deteriorated, it was evident that the profitability of the banking system was severely compromised and importantly, rather than acting as a conduit of intermediation, the banking system was held hostage to the process of economic growth.

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[6] Bank assets, for instance, comprised 66 per cent of total assets of banks and financial institutions in 1970-71, which rose to 84 per cent in 1980-81, but declined subsequently thereafter to about 70 per cent during the period 1991-92 to 1994-95.

[7] Demetriades and Luintel (1996) have demonstrated that banking sector controls had overwhelmingly negative effects on financial development in India, both in the short run as well as in the long run. A more recent study by Demetriades and Luintel (1997), using both static ordinary least squares and dynamic ordinary least squares, confirms the earlier assertion.

Thirdly, in addition, the widespread market segmentation and the constraints on competition exacerbated the already fragile situation. The market for short-term funds was reserved for banks and the market for long-term funds was the exclusive domain of Development Financial Institutions (DFIs)[8]. Direct access of corporate borrowers to lenders (disintermediation) was strictly controlled and non-bank financial companies (NBFCs) were allowed to collect funds only for corporates.

These adverse developments coupled with the balance-of-payments crisis, which followed in the wake of the Gulf War of 1990 coupled with the erosion of public savings and the inability of the public sector to generate resources for investment rapidly brought forth the imperatives for financial sector strengthening in India. Although these reforms were also provoked by the globalisation trends around the world almost around the same time (Williamson and Mahar, 1998), there was a distinct Indian flavour in the pace, sequencing, caution and complementarity. As Reddy (2000) has observed, the Indian approach to financial sector reforms is based on *pancha sutra* or five principles-cautious and proper sequencing; mutually reinforcing measures; complementarity between reforms in banking sector and changes in fiscal, external and monetary policies; developing financial infrastructure; and developing financial markets. While this approach is at variance with the 'big-bang' approach pursued in several countries, the gradualist approach is credited with the advantage of enhancing macro stability, whilst at the same time, fostering the microeconomic linkages.[9] And, the gradualism was the outcome of India's democratic and highly pluralistic polity in which reforms could be implemented if based on a popular consensus (Ahluwalia, 1993). More importantly, the favourable experience of liberalisation in the 1980s created an intellectual climate for continuing in the same direction. While the crisis of 1991 favoured bolder reforms being ushered, the pace had to be calibrated to what would be acceptable in a democracy. Secondly, structural adjustment measures were undertaken in simultaneity with liberalisation programme, in order to harness

[8] Development Financial Institutions were institutions set up to cater essentially to the medium and long term project financing requirements of the industrial sector.

[9] One reason for gradualism was simply because reforms were not introduced against a background of prolonged economic crisis or system collapse of the type which would have created a widespread desire for, and willingness to accept radical restructuring. The reforms were introduced in June 1991 in the wake of a balance-of-payments crisis which was certainly severe. It was not a prolonged crisis; on the contrary, it erupted suddenly at the end of a period of healthy growth in the 1980s, when the Indian economy grew at about 5.5 per cent per year, on average. Although modest by international standards, this was much better than India's previous experience of 3.5 - 4 per cent growth. Secondly, by the beginning of the eighties, it began to be recognized that the system of controls, with its heavy dependence on the public sector and a highly protected inward-oriented industrialization strategy, could not deliver rapid growth in an increasingly competitive world environment. While several initiatives were undertaken in the second half of the eighties to mitigate the rigours of the control regime, through lowering of direct tax rates, expanding the role of the private sector and liberalize of licensing controls on both trade and foreign investment, these changes were marginal rather than fundamental in nature, amounting more to loosening controls and operating them more flexibly rather than a comprehensive shift away from a regime of controls. Since the economy was seen to have responded well to these initiatives, with an acceleration of growth in the eighties, it created a strong presumption in favour of evolutionary change (Ahluwalia, 1993). Further, as the Appendix shows, reform measures have been introduced in a gradual fashion over the years.

the stabilising influence associated with certain measures of liberalisation. Thirdly, macroeconomic stability was made a concurrent pursuit. Fiscal and external sector policies supported monetary policy in maintaining overall balance. Prudential regulations were put in place to ensure safety and soundness, while transparency and accountability in operations were aimed at restoring the credibility of the banking system. Fourthly, recognising the inter-linkages between the real and financial sectors, wide-ranging reforms were also undertaken in the real sector so that financial intermediation kept pace with underlying economic activity.

II. Effects of the Reforms

The recommendations of the Narasimham Committee in 1991 provided the blueprint for the first-generation reform of the financial system (Jalan, 2000; Reddy, 1999). While these reforms were being implemented, the world economy also witnessed significant changes, 'coinciding with the movement towards global integration of financial services' (Narasimham Committee, 1998). Against such backdrop, the Report of the Narasimham Committee II (NCR-II) on Banking Sector Reforms provided the framework for the current reform process.

The visible impact of reforms is evident in both a widening (as reflected in the financial interrelations ratio) as well as the deepening (as evidenced by the intermediation ratio) of the intermediation process and well as its positive influence on growth (as reflected by the finance ratio) (Table 3). In addition to banks, various other intermediaries, including financial institutions, mutual funds and non-banking financial companies, are also engaged in the process of intermediation.

Second, the statutory pre-emptions have gradually been lowered. The combined pre-emptions under CRR and SLR, amounting to 63.5 per cent of net demand and time liabilities in 1991 (of which CRR was 25 per cent), has since been reduced and presently the combined ratio stands lowered at 32.5 per cent (of which, the SLR is at its statutory minimum of 25 per cent)[10]. This has enabled banks to commit a greater quantum of resources for commercial purposes.

Third, the administered interest rate structure of banks, both on the deposit and lending side, has been progressively rationalised. Prescriptions of rates on all term deposits (not below 7 days), including conditions of premature withdrawal and offering uniform rate, irrespective of the size of deposits, have been dispensed with. Currently, the only administered interest rate is on saving deposit (presently fixed at 4 per cent) which are used by individuals as current accounts. On the lending side, banks are required to announce a Prime Lending Rate, which in tune with the international context acts as a benchmark rate and loans to prime borrowers can be extended at sub-PLR at the bank's discretion. In order to ensure

[10] As at end-March 2001, the banking system held Government securities of around 35 per cent of net demand and time liabilities, which translated in volume terms, amounted to as much as Rs.1,00,000 crore (Reddy, 2001b).

transparency, the maximum spread (not exceeding 4 per cent on the PLR) is required to be announced. With regard to interest rate on smaller loans (i.e.,upto Rs.2 lakh), banks cannot charge above PLR.

Fourth, steps have been initiated to strengthen PSBs and infuse competition into the banking system. Towards strengthening PSBs, the Government initiated steps to improve their autonomy and increase their capital base through explicit recapitalisation through the fisc as well as changing legislation to enable PSBs to raise resources from the market (Table 4). The capital injections between 1992-93 and 1999-2000 were around Rs.204 billion, equivalent to an annual average of around 0.2 per cent of GDP. To increase competition, new banks in the private sector have been allowed to enter the industry and foreign banks have been given more liberal entry. In addition, non-banking financial companies have emerged as a competitive force in financial intermediation. In the rural areas, the competitive element has been reinforced with the operationalization of five Local Areas Banks[11] in the private sector, in addition to the Cooperative and Regional Rural Banks (RRBs). The market segmentation has been reduced to a great extent by allowing both banks and DFIs to enter into each others' areas of operations, with banks allowed to advance term loans and DFIs allowed to make short-term finance. On the liabilities side also, DFIs are permitted to undertake short-term borrowings through Commercial Paper and term deposits, with limits linked to their net worth. In addition, measures have been taken to broaden the ownership base of PSBs (Table 5). As evident from Table 5, equity sales in the market aggregating around Rs.63 billion have been made by 11 PSBs, with the State Bank approaching the market twice, in 1993, and again in 1996 (with a GDR issue), that together accounted for around 55 per cent of the total equity sales. Finally, banks have been given flexibility to rationalise their branch network.

Fifth, a set of micro-prudential measures have been stipulated, aimed at imparting strength to the banking system as well as ensuring safety and soundness on a prospective basis in order to fix 'the true position of bank's balance sheet and…to arrest its deterioration' (Rangarajan, 1996). With regard to prudential requirements, norms for income recognition and asset classification (IRAC), introduced in 1992, have been strengthened over the years in line with international best practices (Table 6). A strategy to introduce the attainment of CRAR of 8 per cent in a phased manner was put in place. Banks were required to raise their CRAR from 4 per cent in the initial year (i.e., 1992-93) to 8 per cent over a period of three years (i.e., by end-March 1996). Banks with international presence were required to attain the prescribed CRAR of 8 per cent by 1993-94. As regards IRAC norms, the time (period overdue in quarters) for classification of assets as non-performing has been tightened over the period, with a view to

[11] Local Area Banks are akin to the new private sector banks, with two important differences: they are located in the rural areas and have a paid up capital of Rs.50 crore.

move towards the international best practice norm of 90 days by end-March 2004.[12] Provisioning norms have also been since prescribed at a minimum of 0.25 per cent for standard assets. The investment portfolio of banks has also been streamlined, with the 'mark-to-market' proportion having been raised over the years.

As regards capital adequacy, the prescribed ratio has been fixed at 9 per cent, effective end-March 2000.[13] Risk weights on Government securities and State Government securities have been introduced basically recognising the vulnerability of banks to interest rate risk. From the end of March 2000, Government /approved securities are being provided for a risk weight of 2.5 per cent; an additional risk weight of 20 per cent on investments in Government-guaranteed securities of public sector undertakings is also in place. Foreign exchange open positions are assigned a 100 per cent risk weight. Considerable work is underway to develop capital norms that adequately reflect market risk and draw from internal control approach. These norms are broadly comparable with those prevailing in other Asian and transition economies (Table 7). There is a conscious attempt in moving towards international best practices in several areas in the recent period.[14] A Standing Committee on International Financial Standards and Codes (Chairman: Dr.Y.V.Reddy) has been constituted with the objective of identifying and monitoring global developments, specially in the context of the world-wide efforts to create a sound financial architecture and consider the applicability of global standards and codes to Indian conditions to several broad areas of relevance to RBI (Reddy, 2001a). As Goodhart (1995) has pointed out, 'setting standards is just the first step, maintaining them is the hard part'.

Sixth, the banking system has attained greater transparency. This applies both with regard to prudential norms (disclosure of capital adequacy ratios-tier I and tier II separately, net non-performing assets (NPAs) ratios, provisions and more recently, the maturity profile of loans and advances, investments, movements in NPAs and lending to sensitive sectors, such as capital market, real estate and commodities) as well as securities portfolio (greater 'marking-to-market')[15]. Public sector banks (PSBs) would be attaching the balance sheet of the subsidiaries to their balance sheets beginning from 2000-01, in order to bring greater transparency in operations and move towards consolidated supervision[16]. In

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[12] Revised provisioning norms have been recommended in the Monetary and Credit Policy of April 2001. Additional provisions for such loans are required to be made by banks starting from the year ending March 2002.

[13] As at end-March 2000, as many as 97 out of the 101 SCBs (except RRBs) had CRAR of 9 per cent and above. The corresponding figures for 1995-96 were 54 out of a total of 92 banks.

[14] To provide an example, with regard to NPAs, recent policy pronouncements have announced the intention to move towards international standards, effective March 31, 2004.

[15] Revised valuation norms for banks investment portfolio have been introduced in October 2000. These norms require banks to classify their investment portfolio under three categories, 'Held to Maturity', 'Available for Sale' and 'Held for Trading', of which the first was not to exceed 25 per cent of total investments.[15]

[16] Such a practice already exists for foreign banks operating in India. An exception is New Zealand, which follows a market-based system of disclosure. Banks need to provide quarterly financial statement on leading ratios of solvency, liquidity and asset quality, validated by bank directors, which are audited twice a year and made public.

addition, the introduction of asset-liability management practices since April 1999 (subsequently extended to financial institutions), fortified with the enunciation of risk management guidelines covering broadly the areas of credit, market and operational risks have enabled banks to have a clearer idea of their mismatches and undertake preventive steps.

By 1997-98, there was a significant improvement in the performance of the banking system. The profitability of PSBs showed a distinct improvement, measured in terms of operating profits (from Rs.30 billion in 1992-93 to Rs.131 billion in 1999-2000) as well as in terms of net profits to total assets (from losses in 1992-93 to Rs.51 billion in 1999-2000). Reflecting the efficiency of the intermediation process, there has been a decline in the spread between the borrowing and lending rates as attested by the ratio of net interest income to total assets from 3.22 per cent in 1991-92 to 2.70 per cent in 1999-2000 (Table 8).

As evident from the Table 8, the net profits of public sector banks have been the lowest among all the bank groups, although their profits have improved considerably from –1.15 per cent of assets in 1993-94 to 0.57 per cent in 1999-2000. In general, PSBs have lower interest costs about (6 per cent of assets) than their private sector or foreign counterparts, perhaps reflecting their branch network and rural presence where competition for funding is less than in urban areas. Non-interest income is traditionally lower in PSBs than other bank groups, indicative, to an extent, of their lack of diversification of business operations. Foreign banks, in contrast, tend to be outliers in all major income and expense items. These banks had substantially higher net interest margin (which declined over time) and non-interest income (reflecting their foreign exchange business) and higher operating expense per unit of assets.

The most significant improvement has been in terms of reduction in NPAs. As proportion of total loans, gross NPAs of PSBs declined from 23 per cent in 1992-93 to 14.0 per cent in 1999-2000; net NPAs declined by a factor of 1.5 from 11 per cent in March 1995 to 7.4 per cent in March 2000.[17] The profile of assets of PSBs has also undergone a transformation with over 87 per cent in the 'standard' category and less than 2 per cent in the 'loss' category. The assets under 'sub-standard' and 'doubtful' heads have also witnessed perceptible reduction (Table 9)[18]. At the same time, the capital adequacy ratios for PSBs have

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An important feature of this system is that bank directors face unlimited liability is they are found guilty of making false/misleading statements (Brash,1997).

[17] In India, as in most countries, NPAs are only an indicator of loan performance. The degree to which it measures actual NPAs depends on the quality of accounting, auditing, regulation and supervision and the amount of 'evergreening' of weak loans, though restructuring, which is a continual problem in India to judge from the numerous circulars against the practice which the RBI has issued against it over the last decade (Hanson, 2001).

[18] It needs to be underlined that NPAs in the Indian situation are based on the 180 days rule. Independent analysts have expressed the opinion that the actual NPAs could be much higher if calculated on the international norm of 90 days rule. While the Indian authorities have desisted the move in view of the agricultural crop cycle of 6 months and the system of 6 months interest reset, they have signaled the intention to move towards the 90 days norm by March 31, 2004. The true position would emerge by that date. However, contrary to international norms, net NPA figures in India exclude collateral, which, in any case, are not easily realizable in view of the legal impediments.

also increased significantly: as at end March 2000, as many as 26 PSBs had capital levels exceeding 9 per cent of risk weighted assets; no less than 22 of them has the ratio above 10 per cent.

Seventh, the liberalisation measures have permitted a refocusing of supervisory strategy from one of micro-management to one of macro-governance with the establishment of a quasi-autonomous Board for Financial Supervision (BFS) in 1994. The supervisory strategy of the BFS consists of a four-pronged approach, including (1) restructuring system of inspection, (2) setting up of off-site surveillance, (3) enhancing the role of external auditors, and (4) strengthening corporate governance, internal controls and audit procedures. Detailed off-site surveillance of banks, financial institutions and NBFCs is based on a quarterly reporting framework covering mandated aspects of liquidity, solvency and asset quality. It has been combined with on-site inspection, based on the evaluation of total operations and performance of banks under the supervisory rating framework based on the CAMELS (Capital Adequacy, Asset Quality, Management, Earnings, Liquidity and Systems) methodology for Indian commercial banks and CACS (Capital Adequacy, Asset Quality, Compliance and Systems) for foreign banks. The role of external auditors has been enlarged: besides auditing of annual accounts, they are required to verify and certify financial ratios to be disclosed in the balance sheet.[19] This has enabled regulators to have a clearer understanding of the true financial position of banks and take remedial measures, as warranted. The supervisory focus has since been spruced up with the enunciation of a Discussion Paper on Prompt Corrective Action for timely identification and monitoring the behaviour of troubled banks.[20]

This is not to say that the reforms process has been without its share of shortcomings. As the World Development Report (1989) has observed, 'this (financial liberalization) tends to increase financial fragility'. It is true that the reforms process often enhances the vulnerability of the system. In a tightly controlled system, it is easier to isolate and contain the problem. However, when the system is opened up and markets become integrated, containing the systemic effects of an idiosyncratic shock might prove difficult, since a shock in one sector of the economy might engender contagion effects in other sectors. In order to counter this risk, the reform process needs to address the twin concerns of liberalizing whilst, at the same time strengthening the institutional framework. The irregularities in the securities market in 1992 and the more recent one seems to suggest that the resilience of the system has improved.[21] As a

[19] The role of transparency in the banking system is illustrated in a recent paper by Hyytinen and Takalo (2000). The authors show that transparency has both a direct cost of complying with disclosure requirements and the indirect costs stemming from imperfect property rights governing information. The conditions under which transparency can (and cannot) reduce financial fragility are then derived.

[20] A discussion of the Prompt Corrective Action framework in different countries is contained in Hawkins and Turner (1999).

[21] Frauds have not been confined to emerging economies alone. The most infamous cases of bank failures have been associated with frauds. Early cases of frauds such as *Bank Ambrasiano* in Italy in 1982, seem trivial compared to the spectacular closure of the *Bank of Credit and Commerce International* in 1991, where mismanagement jettisoned the

negative test, one could compare the recent crisis in the Indian stock market with that of 1992. First, the amount involved in the present case was just about 20-25 per cent of that in the 1992 crisis of Rs.6-8 billion. Second, when the last crisis surfaced, the working of the market was seriously impaired; in fact, the stock market remained closed for several days, whereas this time around, no such system-level closure has occurred. Third, as a fallout of the previous crisis, one bank went into liquidation; in the recent case, while several banks were affected, bank failure has been averted and there has been no run on banks. This testifies the resilience of the system and its ability to isolate the problem.

Ninth, a positive externality of the reform measures have been the building up of the institutional architecture in terms of markets, technological and legal infrastructure and improving the managerial competence and the quality of human resources, which are pre-requisites for the efficient functioning of markets. Since 1997, there has been an intensification of efforts to develop and fortify the domestic financial architecture, albeit with a distinct country-specific approach. Several new initiatives on the technological front, including among others, the setting up of the Indian Financial Network (INFINET), a Wide Area Satellite based Network using VSAT technology, Shared Payment Network System, initiatives for Electronic Fund Transfer have already been undertaken. A Real Time Gross Settlement (RTGS) system, with system requirement specifications to take into account international best practices and the specific requirements of Indian banking is being developed.

Tenth, the changes in the policy environment have been supplanted with changes in the conduct of monetary policy and financial markets. A sweep of the evolution of monetary policy during the nineties has been detailed in Reddy (2001b). To briefly encapsulate the salient features of monetary policy, the monetary policy framework followed in India from mid eighties till 1997-98 was by and large a 'monetary targeting' framework, with broad money being the intermediate target. However, the deregulation and liberalization of financial markets and increasing openness have necessitated the adoption of a 'multiple indicator' approach in 1998-99, wherein interest rates or rates of return in different markets (money, capital and Government securities markets) along with high frequency data on currency, advances by banks and financial institutions, fiscal position, trade, capital flows, inflation rate, exchange rate, refinancing and transactions in foreign exchange have been juxtaposed with output data for drawing policy perspectives. While the twin objectives of monetary policy of maintaining price stability and ensuring availability of adequate credit to productive sectors of the economy to support growth have remained unchanged; the relative emphasis on either of these objectives have varied over the years depending on the requirements of the macro-economy. With the change in the institutional context of conduct of monetary policy pursuant upon the adoption of Ways and Means Advances (WMA) in 1997,

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banking system to the tune of US $5-10 billion, *Barings* episode, where losses exceeded US $ 1 trillion and at *Credit Lyonnais*, where frauds resulted in losses to the tune of US $ 17 billion.

indirect instruments of monetary control have come to the fore.[22] Consequently, the thrust of monetary policy in recent years has been the use of instruments in a more flexible and bi-directional manner. A Liquidity Adjustment Facility (LAF) has been introduced since June 2000 to modulate short-term liquidity and signal short-term interest rates. The LAF, in essence, operates through repo and reverse repo auctions, thereby setting a corridor for the short-term interest rate consistent with policy objectives. This has been supplanted with wide-ranging reforms in the financial markets (Appendix Table 1).[23]

After a long period of fixed exchange rate regime, a movement to a market-based regime was effected in 1993. Alongside, several initiatives, including among others, the freedom to fix net overnight position limit and gap limits, freedom to initiate trading position in the overseas markets; freedom to borrow or invest funds in the overseas markets (up to 15 per cent of tier I capital, unless otherwise approved); freedom to determine the interest rates (subject to a ceiling) and maturity period of Foreign Currency Non-Resident (FCNR) deposits (not exceeding three years); exempting inter-bank borrowings from statutory pre-emptions (subject to certain stipulations); and freedom to use derivative products for asset-liability management have been undertaken. Substantial freedom has been accorded to corporates to operate in the forex market. Foreign Institutional Investors (FIIs) have been allowed entry into equity and debt markets and take forward cover and exporters have been permitted to retain a progressively increasing proportion of their earnings in foreign currency accounts. The RBI buys and sells foreign exchange at its discretion to ensure orderly conditions in the market.

III. Weaknesses in the Banking System

First, the reform measures aimed at reducing the repressive financial regulation, on the one hand, and tightening prudential regulations, on the other. However, with the benefit of hindsight, it appears that the process could have been better handled. As it is, the impact of the reduction in the financial deregulation through freeing of interest rates is immediate, while the tightening of prudential regulations takes time to make itself felt. Illustratively, the pace of deregulation in interest rates gained primacy over the course of the reforms process than structural reforms. The primacy of interest rate deregulation has focused on creating a framework that does not reflect financial repression. The nominal deposit rates (excepting those on savings deposits) have generally been higher than the rate of inflation and the real

[22] Until end-March 1997, thee was a system of automatic monetisation of the Government's budget deficit by creation of *ad-hoc* Treasury Bills (T-Bills) at an interest of 4.6 per cent. At the end of each year, the *ad-hoc* T-Bills were converted into non-negotiable instruments in perpetuity at 4.6 per cent. Beginning April 1, 1997, this system has been abolished and financing of temporary mismatches of revenue and expenditure of the Government is made through a system of WMA, whose interest in linked to the Bank Rate.

[23] A broad sweep of the changes in the various markets and the reforms undertaken is contained in Appendix Table 1. A study of the Appendix would serve to give an idea of the direction of reforms in the last five years, when the RBI has been formally and directly involved in the development of the financial markets.

lending rates are at times ranging from 8-10 per cent (Government of India, 2001). It seems pertinent to mention in this context that McKinnon (1989) had advocated ceilings on deposits and interest rates in an immature bank-led capital market. This issue will have to be confronted squarely at present, particularly because a substantial section of the financial sector (e.g., cooperatives and NBFCs), which have been offering high interest rates on deposits and have charged correspondingly higher interest rates on loans. In a situation of predominantly bank-based system, the differential interest rate structure of different groups of financial entities might jeopardize the signaling mechanism of the Bank Rate.

Thirdly, there still remain several gaps in the prudential norms. For example, the NPAs in the Indian situation reflect the position based on the 180 days rule. Independent analysts have expressed the opinion that the actual NPAs could be much higher if calculated on the international norm of 90 days rule. While the Indian authorities had so far desisted the move in view of the agricultural crop cycle of 6 months and the system of 3 months interest reset that banks presently adopt, they have signaled the intention to move towards the 90 days norm by March 31, 2004. The true position which would emerge by that date would reveal the total quantum of NPAs in the banking system. However, contrary to international norms, net NPA figures in India exclude collateral, which, in any case, are not easily realizable in view of the legal impediments. In view of the fact that the norms for NPA classification in India are less stringent than those prevalent abroad, the extent of improvement in NPA might not reveal their actual quantum in the Indian context.

The fourth is the issue of directed lending. While it is generally accepted that the business of banking essentially involves risk-taking, which might be especially high when banks lend to borrowers of uncertain quality at fixed/concessional rates, this raises issues of incentives. In a developing economy with a democratic polity and a large number of people below poverty line, certain policy pronouncements often fail to achieve the desired effects. This is reflected in the fact that while banks are enjoined to undertake directed lending, definitional relaxation have been provided to impart a certain degree of relief to banks from lending to priority sector and invest the same in low-risk bonds of specified financial institutions. Likewise, at the operating level, there are reasons to believe that whereas political-economy considerations are compelling banks to continue to lend under the various schematic lending programmes, the credit-deposit (C-D) ratio of PSBs and RRBs tell a different story. Illustratively, the C-D ratio of SCBs declined from over 75 per cent as at end-June 1969 to 51 per cent as at end-March 1994; it improved thereafter to touch 53.3 per cent at end-March 2000. A decline in the flow of credit to the agricultural sector can have serious consequences with regard to sustained growth and viability of the agricultural sector.

Fifthly, another problem relates to the vesting of ownership and control with the same agency. Even after decades of state control, the Government is unwilling to let go of its control in PSBs. As it

stands at present, the Reserve Bank holds ownership position in certain banks (the State Bank and its Associates) and RBI officials serve as Directors on these and other banks' Board of Directors. Apart from problems of corporate governance, this in effect has constrained the functional autonomy and operational independence of banks. There has been a strong apprehension that existing arrangements might engender conflict of interest between the Reserve Bank as owner/manager and its role as regulator and supervisor. A re-ordering of relationship between Government as principal/owner and banks as agents, through legislative changes or otherwise, is therefore deemed as necessary.

A sixth weakness is that of weak corporate governance practices in PSBs. Multiple layering of 'principal-agent' chains in the case of PSBs by virtue of Government holding creates unauthorised power centres outside the chain of command. The Government ownership also creates problems for the RBI as regulator/supervisor of the financial system, since it acts as a 'quasi-regulator'. Corporate governance in PSBs gets complicated because the effective power rests with the Government and not with Bank Boards, making the management of the banks accountable to the Government and not the Boards, that operate as mere functionaries. Second, there is no equality among the various Board members of the PSBs. For instance, certain committees of the Board cannot function unless the Government/RBI Directors participate, effectively curtailing the rights of the other Board members. These issues would remain in the forefront since even after the proposed dilution of Government stake, it would continue to remain the single, dominant shareholder[24].

The success of the reform process, therefore, depends on the responses forthcoming from the Government, the RBI and the banking sector. In this context, it is important that the weaknesses in the banking system are pro-actively addressed, as otherwise, banking failures worldwide have provided graphic evidence of the damaging consequences of crises for the macro-economy. It is to these issues that we turn our attention. It seems opportune to mention at this juncture that the set of issues is illustrative and would need to be viewed in conjunction with several broader issues, both in the real and financial sectors, for deriving a more meaningful perspective of the present status of the reform process.

IV. Emerging Challenges in Indian Banking

Not surprisingly, the reforms have been a mixed bag. While there have no doubt been some successes in the aftermath of the reforms, they have not been without their pitfalls. The obvious question that therefore arises is: what are the emerging challenges and how can they be tackled?

[24] It may be pertinent to note that in Belgium, while registering with the Banking Commission, the dominant shareholder/promoter of banks have to sign a protocol of managerial autonomy giving a commitment that they will not, in any way, interfere with the freedom of the management and the Board of Directors.

It is important in this context to note that, given the size of the financial system broadly defined, the question of banking soundness cannot be analyzed in isolation of the broader system (Crockett, 1997). This is because financial disturbances, wherever they originate, can have serious consequences for the real economy. This is also a logical consequence of Walras law, which states that disequilibrium in one particular market must imply an out of equilibrium position in at least one other market. And importantly, special attention needs to be paid to banks, especially in emerging economies[25]. Although they might be declining in overall importance when measured by the volume of transactions or the relative scale of financial intermediation, they remain of strategic importance, notwithstanding the importance of other major entities in the financial system, *viz*., development financial institutions and NBFCs. It is in this context that a thorough analysis of the challenges facing Indian banks is taken up. The PSBs in India have strategically been the engines of growth, not only for economic activity, but also for the financial sector through its various para-banking channels like mutual funds, merchant banking, housing finance, and the like. Not surprisingly, PSBs have been historically viewed as instruments of delivery of Government policies, and consequently, a large quantum of economic and social investment has been dovetailed into them. As a consequence, it is of no surprise that any constructive dialogue on the status of financial sector reform in India will perforce need to focus predominantly on the banking segment, with an emphasis on public sector banks, in particular.

1. Structure of the Financial System: Pre-liberalisation, the Indian banking system was protected from the vagaries of business cycle by high levels of statutory pre-emptions and a control over flow of credit. Additionally, the lending portfolios of banks also included exposures on account of financing for food procurement operations and debts guaranteed by the sovereign or sub-sovereign. While this had the effect of generating guaranteed profitability, it also made the system highly fragile[26]. While that might not be the case at present, given the comfortable capital adequacy of PSBs[27] alongside reduction in NPAs, it clearly brings out the fragility of the Indian banking system. Clearly, with a greater quantum of resources for lending purposes, banks would need to be pro-active in management of their asset portfolio as opposed to liabilities alone in order to withstand pressure on their bottom line.

Although the PSBs dominate the banking sector, increased competition has reduced their dominance somewhat since financial liberalization was initiated. Competition has come from various

[25] Rojas Suarez and Weisbrod (1994) has documented that banks play a much more important role in the financial systems in emerging markets than they do in industrialized economies.

[26] Assuming a normalized deposit of Rs.100, it was shown that the total loss is Rs.9.31. With aggregate deposit in July 1992 being Rs.2.45 trillion, the aggregate net worth of the banking system, adjusted for capital reserves, turns out to be (negative) of Rs.90 billion (Verma, 1992).

[27] As at end-March 2000, 26 out of 27 PSBs met the stipulated capital adequacy ratio of 9 per cent. By contrast, as at end-March 1996, only 21 of these banks met the the-then stipulated capital adequacy ratio of 8 per cent.

quarters: development financial institutions (DFIs), the capital market, NBFCs, foreign banks and the new private sector banks. DFIs have increased their shares of financial assets in the early 1990s, but their growth has since slowed down and for several of them, their assets have deteriorated and they are restructuring in order to re-position themselves in the new financial marketplace. Both the NBFCs and the capital market grew rapidly after liberalisation as sources of funding, with the capital market, in turn, benefiting from liberalised portfolio inflows. While the role of the NBFC sector has declined somewhat, the importance of the capital market has, by and large, remained intact.

The issue that arises, therefore, is: what can be said about the changing facet of PSBs? Within the commercial banking sector, the new private banks have grown to account for about 4-5 per cent of commercial bank assets by end-March 2000; the share of foreign banks has increased by about one percentage point around 3 per cent, and even the old private sector banks have increased their share by over a percentage point. Correspondingly, the share of PSBs has declined to about 80 per cent[28]. The new private and foreign banks have increased competition for the best clients and are eroding the share of PSBs in terms of assets at about 1 per cent per annum. This has created a chasm between the relatively technology-savvy new private sector/foreign banks (and to a certain extent, the better performing PSBs) and the remaining ones. At the same time, the bank asset to GDP ratio, which was around 70 per cent at the beginning of the nineties has declined to about 64 per cent by 1999-2000. Consequently, the competition among banks is on a shrinking pie. The loss of business by PSBs, especially the niche clientele might adversely impact their portfolio and more so at a time, when sub-PLR lending has been permitted. PSBs would need to re-position themselves to not only protect their client base, but also to avoid adverse selection problems by reckless lending to built upon their credit portfolio, possibly by adopting an integrated risk management strategy, encompassing the areas of credit, market and operational risks. The pressure on bottom line and franchise values (present value of future economic profits) would need to be taken into account in the strategy for dealing with the PSBs and their privatisation.

A time has also come for the Government/RBI to consider whether the financial system is ‘optimal’ in terms of the number of banks, or whether there is a case for rationalization of branch network (along with mergers of few banks). The existence of a large number of banks in public sector is widely viewed as a matter of historical accident and a more rational view on economic considerations would need to be taken. The PSBs vary greatly in size, branch network, deposit base and asset quality. If these banks are to improve their standards of service and compete more effectively with their new private and foreign counterparts, they would need to be more capitalized, automated and technology-oriented, even

[28] The State Bank Group still accounts for about 30 per cent of commercial bank assets, with the State Bank alone constituting around 25 per cent.

while strengthening their internal operations and systems. While capital levels of these banks have improved, they would need to be augmented further to enable them to effectively compete with their counterparts abroad, who are much bigger in terms of their size and asset base. It is in this context that a restructuring of these banks is deemed as important (NCR-II, 1998). In the absence of full-blown reforms in the labour sector, which still suffers from high levels of rigidities, the structural issues could pose a major stumbling block. This point was also echoed in NCR-II, where it was observed that 'if Indian banks are to be made more comparable with their competitors from abroad with regard to the size of their capital and assets base, it would be necessary to restructure these banks' (pp.48). One is also witnessing a degree of mergers/acquisitions moves among the new private sector banks. It appears that the new private sector banks with institutional parentage are making tremendous strides. They are also performing well in terms of enhancing shareholder value. While they could be seen in the not-too-distant future to consolidate their operations further, it is the PSBs that need to take prompt action. In view of the overlap of operations among PSBs, another aspect of re-sizing which has gained currency is rationalization and restructuring the branch network of the weak banks in such a fashion that the unviable rural branches of these banks is taken over by the Asset Reconstruction Fund (ARF)/converted to a separate entity, while the viable urban branches is merged with some of the strong banks.

2. Capital Adequacy: Imposition of minimum capital adequacy requirements promotes more prudent management of commercial banks. A high capital adequacy requirement limits the ability to extend additional loans and thus contains inter-bank competition, which would increase the financial cushion of commercial banks to cope with a volatile economic environment (Eichengreen, 1999)[29].

Studies reveal that capital has been instrumental in influencing bank behaviour in the Indian context. In other words, capital requirements do seem to affect bank behaviour over and above the influence of the banks' own internally generated capital targets. More importantly, such adjustments by banks in their capital ratios are effected primarily by boosting their capital rather than through systematic substitution away from high-risk loans (Nachane *et al.*, 2000). However, the capital levels still slightly exceed the volume of net NPAs, on average. The (weighted) average capital ratio for PSBs has risen from 8.7 per cent of risk weighted assets in 1996 to 11.2 per cent in 1999. However, with the risk weight

[29] A contrary viewpoint has been expressed by Hellmann *et al.* (2000). They observe that, in a liberalised, dynamic economy, capital requirements might not prove to be an effective instrument of regulation. This is because, in addition to a one-period 'capital-at-risk' effect that reduces the incentive to gamble, there is a future-franchise-value effect that increases the incentive to gamble. In such a situation, while a sufficiently large capital requirement can generate an equilibrium in which banks choose to invest efficiently, the equilibrium is Pareto-efficient. Alternately, a regulatory regime that uses both deposit-rate controls and capital requirements Pareto-dominates a regime based on capital requirements alone.

of Government debt and cash reserves being negligible[30], which represents roughly 30-35 per cent of assets, the volume of capital is not much larger than net NPAs.

It also needs to be recognized that the prescription of norms is not sufficient for good banking: 'stress testing' of figures is required to ensure that the banking system is resilient to adverse macro-economic shocks. In this context, in order to understand the consequences of an adverse shock to the system and examine how far the (banking) system is able to withstand such shocks, we conducted a 'stress test' of a vulnerability to credit risk. We consider two scenarios (1) where 13 per cent of the loans become non-performing and provisioning is made at 10 per cent, and (2) where 5 per cent of the loans become non-performing and provisions are made at 35 per cent. While the first case represents an extreme situation of highest NPA growth witnessed by the PSBs in a particular year, wherein provisions are made at 10 per cent slipping into sub-standard category, scenario 2 depicts a situation of the average NPA growth of the PSBs over the span of the reforms process and the average level of provisioning that PSBs make on NPAs.[31] The results reveal that in the first case, capital is reduced to a quarter of its actual amount by the 11th year (and virtually wiped out by the 20th year), and in the second case, capital is reduced to zero by the end of the 6th year. The post-shock time path of capital under the two scenarios is presented in Exhibit 1 and the one period post-shock scenario is presented in Table 10. The immediate effect of the NPAs is a loss of interest income to the PSBs to the tune of Rs.55 billion (0.6 per cent of assets) under the first scenario and Rs.21 billion (0.2 per cent of assets) under scenario 2. We also find that the maximum additional provision that can support the present capital adequacy level of 9 per cent is Rs.70 billion. Our analysis supports the observations by Sheng (1996) who showed that NPA level of 15 per cent would suffice to wipe out the net worth of the banking sector in 15 years.

The capital of the PSBs has increased in three ways: Government capital injections, equity sales to the public and retained earnings, which are relatively small. The Government's total injections over Rs.200 billion between 1992-93 and 1998-99, equivalent to an annual average of nearly 0.3 per cent of GDP, has primarily been in the form of non-marketable Government bonds paying 10 percent, which has added to the share of Government debt in the recipient banks. Excluding the interest income on recapitalisation bonds is likely to substantially affect the net profits of PSBs[32].

In spite of the wide heterogeneity among PSBs in terms of their product sophistication and customer orientation, the present prescription of CRAR is that of 'one-size-fits-all'. Given their wide divergences, an important aspect for consideration is whether individual banks could be encouraged to

[30] Prior to March 2000, risk weights on Government securities and standard assets were zero.
[31] The PLR of five major commercial banks during 1999-2000 was 12-13 per cent. Accordingly, the average interest rate on loans is taken to be 12.5 per cent.

maintain higher CRAR than the stipulated minimum, to reflect their differential risk profiles[33]. This seems all the more relevant at a time when measurement of risk-weighted assets proves problematic, in view of the deficiencies in the valuation of collateral, the weaknesses in legal system which inhibits prompt recovery and the inadequate risk management techniques[34]. The recommendations contained in the NCR-II of raising the minimum CRAR to 10 per cent by 2002 with the [RBI] having the authority to raise this further in respect of individual banks *'if in its judgment the situation with respect to their risk profile warrants such an increase'*[35] (emphasis added) merits consideration.

3. Bank Recapitalisation: The experience of bank recapitalisation in several parts of the world has demonstrated that the exercise of recapitalisation does not necessarily prevent banks from rushing into headlong trouble again (Hawkins and Turner, 1999). In fact, it often serves to distort the incentive structure, erode discipline and reaffirm the faith of these institutions in the 'deep pockets' of the Government. Recapitalisation of weak banks using public money is also a costly and unsustainable option, in view of the increasing strains on the Government exchequer. Recent studies (Standard & Poor and CRISIL, 1999) have estimated that India's scheduled commercial banks require between US$11 billion to US$13 billion in new capital to support losses embedded in impaired assets. It appears that, even after allowing for additional infusion of capital through internal generation and access to sub-ordinated debt, the gap between the capital required by these banks and the leeway available to raise the same from market sources, is likely to remain significant. The obvious question which merit attention is whether the gap should be filled by the Government or alternately, whether the legislative ceiling for public subscription should be raised. At a time when the Government exchequer is under stress, the former does not seem to be a viable solution. Recapitalisation of public sector banks also does not seem to be feasible, since it would be tantamount to monetisation with potentially inflationary implications. In this context, the Government has indicated that it will adopt a gradual privatisation agenda where it ownership of PSBs will be gradually reduced over a period of time. Such proposal to dilute equity raises some difficult issues. First, though gradual, it will necessitate Parliamentary approval for a further change in laws, since the Banking Companies-Acquisition and Transfer of Undertakings Act, 1969 still requires the

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[32] Given the overhang of Government securities carried by the banking system, it might be worthwhile to explore the possibility of consider foreclosing the debt by utilising the sale proceeds of disinvestment towards foreclosure of low-coupon Government debt.

[33] This approach has been termed as '*supervision-plus*'. In other words, 'prudential regulation should be seen as minimum requirements and banks should set internal benchmarks which are over and above those mandated by supervisors' (Talwar, 2001).

[34] In the U.K., for instance, banks are subject to a 'trigger' ratio, which is the minimum capital ratio that banks must comply with and a 'target' ratio, set above the trigger ratio. Such a gap between the target and the trigger acts as a buffer in the sense that regulatory pressure is initiated when the capital ratio falls below the target, which becomes increasingly severe as the ratio approach the trigger level (Ediz *et al*., 1998).

Government to hold more than 51 per cent of nationalised bank equity. Second, the Union Budget 1999-2000 announced the intention of the Government to reduce its holdings in PSBs to 33 per cent, while ensuring that banks retain their 'public sector character'[36]. The RBI has been of the view that even if the economy grows at the current rate and capital adequacy norms are the same as at present, the banks (barring the three weak banks) would require Rs.100 billion over the next five years. Such a move might turn out to be counter-productive, in the sense that such privatization might result in long-term greater cost to the Government, if, in an eventuality, it is required to support the banks in the future, since their closure might not be feasible on political-economy grounds as it might cause unacceptably high level of socio-economic distress [37]. In addition, two other issues merit consideration. The first is the modalities and sources of raising such a large quantum of resources, owing to the lack of depth and liquidity of the equity market. Second, the performance of some of the banks which have divested in so far as their equity is concerned have not been very encouraging. As it is, net profit exclusive of income from recapitalisation bonds for nationalised banks has risen marginally from Rs.6.1 billion in 1996-97 to Rs. 6.4 billion in 1999-00.

4. Pro-cyclicity of Prudential Norms: One of the difficulties of implementing capital adequacy requirement is that bank behaviour tends to be pro-cyclical, independently of the regulations in place and the need for such tightening usually becomes manifest when recession or adverse shocks impinge upon the system, revealing the lacuna in existing systems (BIS, 2000). During booms, growth and rising asset prices can disguise fundamental underlying problems.

An important question that arises is whether bank regulations should be tightened during a recession or a boom. Two contradictory views have emerged in the literature: on one hand, tightening of the requirement may lead to a curtailment of bank credit. On the other, sustainable growth is unlikely to resume until confidence in the banking system is restored-especially in countries with inadequate standards and provision.

The pro-cyclicity of prudential regulations raises an important issue about adequacy of capital in India. In other words, what could be the appropriate cyclically adjusted ratio that might mitigate moral

[35] *Report of the Committee on Banking Sector Reforms*, 1998, pp.21. para 3.15.

[36] The 'public sector character' of PSBs was espoused by Jalan (2000) in view of the twin concerns of PSBs to give adequate attention to agricultural credit and rural banking, while at the same time, maintain public confidence in the safety of these banks, in case there is a divestment of shareholding in these banks, given the resource constraints on the exchequer.

[37] Till 1999-2000, the Government has expended Rs.56 billion (equivalent to 27 per cent of the recapitalisation amount of Rs.204 billion) in augmenting the capital base of three banks identified as weak by the Working Group on Weak Public Sector Banks. These injections of capital do not show up as part of the Government deficit, because they take the form of an exchange of 9non-marketable) Government debt for equity, thereby increasing the share of Government debt in the banks' portfolio.

hazard behaviour? The timing and extent of progress in tightening of such regulations would have to take into account the cyclical factors in the economy. This would require correct identification of the cycle. Second, adequate notice would need to be provided to market participants to enable them to be fully prepared to meet the changing prescriptions. Finally, intense consultation process in detailing the prudential regulations would be necessary so that 'prudential regulations [are] introduced at an ‘appropriate’ pace, in order to reach the objective of meeting financial standards as soon as feasible (Reddy, 2001c). This needs to be tempered with an understanding of the fact that while capital levels might provide effective cushion in an upswing, they might prove to be inadequate in downturns, as firms find difficulty to service their loans. Therefore, as each firm attempts to satisfy their capital adequacy standards, the whole system may find its strategy completely undermined, eventually resulting in a worsening of capital adequacy standards. It is therefore necessary to find out the levels of NPAs at which confidence in the banking system can be maintained at high levels, and, at the same time, the level of CRAR needed to sustain the NPA level. The necessity of raising the minimum CRAR to 10 per cent needs to be viewed in this light. Two important questions need to be addressed in this context: whether the CRAR of 10 per cent is sufficient to maintain confidence in the banking system, given the present levels of NPAs in the PSBs; and, second, first, how far are all the PSBs capable of reaching the 10 per cent CRAR. As at end-March 2001, as many as 23 PSBs had reported to have exceeded the CRAR of 10 per cent; while the reported level of gross NPAs to total assets stood at 5.3 per cent[38]. As at end-March 2000, wherein 22 out of 27 banks had CRAR exceeding 10 per cent and the gross NPA to total asset figures were equal to 5.5 per cent of total assets.

5. Treatment of Weak Banks: A sound banking system by definition presupposes that all the banks, or at least a majority of them within the system are strong and good as viable concerns. However, every system has its own instances of weak links and the banking system is no exception. It is, therefore, desirable to discuss the options available to the weak banks for ensuring resilience of the system. While the root cause of a bank becoming weak can be traced to managerial inadequacies, existence of high NPAs is one of the prominent manifestations. Poor quality of assets confronted with stringent IRAC norms can and sometimes does result in wiping out the entire (or a substantial) portion of the net worth of a bank (Sheng, 1996).

It is often argued that the problem of weakness in the banking sector has had its roots in directed lending on behest of the Government, and that the latter has the responsibility to bail out the weak institutions. One of the proposals to effect this bailout, without direct recapitalisation, mooted in NCR-I, was the proposal to setting up ARF to take over the bad assets from these troubled at a discount, follow-

[38] These figures are as reported in the audited balance sheet of these banks for the year ended 2000-01.

up the loans and effect recovery. While variants of such institutional arrangements to tackle the problem of bad loans have been an integral part of bank restructuring programmes, in countries as Spain, Sweden, Philippines and more recently in Japan, Malaysia and Korea (Sheng, 1996; Hawkins and Turner, 1999), the ARF did not find favour in India for several reasons (RBI, 1992-93). First, it was felt that a centralised all-India fund would be severely handicapped in its recovery efforts by lack of widespread geographical reach which individual banks possess. Second, there could be a moral hazard problem, making banks complacent about recovery. Finally, given the large fiscal deficits facing the Government, there was a problem financing the ARF. Unfortunately, the legal framework does not exactly provide an enabling or conducive framework to address this issue.

Subsequently, the Verma Committee on Restructuring Weak PSBs formalised the proposal for an ARF[39]. Such a proposal has raised several crucial issues. First, the institution of ARF is crucially based on the presumption that it would be successful in recovering bad debts of the banking sector where the banks themselves have failed, as otherwise, the ARF could itself become sick after a period of time! The absence of strong bankruptcy and foreclosure laws in India are as likely to hamper the recovery operations of specialised Asset Management Companies (AMCs) as they do banks and financial institutions. This contrasts to the US S&L debacle where the depth of the markets coupled with their high marketable value could enable high recoveries, which limited the damages to a great extent. Second, it is important to note that to the extent there is a gap between what is recovered and what it will have to pay to its bondholders, the shortfall for an ARF will have to be made good by the Government, since the bonds would be guaranteed by it. An option might be to fix a time frame for the ARF to achieve its results; otherwise, the Government will not be obliged to bridge the shortfall. However, unless it is assumed that over the period, the weak banks become strong enough to absorb the transfer of some bad loans, this might defeat the very purpose of setting up the ARF. Third, while the ARF might effect a 'one-time' cleaning of the balance sheet of banks of their non-performing loans, this does not foreclose the possibility of the bank turning weak once again owing to inadequacies in their business revenue model.

A second proposal on the treatment of weak banks has been that of narrow banking (Tarapore, 1999). This would include restricting the incremental resources of these institutions only to investments in high quality marketable securities of minimal risk to completely match the maturity profile and liquidity

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[39] The details are contained in the Report of the Working Group on Restructuring Weak Public Sector Banks (1999). The salient features are (1) ARF to be set up under a Special Act of Parliament, (2) a two-tier structure whereby ownership of assets lies with the Government and the management thereof with an independent private Asset Management Company (AMC) equipped with necessary professional expertise, (3) share capital of ARF to be subscribed by Government sources, (4) majority shareholding of AMC to be non-Governmental, (5) mctivities to be initially restricted to the NPAs of the identified weak banks, (6) focus on comparatively large NPAs, and (7) ARF to have a life span not exceeding seven years.

needs of their deposit liabilities.[40] However, the risks involved in narrow banking are underrated in this view of the banking business (Ghosh and Saggar, 1998). One might adduce several reasons behind this assertion. For one, much as narrow banking reduces liquidity and credit risks, it exposes the banks to increased market and interest rate risks, as the entire asset portfolio of banks comprises of marketable securities. Second, the implicit assumption behind narrow banking is that Government securities have zero default risk attached to them. This proposition is not necessarily borne out by empirical evidences as instances of repudiation of sovereign debt (in Mexico and Russia) have not been uncommon in the history of financial markets. Third, the proposal to covert a commercial bank into a narrow bank in itself can be detrimental to the reputation of the bank management and the faith of depositors, enhancing the probability of a run on the institution. Fourth, other things remaining the same, narrow banking can only tackle the problem at the increment; it overlooks the issue of overhang. Whether narrow banking should not be adapted would lie in whether the balance of advantages exceeds the disadvantages. However, narrow banking can best be viewed as an interim solution to turn around the weak banks.

It has also been suggested in informed quarters that in such banks, there should be a control on the growth of risk assets, depending on their degree of weakness. Such actions would need to be complemented by addressing the underlying causes of inefficiency in the workings of these banks, particularly in the areas of autonomy in bank management, staff resizing, branch rationalisation, and changes in work culture, for such restructuring to be viable in the long-run. The question of weak banks is sensitive in character, given the political-economy considerations and stiff opposition from unionized leadership to the closure and downsizing of these institutions.

The Union Budget 2000-01 announced the setting up of a Financial Restructuring Authority (FRA) in a modified form, from the one suggested by the Verma Committee in respect of any bank considered to be potentially weak. The FRA, comprising experts and professionals, would be given powers to supersede the Board of Directors on the basis of the recommendations of the Reserve Bank.

6. Non-Performing Assets: Although non-performing assets have been substantially reduced since regulation was tightened in 1993, especially in the PSBs, the momentum has recently slowed down and the levels of NPAs remain high compared to international standards. As at end-March 2000, the gross NPAs to total assets of SCBs (excluding RRBs) stood at 5.5 per cent; net of provisions, it was 2.7 per cent. The PSBs gross NPA to asset ratio was slightly higher at 6.0 per cent and 2.9 per cent, net of

[40] The underlying rationale is two fold: (1) to reduce asset-liability mismatches, thereby minimising the risk of bank runs, and (2) to minimise credit risk for banks and foreclose the possibility of further build-up of any NPAs.

provisions, respectively (Exhibit 2)[41]. The NPAs of US banks in 1997 were 1.1 per cent of loans and 0.66 per cent of assets (Goldstein, 1996). The comparable figures for other countries were 1.0 per cent for Korea, 7.6 per cent for Thailand, 5.9 per cent for Brazil and 3.3 per cent for Japan.[42]

Studies on NPA in the Indian context suggest that the problems of NPAs have a sizeable overhang component, arising from infirmities in the existing processes of debt recovery, inadequate legal provisions for foreclosure and bankruptcy and difficulties in the execution of court decrees [43]. As a consequence, many institutions have been adopting ingenious ways of suppressing the true level of NPAs, thus resorting to 'ever-greening'[44]. The problem is exacerbated by the regulatory provisions for loan classification *vis-à-vis* international best practices. One such case is in regard to consortium lending. For instance, a loan account becomes non-performing if the interest/installment is not paid for two quarters. Besides, even in a consortium, each bank has to classify the borrowal accounts according to its own record of recovery. The operation of these two provisions often creates a piquant situation wherein each member of the consortium reports an account as a performing asset, when, in practice, at the aggregate level, it is a non-performing loan!

Operationally, it seems imprudent to treat all non-performing loans as a single 'catch-all' category. Broadly, they can be categorized into several categories, *viz.*, loans to agricultural sector, directed lending, loans to small enterprises and loans to corporate sector. Many of the directed loans are subsistence loans, where default rates are high and recovery prospects not bright. As regards loan to agricultural borrowers, legal impediments often prove to be a challenging proposition for banks to recover their dues[45]. Loans to small enterprise become difficult to recover due to in-ordinate judicial delays. Even if court decrees can be obtained towards recovery, by the time the charge of the assets is taken, its realizable value is significantly diminished because of several reasons including depreciation of the asset, lack of borrowers, limited market value of the asset, with the concomitant effect that such decrees are not executed. As regards corporate loans, suits pending/referred to Board for Industrial and Financial Reconstruction leaves little headroom for banks to effect recovery. The banks also suffer from the dilemma of a working capital lender. In a protected/regulated economy, the propensity of an entrepreneur to continuously upgrade his technology/machinery is low, and therefore, the average age of the machinery is high. Consequently, the working capital lender finds himself in a situation of increasing commitments

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[41] Simple average of CRAR and net NPA ratio of top 5 banks (in terms of assets) for the period 1995-96 to 1999-2000.

[42] The figures are average of 1990-94 figures and are as per cent of total loans.

[43] Gavin and Hausman (1996) show that publicly reported figures on NPAs provided little hint of banking crisis in Chile and Colombia in the early 1980s.

[44] There are several ways in which this can be effected. For example, when an account becomes non-performing, it can be converted to foreign currency loan with bullet payment with guarantee. Alternately, the loan can be swapped in exchange for fixed assets of the company whose marketable value is weak.

vis-à-vis rapidly depreciating, outmoded equipment and outdated technology. Such loans, which are large in number in Indian banks, become highly vulnerable to the market forces when the economy is opened up, with the possibility of slippage of these loans into non-performance. Under such a scenario, there remains the vexed issue as to who would take the decision towards write-offs. Inadequate corporate governance practices coupled with problems of fixation of accountability leaves little maneuverability for banks towards an all-out recovery drive. With the environmental changes that are taking place, it seems that the credit portfolio of banks is becoming vulnerable and the issue of NPAs would need to be tackled head-on.

It needs to be realised that there are no 'quick-fix' solutions in tackling the NPA problem. Prospectively, a lasting solution to the viscous problem of NPAs can be achieved when financial institutions put in place a sophisticated system of credit assessment and an integrated risk management mechanism, backed by a prompt and efficient legal framework. In a situation of liquidity overhang, banks, in their attempt to book fresh business and maximise returns may go in for selection of assets which may later turn out to be cases of adverse selection, resulting in NPAs. However, if the banking system is equipped with balanced prudential norms, these problems can, to a large extent, be minimised, if not avoided. This calls for organisational restructuring, improvement in managerial efficiency, skill upgradation for proper assessment of creditworthiness and an attitudinal change towards legal action (Jalan, 2001).

7. Legal Framework: The issue of NPAs is intimately related to the question of legal framework. The legal framework sets standards of behaviour for market participants, details of rights and responsibilities of transacting parties, assures that completed transactions are legally binding and provides regulators with the teeth to enforce standards and ensure compliance and adherence to law. The legal framework is a key ingredient for limiting moral hazard. In developing and transition countries, including those that fall under the rubric of emerging markets, there is often a basic need for workable laws on contract, collateral and bankruptcy proceedings, as well as a need to implement and streamline court procedures for seeking effective and rapid remedy under these laws. But the issue extends also to highly developed legal and judicial systems because the continual state of innovation and evolution of new financial products can outrun existing legislation and raise fine points of law. The banking system requires a legal system, which facilitates the enforcement of financial contracts. The system must not only be impartial, but also display sufficient understanding of financial transactions so that the banking system can rely on fair and prompt enforcement of their contractual rights and obligations.

[45] The *Prevention of Alienation of Agricultural Land* Act, for instance.

In India, prior to the Recovery of Debts Due to Banks and Financial Institutions Act, 1993, the two modes available to banks to recover their debts or realising the securities pledged to them had been to file a suit against a borrower in the Civil Courts and retaining the pledged goods as collateral till debts were realised, or alternately, selling the goods by giving prior notice to the borrower without court intervention. However, since the Courts were flooded with such matters, settlement of such claims were inevitably long delayed, which meant a deterioration in the quality and a deflation in the commercial value of the security assets charged by the borrower on the lending institutions, compelling the former to write-off such debts. Further, Section 22 of Sick Industrial Companies (Special Provisions) Act, 1985 provides that once a sick company[46] stands referred to the Board for Industrial and Financial Reconstruction (BIFR), no proceedings for (1) winding up such company, (2) for execution of the properties of such company, or (3) the appointment of a receiver thereof and (4) no suit filed for recovery of money, can be effected, except with the consent of BIFR. This enabled the borrowers to take refuge by getting their companies referred to BIFR, and gaining automatic immunity from suits or actions for recovery of dues. [47] A significant portion of bank funds has, therefore, been blocked in unproductive assets, whose value keeps on deteriorating with the passage of time.[48] This has also been one of the major contributory factors behind the high NPA levels in the Indian banking sector.

The Recovery of Debts Due to Banks and Financial Institutions Act, 1993, suggested a six-month time frame for disposal of every application for debt recovery through the recently instituted Debt Recovery Tribunals (DRTs). Such limits often cannot be respected given the current operational state of the tribunals, including poor location, lack of appropriate staffing[49] and the virtual absence of modern office infrastructure, including information technology support. This has unduly lengthened the time lag for hearings and even further time is expended for issue of recovery certificates. Data reveals that as at end-March 1999, out of the total number of 21,781 cases involving a sum of Rs.18 billion transferred to/filed with the DRTs, the number of cases decided was 3,774 or 17.3 per cent of the total and they accounted for 10 per cent of the total locked-up amount in the cases transferred to/filed with DRTs. It is important that the automatic nature of the blanket immunity granted by the present scheme of Sick Industrial Companies (Special Provisions) Act, 1985 be suitably rectified to remove the incentive for promoters to get their companies declared as sick to perpetuate defaults or negotiate more favourable terms. More recent work in this area is reflected in the Government of India's constitution of an Expert Group under the Chairmanship of Shri T.R.Andhyarujina, former Solicitor General of India, to suggest

[46] Defined as a company, registered for not less than five years, whose net worth has been fully eroded.

[47] Of the roughly 4,000 firms that have entered the BIFR since 1987, 80 per cent are still under consideration. Moreover, once the BIFR reaches a judgment, it can be appealed through a court system (Hanson, 2001).

[48] As on December 31, 2000, an amount of Rs.552 billion was locked up in cases pending/registered with BIFR (www.bifr.org).

appropriate amendments in the legal framework affecting the banking sector[50]. The Committee, in its Report submitted recently to the Government recommended, among other things, the creation of a new law granting statutory power of possession and sale of security directly to banks and financial institutions and creation of a new Securitisation Act, which would be an umbrella act conferring legal sanctity to transfer of future receivables. It has also suggested the provision of additional avenues of recovery of dues to banks and financial institutions by empowering them to take possession of securities and sell them for recovery of loans without the court's intervention. It is important to note in this context that the co-operative sector has such a system of taking possession of securities in case of default; such a system has however, proved to be ineffective. The Advisory Committee on Bankruptcy Laws has also made several interim recommendations, including a separate comprehensive Bankruptcy Code to deal with corporate bankruptcy and institution of a Special Bankruptcy Bench in each High Court, to tackle the problem. It needs to be reiterated that the legal system be made sufficiently prompt, responsive and efficient to take care of the problems facing the banking sector.

8. Transparency and Disclosure: In the Indian context, the transparency and disclosure standards have been enhanced to meet international standards. The range and extent of disclosures has been gradually increasing over the last couple of years in order to provide a clearer picture of balance sheets to the financial community. Since March 31, 2000, banks operating in India have been disclosing in their published accounts information relating to maturity pattern of loans and advances, investment securities, deposits and borrowings, foreign currency assets and liabilities, movements in NPAs and provisions and lending to sensitive sectors (capital market sector, real estate sector and commodities sector). The Memorandum of Understanding (MOU) signed with the Reserve Bank each year has compelled bank management to adhere to certain minimum performance standards. More so, when banks are raising capital from the market, they are accountable to the public/shareholders. Such transparency of operations is essential to minimize informational asymmetry between the regulator and regulated and facilitate effective monitoring of banks.

Two issues arise in this context. The first relates to the availability of raw source data. Presently, the majority of the banking data is housed with the RBI and only those data which are released by the RBI is available to the financial community; all other data are secondary. It needs to be appreciated that this poses a serious handicap in understanding and analyzing the developments in the banking sector.

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[49] As against 50-60 judges in High Courts, the Act has provided for only one presiding Officer for each DRT.

[50] Banks have been provided with a menu of strategies to restructure bad debts, i.e., recovery drive, Debt Recovery Tribunals, Lok *Adalats*, and ARCs. The Reserve Bank has also provided indicative guidelines for compromise settlement of chronic NPAs in the small-scale sector. Settlement Advisory Committees have also been formed at

Therefore, in order to impart greater transparency, while the regulatory data, which is confidential in nature, would need to be kept in abeyance from public domain, all other data could be warehoused outside, where it would be freely accessible to the public at large. Secondly, while the disclosures standards have been enhanced, several areas of lacunae still remain, *viz*., complete breakup of income, discontinuance of lines of business, entry into newer lines of business, information detailing maturity and repricing of all assets and liabilities, cumulative provisions as against loan losses with the movement in provisions account, details of contingent liabilities, details of risk weighted assets, leverage ratio, details of legal risk, are still not being disclosed. If recent experience is to be believed, the compliance of norms for transparency often turns out to be 'technical compliance', whereas there is little headway as regards actual compliance with norms. The recommendations of the Advisory Group on Banking Supervision (Chairman: Shri M.S.Verma) are pertinent in this regard.

9. Potential Conflicts as Owner/Supervisor: A large part of banking operations in India is accounted for by PSBs[51]. The competitive impulses engineered by the RBI in the cause of enhancing efficiency have to take into account the extent of response of PSBs and the Government as their principal to competitive pressures. Similarly, the regulatory and prudential considerations advanced by the RBI have to reckon with the impact on and response of the PSBs and Government as their principal. It is not possible to ignore the systemic implications of the large sub-system of PSBs[52]. The RBI is both the owner as well as the regulator of the State Bank of India (SBI). A transfer of the ownership of SBI to the Government, more so at a time when there is a general move towards reducing Government presence in the banking sector might be a retrograde step, since the autonomy which SBI had with its ownership being with the RBI might get compromised when the same is transferred to the Government. A more practical approach might be to go for a two-stage solution. In stage 1, a truly independent Board of Directors needs to be nominated by the RBI. In stage 2, the nominees of RBI needs to be form Trust, where the shares of SBI can be deposited. Such a move, while allowing greater operational autonomy to SBI will also enable it to enhance corporate governance.

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regional and head office levels. A Credit Information Bureau has been established to co-ordinate sharing of information among banks and financial institutions.

[51] Over the period ending March 1997 through March 2000, PSBs accounted for roughly 80 per cent of total assets of SCBs.

[52] A study by Sarker *et al.* (1998) finds that private banks may not be unambiguously superior to state-owned banks (SOBs). While traded private banks are found to be superior to SOBs with regard to both return on assets and income earning potential (proxied by the ratio of operating profits to average total assets or, the operating profit ratio) and private banks, as a group were significantly superior with respect to Return on Assets, neither traded nor non-traded private banks seem to have any comparative advantage with respect to operational efficiency.

10. Regulation and Supervision: The experience of the Asian crisis reiterated the need for a sound regulatory and supervisory framework[53]. The role of supervision, in such a situation, is to promote financial market stability and minimize systemic risk. In a tightly controlled financial system, it is easier to isolate and contain a problem, while when the system is being opened up and markets become integrated, the transmission of problems across markets and territories becomes easier. To counter the risk, the implementation of risk management practices has to be directed towards not only liberalizing, but also simultaneously strengthening it. Regulators all over the world are unanimous in their view that the effectiveness of the financial system is, to a significant extent, molded by the effectiveness of the regulatory and supervisory structures in which they operate. Normally, systems are devised in anticipation mode to take care of eventualities that might arise in the foreseeable future. However, while the situations are dynamic, the systems, which are expected to respond to these situations are at best essentially quasi-dynamic: they are generally static (Caprio and Honohan, 1999). In order to ensure that the slack between a situation and the system governing it is smooth and not jerky, it becomes essential to promote prudent practices. This requires that the supervisors adopt appropriate benchmarks, based on international best practices. These should be transparent. Above all, the guidance flowing from the supervisory findings has to gain acceptance from the regulated. This requires that a suitable system of rewards and retribution be evolved and systematically adhered to.[54]

There is also a lack of consensus in the literature on whether monetary policy and supervision should be with the same or with different agencies. One argument given for separation is that combining these functions within the same agency might lead to conflicts of interests[55]. Goodhart and Schoenmaker (1998) argue that, 'the potential for conflict between regulatory and monetary objectives depends to a large extent on the structure of the banking and financial systems. The more such a system involves intermediaries financing maturity mismatch positions through wholesale markets in a competitive milieu, the greater such dangers of conflict'.[56] In line with the recommendations of the NCR-I, the supervisory function of banks (and other financial institutions) has been hived off to a separate authority as an

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[53] As Caprio (1998) has observed, deregulation does not imply the absence of regulation, but it means right regulation.

[54] The recent instances of irregularities in the equity market has brought to the fore the need for a super-regulator for formal coordination of the activities of the multiple regulators. It needs to be recognised that every transaction, irrespective of the market in which it takes place, has one leg in the cash (inter-bank) market in terms of ultimate payment and settlement. As a consequence, any problem in that market in which the transaction takes place has an impact in the cash market. In the co-ordination mechanism suggested in the 'Reddy formula', the authority should be vested with the RBI, since in the ultimate analysis, the central bank is called upon to provide liquidity to the market in a contingency.

[55] For example, in its role as the agency in charge of monetary policy, the central bank might desire to raise interest rates (to control inflation), but that, on the flip side, might adversely affect the profitability and solvency of the banking sector (Goodhart, 1995).

autonomous body under the aegis of the Reserve Bank. In pursuance of the same, the Board for Financial Supervision (BFS) was constituted in 1994 as a Committee of the Central Board of Directors of the Reserve Bank to pay 'undivided attention to supervision', with the Governor of the Reserve Bank as the Chairman and four non-official Directors of the Reserve Bank and the Deputy Governors of the Reserve Bank as members. However, as echoed in NCR-II, 'the membership of the Board has been restricted to the members of the RBI Board, and in effect, the Board functions like a Committee of the RBI Board' (pp.68, para 7.23). The objective of distancing the actual operations of the Board and its supervisory arm from the Reserve Bank remains an unresolved issue till date[57].

An important issue that has gained currency is the supervision of cooperative banks. It needs to be recognized that the asset structure of cooperative banks is distinctly different from that of commercial banks. Apart from the different regulatory authorities involved in their supervision/inspection, the sheer numbers[58] and their dispersed and local character (with a different niche clientele) can affect the regular programming of inspections by supervisors, given that the supervisory resources are limited. In view of the above, supervision of UCBs often proves to be a challenging proposition for the Reserve Bank, so that it might prove worthwhile integrating the supervision of cooperative banks under one umbrella. In this context, the Monetary and Credit Policy of April 2001 has emphasized the creation of a separate apex supervisory authority which can take over the entire inspection/supervisory functions in relation to scheduled and non-scheduled UCBs, with manpower and other assistance to the new supervisory body, when created. Such a set up might engender a fragmentation of the regulatory framework, and more so, when UCBs are a part of the payment system. In view of the size diversity and geographical dispersion of such banks, it is important that regulators develop expertise of 'hands-off' approach' to regulation. Such expertise would also lead to synergies in the supervision of NBFCs, where at present, the regulatory and supervisory functions are guided more by concerns of protection of depositors interests as opposed to priority to secured creditors. A study of the regulatory control over NBFCs reveals that it is essentially liability-centric, with primary concern for depositor protection. It is important in this context that the

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[56] In their survey of 24 countries, Goodhart and Schoenmaker (1998) found that 11 of these had combined agencies, while the rest had separated ones in the eighties.

[57] In this context, the ability to monitor financial sector soundness pre-supposes the existence of valid indicators of the health and stability of financial systems. These indicators, termed Macro-Prudential Indicators (MPIs) have been widely used in the literature of late (Owens *et al.*, 2000). MPIs in essence, comprise both aggregated micro-prudential indicators (AMPIs) of the health of financial institutions and macroeconomic indicators (MEIs) associated with financial system soundness. Financial crises often occurs when both types of indicators point to vulnerabilities-that is, both financial institutions are weak and vulnerable to macro-economic shocks. The use of MPIs to assess financial soundness has been dictated by two major considerations. The first is the responsibility of supervisors to identify problem banks. The other is to monitor the behaviour of troubled banks in an attempt to prevent failure or to limit losses.

[58] As at end-March 2000, there were as many as 2,084 UCBs, of which 51 are scheduled UCBs and the rest are non-scheduled.

regulator is guided by concerns of emergence of a systemic threat and the deposits of the intermediate sector be treated differently from those of commercial banks, so as to ensure that the growth of this sector, with its innovative approach in financing, takes place on sound lines (Nayak, 1995).

In the financial sector itself, there are at present three major regulators, RBI, Securities and Exchange Board of India (SEBI) and Insurance Regulatory and Development Authority (IRDA). Looking at the international experience as also the financial structure of India, there seems to be a case for preserving this multiple regulatory structure, while at the same time strengthening the co-ordination mechanism. In this context, the Reddy formula seems worth pursuing giving the framework a legal status (Reddy, 2001c).

11. Universal Banking: Worldwide experience suggests a move towards universal banking on the part of financial sector participants in terms of a greater integration of operation of banks and non-bank financial institutions in India. Commercial banks have entered the domain of term-financing and have started providing investment banking services, besides making their presence in diverse areas like mutual funds, securities trading and factoring services. With DFIs, in turn, making inroads into traditional banking activities of short-term/working capital financing, the operational divide between banks and DFIs has become increasingly blurred. In the light of the recommendations of the Narasimham Committee as well as the Khan Working Group for Harmonising the Role and Operations of DFIs and Banks (1998), the Reserve Bank prepared a *Discussion Paper* which contended that the issue of transformation of a DFI into a bank should ideally be considered after a reasonable period of time has elapsed; in the interim, DFIs could tailor their activities to become either a bank or a NBFC, depending on institution-specific considerations and their comparative advantages. It however needs to be recognized that universal banking is not a panacea; Rojas Suarez (1997) has documented that the potential systemic effect of a bank failure could be far greater under universal banking than otherwise.

Several issues would need to be sorted out in the transition towards universal banking becomes operational. On the liabilities side of the banks' balance sheets, short-term deposits account for a substantial share. On the other hand, it is long-term resources that dominate the liability side of a DFI's balance sheet, with mobilisation of short/medium-term resources through term-deposits, certificates of deposits, inter-corporate deposits and term money borrowings, restricted by the umbrella limit in terms of their net owned funds. In the absence of cash-like assets and the existence of relatively illiquid assets, the imposition of CRR and SLR would, therefore, prompt the universal banks to resort to large-scale borrowings. With the CRR and SLR prescriptions currently at 7.5 per cent and 25 per cent, respectively, the extent of pre-emption would be substantial, thereby limiting the flow of lendable resources to the productive sectors of the economy. In addition, several other issues like branch network (new banks are

required to locate at least 25 per cent of their total branches in the semi-urban and rural areas), extension of deposit insurance, priority sector lending *etc*., will need to be sorted out before the full transition towards universal banking. The legal status of some of the financial institutions would need to be altered in order to bring it under the regulatory ambit of the central bank.

Furthermore, in a situation of universal banking, there could be multiple regulators covering a single entity, depending on the functions undertaken by it. In such a scenario, the risk of regulatory arbitrage or competitive concessions might prove overwhelming. This necessitates a mechanism for coordinating the activities of the multiple regulators in order to impart greater efficacy to 'function-specific' regulation, so that the risk multiplier role of universal banks is, by and large, contained. In other words, the role of regulation in such circumstances should be to ensure risk mitigation, and not risk diversification. More importantly, at a time when banks and financial institutions would require higher levels of capital in the light of the pronouncements in the new Basel Capital Accord, it is possible that the banking industry might witness mergers and acquisitions to exploit cost benefits (economies of scale, organisational efficiency, funding costs and risk diversification) or revenue benefits (economies of scope, enhancing monopoly rents) as financial entities brace to position themselves as universal banks.

12. Risk Management: Given the growing internationalisation of banking operations, there remains the possibility of a serious mismatch between assets and liabilities with damaging implications for interest rate risk, liquidity risk, foreign exchange risk *etc*. Proactive handling of these risks therefore assumes prime significance. The NCR-II had also addressed this issue and brought into focus the dangers to liquidity and solvency due to mismatches between assets and liabilities. Apart from the standard set of risks which are already present, several other kinds of risks, not easily visible to the common observer, also gain prominence. Some of the salient ones are discussed below.

When an economy is liberalizing, the banking system faces a 'double-whammy'. On one hand, the banks have to handle changes within the banking system, whereas on the other hand, they have to confront changes in the client network, which involves an entirely new set of risks. These risks are such that the client system does not have much maneuverability to hedge against them. Since the banks in India had, in the regulated era, assumed that these risks would be borne entirely by the clients, they were not factored them into account while determining the risk-reward structure or pricing strategy.

Another source of problem is that of technology risk. With a significant workforce, the PSBs have not been able to harness the beneficial effects of computerisation. Information technology is viewed more as a reconciliation equipment for the back office and a ledger mechanism for the front office. This, in effect, constrains PSBs from providing a single window service to their customers in a world where banking is increasingly becoming a consumer-centric service provider. This lack of leveraging of their

investment in effect has inhibited their decision-support system, which is a growing threat they encounter from their private sector and foreign counterparts. PSBs have remained a dominant segment of the financial marketplace in India, with a considerable amount of social and economic investment into them. It is important for them to wake up to the realities of the changing scenario and pro-actively handle these risks.

On the operational front, two issues emerge. One, the Board of Directors of a bank is enjoined to consider and approve models for risk identification, measurement and management. The constitution of the Board of PSBs is often such that decisions on the risk management techniques is outside their core competence. Even within the bank's administrative structure, the necessary expertise might not be readily available. Urgent steps are called for to strengthen the Board as also the technical skills of the bank personnel. The second is the non-availability and lack of credibility of the data. Data availability and integrity decide the effectiveness of risk management decisions. The situation in this area would need to be improved if banks are to equip themselves to proactively deal with the changes in the operating environment.

As regards off-balance sheet activities of PSBs, these seem to be quite limited at present. The Indian banking system is yet to develop the necessary expertise to handle complicated derivative products and hedge the risks that flow from there; in the foreseeable future, however, the banking system would need to exercise great degree of caution in the use of such instruments.

13. Capital Account Liberalisation: In India, the link between the forward premia and the interest rate differential seems to work roughly through leads and lags. Importers and exporters do influence the forward markets through availment of /grant of credit to overseas parties. With the opening of the capital account, the forward premia is getting aligned with the interest rate differential. However, the fact remains that free movement in the capital account is only a necessary condition for full development of forward and other forex derivatives market. The sufficient condition is provided by a deep and liquid money market with a well-defined yield curve in place. Developing a well integrated, consistent and meaningful yield curve requires considerable market development in terms of both volume and liquidity in various time and market segments. No doubt, the integration between domestic and overseas market operates more often through the forward market. This integration has been facilitated by allowing Authorised Dealers to borrow from their overseas offices/correspondents and invest funds in overseas money market to the same amount.[59]

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[59] The Union Budget 2001-02 provided an impetus towards Capital Account Liberalisation by permitting (1) Indian companies to invest abroad to the tune of US $ 50 million on an annual basis; (2) companies which have made

Several issues arise in this regard. First, liberalization of the capital account provides a new source of liquidity for banks. The question arises as to how well are banks geared up to face this challenge. Second, access to external capital impacts the business of banks since corporates have access to a wider choice regarding the quantum, rate and denomination in which to raise resources and therefore the cost of domestic capital assumes primacy. This also has an impact on the credit portfolio of banks. Thirdly, as it stands at present, overseas branches of Indian banks act as a conduit for domestic corporates to park their funds (ADRs/GDRs)/borrowal accounts, which would not be required once capital account liberalization becomes a reality. A re-positioning of such branches would, therefore, be in order. Finally, with the advent of universal banking practices amidst capital account liberalization, financial conglomerates would be looking for cheapest way to raise funds, of which foreign capital would be one such. Such massive inflow and outflow of resources might engender serious systemic risks, which would necessitate greater vigilance on the part of the regulatory authorities to ensure that such activities are risk mitigating and not risk multiplying.

14. Corporate Governance: In a democratic polity, reforms by itself might not make much sense, unless they are fortified with strong corporate governance practices. Corporate governance acts a 'coping mechanism' in order to enable the participants reap the full benefits of reforms. As it stands at present, banks and financial institutions are covered by the SBI Act, Banking Regulation Act, IDBI Act, Bank Nationalisation Act, RBI Act and the Companies Act. The employees of the nationalised banks and SBI are covered by the Bank Nationalisation Act or SBI Act as against those of private sector banks, who are governed by the Companies Act. Consequently, the employees of PSBs are treated as public servants and are within the jurisdiction of the Central Vigilance Commission (CVC)/Central Bureau of Investigation (CBI), which does not cover employees of private sector banks, thereby hampering the decision-making process of such entities. Corporate governance in banks is essential towards creation of a ‘level-playing field’ in respect of the legal framework governing their operations.

The rights of the private shareholders of SBI/nationalised banks are also abridged very considerably. Presently, they are denied such basic rights as adoption of annual accounts or approving dividends. They can neither influence the composition of the Board, or the compensation package or even the selection of statutory auditors of banks. Preferential treatment is accorded to the Government nominee for determining the quorum of an Annual General Meeting of the PSBs. One therefore clearly experiences the lack of shareholder democracy. In the private sector banks likewise, the voting rights of individual

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ADR/GDR issues to make foreign investments upto 100 per cent of the proceeds, (3) Indian companies which have issued ADR/GDRs to acquire shares of foreign companies to the tune of US $ 100 million.

shareholders is restricted to not more than 10 per cent of bank's equity, even if they own more than 10 per cent of equity.

The Board of Directors of PSBs also needs to be given attention from another angle. Since Directors are nominated by the Government, it assumes a degree of political patronage and at times, reconstitution of Board becomes a difficult balancing act. Besides, representation is given to various socio-economic interest groups on the Boards of banks. Such an arrangement might well have outlived its utility, post-reforms. Hence, a major reform in the constitution, functioning and the autonomy of the bank Boards is urgently called for. As Tarapore (2000) has observed, 'the real challenge in the Indian system is not merely how quickly banks migrate out of the public sector but how banks are governed in an optimal manner'.

15. Deposit Insurance: Another issue is that of deposit insurance. Historically, deposit insurance has been linked to bank runs (Diamond and Dybvig, 1983). To prevent runs and its contagion effect, it was deemed as essential to insure depositors by an entity of unquestioned creditworthiness (which probably means in practice an agency of the Government). Such a mechanism seeks to ensure that sudden withdrawals do not lead to widespread financial panics. Following the experience of the Great Depression when there was a widespread loss of confidence in banks and one-third of the institutions failed, deposit insurance was introduced in the U.S. in the form of the Federal Deposit Insurance Corporation (FDIC) to avoid a repetition of such eventualities.

In India, as it exists at present, the deposit insurance premia is generally a flat rate, irrespective of the risk profile of the financial entity. This creates a moral hazard problem in that depositors have limited incentive to monitor the condition of the financial institution. This has raised the obvious question as to whether the premia should be risk-based which raises issues, such as the basis of assessment of risk profile of banks. The literature points to FDIC model of supervisory rating (CAMELS), risk-adjusted assets basis and options pricing model. There is also an question of whether the onus of monitoring the bank falls on the Deposit Insurance Corporation and whether it should be conferred legal status to take penal action including liquidation. Moving to such a system at this stage would discriminate against the existing weak banks and place their restructuring efforts under greater difficulty. Another issue relates to the size of deposit that is insured. Many of these problems involved in the transition have been discussed in the Report on Reforms in Deposit Insurance in India (1999). From the legal standpoint, the scope of revision of the present deposit insurance setup has to deal with a number of legal amendments. Several enactments, including the Bank Nationalisation Act and the State enactments on cooperatives present hurdles in the deposit insurance corporation acting as receiver/liquidator in the case of failure of insured

entity.[60] These issues would need to be sorted out before the move towards a revised deposit insurance scheme, which is being contemplated, is effected.

16. Issues relating to Cooperative Banking: Urban cooperative banks (UCBs) have come to constitute an important segment of the financial system. Over the period from 1992-93 to 1999-00, the number of reporting banks have increased from 1,399 to 2,050 with their owned funds increasing more than three-fold from Rs.22 billion to over Rs.80 billion over this period. Even their profitability has improved significantly over the period, with net profits increasing from Rs. 0.86 billion in 1997-98 (0.46 per cent of total assets) to Rs. 2.55 billion (0.86 per cent of total assets) in 1999-00.

Despite the healthy growth of UCBs, there are several issues that remains to be resolved. First, in the new liberalised regime, licensing policy for new UCBs is expected to be not only transparent, but also objective, based on established standards and procedures. Moreover, the procedures governing these licensing norms have to be simple and minimal. In connection with the above, the Madhava Rao Committee (1999) enunciated a two-fold licensing criteria, depending on the capital base of the bank and the credibility of the promoter. As it stands at present, the entry point norms (EPN) for UCBs are extremely low and not in consonance with the principles of sound banking. While the entry point norms for new private sector banks are placed at Rs.2 billion, that for UCBs have varied anywhere between Rs.10-75 lakh (recommended at Rs.50-500 lakh by the Madhava Rao Committee), depending on the population strata and initial membership. At a time when UCBs are part of the payment system, any weakness in cooperative banking sector is expected to have serious repercussions on the rest of the financial system, necessitating high bail-out costs. There is a need to rethink the present EPNs for UCBs. Second, one of the major problem areas in the supervision of UCBs is the duality in control by the State Government and the Reserve Bank. Since UCBs are primarily credit institutions meant to be run on commercial lines, the responsibility for their supervision devolves on the Reserve Bank, as they constitute a part of the payment system. Therefore, while the banking operations pertaining to branch licensing, expansion of areas of operations, interest fixation on deposits and advances, audit and investments are under the jurisdiction of RBI, the managerial aspects of these banks relating to registration, constitution of management, administration and recruitment, are controlled by the State Governments under the provisions of the respective State Cooperative Societies Act. The NCR-II recommended that this duality of control be done away with and the responsibility of regulation of UCBs be placed on the Board for Financial Supervision. This will require amendments of the Multi-State Cooperative Societies Act, 1984,

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[60] The Banking Regulation Act deals with suspension of business and winding up of banking companies. In case of SBI and its subsidiaries, only the Central Government is competent to order for liquidation of these entities. In case of RRBs, the Central Government is empowered to order their liquidation.

State Cooperative Societies Act, and the Banking Regulation Act, which would need to be sorted out. Third, the NCR-II had raised the issue of extending capital adequacy prescription for cooperative banks. In the words of the Committee "*capital adequacy prescription to the [rural financing institutions] is important to develop a sound and healthy rural financial system*"(pp.61). Accordingly, the Committee recommended that the cooperative banks should reach a minimum 8 per cent CRAR over a period of five years. The findings of the Madhava Rao Committee on UCBs also reiterated that the majority of the UCBs was in favour of extending the CRAR discipline to UCBs. However, the ability of the UCBs to raise additional capital for the purpose has been limited by certain features *viz*., inability to make public issue of capital and that, they can raise capital only from members, the fact that members can redeem their share in the capital, subject to an overall ceiling and restrictions imposed by the various Acts (State Cooperative Societies Act and Multi-State Cooperative Societies Act, 1984) which constrains the number of shares that an individual can hold. In view of the above, it is suggested that scheduled UCBs be brought under the ambit of the CRAR discipline in phased manner[61]. Finally, the existence of a large number of unlicensed banks has become a serious cause for concern to regulators. The main reason for proliferation of such banks has been the statute induced expansion, so that under Section 5(ccv), a primary credit society with a paid up capital of a minimum of Rs. 1 lakh and carrying out banking business automatically secures an UCB status. In view of the regulatory discomfiture that such banks impose on the system as a whole, the Madhava Rao Committee (1999) had suggested that these banks be licensed provided they satisfy the quadruple criteria of (a) minimum prescribed CRAR, (b) net NPA ratio not exceeding 10 per cent, (c) have made profits continually for the last three years, and (d) have complied with the RBI regulatory directions. These would need to be examined before making any decision on licensing of UCBs. It needs to be appreciated that every transaction, irrespective of the market in which it takes place, has one leg in the cash/inter-bank market in terms of ultimate payment/settlement. Any problem in the market in which the transaction takes place has to impact the cash market. The Reserve Bank as the ultimate provider of liquidity has, therefore, to concern itself with the stability in the functioning of all financial markets (Reddy, 2001c). **Since the co-operatives banks are part of the payment system, they need to be regulated in the same manner as banks. A two-tier approach to regulation - those being part of the payment system being regulated under one umbrella; those who are not part of the payment system are regulated separately, might prove useful in this regard.**

[61] For non-scheduled UCBs, the CRAR has been fixed at 6 per cent as on March 31, 2001. This has been raised subsequently to 7 per cent and 9 per cent, respectively, effective March 31, 2002 and March 31, 2003, respectively.

V. Concluding Remarks

To syncopate, the reform process cannot be entirely painless. While there are achievements, there are setbacks as well. What is important is to strike a balance: tread a careful middle path between the *ex-cathedra* overzeal for intervention and a complacent belief in the ability of the banking system to self-rectify its deficiencies. This is because, in an ideal world, there is always a smattering of small disturbances every year or two to keep the authorities on their toes. The real world, however, is often far divorced from idealism: long periods of tranquility with little or no financial disturbance, engender a sense of complacency which eventually culminate in periods of turmoil which contain several failures and the threat of many more. A constant challenge therefore remains for the authorities in identifying newer risks, eschewing harmful incentives and strengthening the banking sector to keep pace with changes in financial technology. This is also reflected in NCR-II wherein they observe 'with improved strengths and structural changes and with greater functional autonomy and operational flexibility, there is every reason to expect that [our] banking system will rise to the challenges of the next millennium'. Vigil is the eternal price of freedom, which includes economic freedom as well.

List of Abbreviations

ADR: American Depositor Receipt

AMC: Asset Management Company

AMPI: Aggregated Micro Prudential Indicator

ARF: Asset Reconstruction Fund

BFS: Board for Financial Supervision

BIFR: Board for Industrial and Financial Reconstruction

CACS: Capital Adequacy, Asset Quality, Compliance and Systems

CAMELS: Capital Adequacy, Asset Quality, Management, Earnings, Liquidity and Systems

CBI: Central Bureau of Investigation

CRR: Cash Reserve Ratio

CVC: Central Vigilance Commission

DFI: Development Financial Institutions

DRT: Debt Recovery Tribunal

EPN: Entry Point Norm

FII: Foreign Institutional Investor

GDR: Global Depositor Receipt

INFINET: Indian Financial Network

IRAC: Income Recognition and Asset Classification

IRDA: Insurance Regulatory and Development Authority

LAF: Liquidity Adjustment Facility

MEI: Macroeconomic Indicator

MPI: Macro Prudential Indicator

NCR-II: Narasimham Committee Report-II

NBFC: Non-Banking Financial Company

NCR-I: Narasimham Committee Report–I

NPA: Non-performing Asset

PLR: Prime Lending Rate

RoA: Return on Asset

RRB: Regional Rural Bank

RTGS: Real Time Gross Settlement

SBI: State Bank of India

SCB: Scheduled Commercial Bank

SEBI: Securities and Exchange Board of India

SLR: Statutory Liquidity Ratio

SOB: State Owned Bank

UCB: Urban Cooperative Bank

WMA: Ways and Means Advances

References

Ahluwalia, M.S.(1993), 'India's Economic Reforms', in R.Cassen and V.Joshi (*eds.*) *INDIA: The Future of Economic Reform*, Oxford University Press: New Delhi.

Bank for International Settlements (2000), *Annual Report*, BIS: Basel.

Board for Industrial and Financial Reconstruction, website (www.bifr.org).

Board of Governors of the Federal Reserve (2000), *Improving Public Disclosures in Banking*, Staff Study No.173, Federal Reserve: Washington.

Brash, D (1997), 'Banking Soundness and the Role of the Market', in C.Enoch and J.H.Green (e*ds.*) *Banking Soundness and Monetary Policy*, IMF: Washington.

Caprio, G (1998), 'Bank Regulation: The Case of the Missing Model', in A.Harwood and B.Smith (*eds.*) *Sequencing? Financial Strategies for Economic Development*, Basil Blackwell.

Caprio, G and D.Klingebiel (1996) 'Bank Insolvency: Bad Luck, Bad Policy or Bad Banking', *Annual World Bank Conference on Development Economics*, The World Bank, Washington, D.C.

Caprio, G and P.Honohan (1999), 'Restoring Banking Stability: Beyond Supervised Capital Requirements', *Journal of Economic Perspectives*, 4, 43-64.

Caprio, G. and D.Klingebiel (1996), 'Bank Insolvencies: Cross Country Experience', *World Bank Policy Research Working Paper No.* 1692, World Bank: Washington.

Cordella, T and E.L.Yeyeti (1997), 'Public Disclosures and Bank Failures', *IMF Working Paper* No. 96, IMF: Washington D.C.

Crockett, Andrew, D (1997), 'Global Capital Markets and the Stability of Banking and Financial Systems', in C.Enoch and J.H.Green (eds.) *Banking Soundness and Monetary Policy*, IMF, Washington D.C.

Demetriades, P.O. and K.B.Luintel (1996), 'Financial Development, Economic Growth and Banking Sector Controls: Evidence from India', *Economic Journal*, 106, 359-374.

Demetriades, P.O. and K.B.Luintel (1996), 'The Direct Costs of Financial Repression: Evidence from India', *The Review of Economics and Statistics*, 106, 311-319.

Diamond, D (1991), 'Monitoring and Reputation: The Choice Between Bank Loans and Privately Placed Debt', *Journal of Political Economy*, 99, 689-721.

Diamond, D and P. H.Dybvig (1983), 'Bank Runs, Deposit Insurance and Liquidity', *Journal of Political Economy*, 91, 410.419.

Diaz Alejandro, C (1985), 'Goodbye Financial Repression, Hello Financial Crash', *Journal of Development Economics*, 19, 1-24.

Ediz, T., I.Michael and W.Perraudin (1998), 'The Impact of Capital Requirements on UK Bank Behaviour', *Federal Reserve Bank of New York Economic Policy Review*, October, 15-22.

Edwards, F and F.S.Mishkin (1995), 'The Decline of Traditional Banking: Implications for Financial Stability and Regulatory Policy', *Federal Reserve Bank of New York Economic Policy Review*, July, No.3, 27-45.

Eichengreen, B (1999), *Towards a New International Financial Architecture: A Practical Post-Asia Agenda*, Institute for International Economics, Washington

Feldstein, M (1997), 'Institutions and Policies for Maintaining Financial Stability: An Overview', in *Maintaining Financial Stability in a Global Economy*, a Symposium by the FRB, Kansas City, Wyoming, USA.

Gavin, M and R.Hausman (1996), 'The Roots of Banking Crisis: The Macroeconomic Context', in R.Hausman and L.Rojas-Suarez (*eds.*) *Banking Crises in Latin America,* Washington: Inter-American Development Bank and Johns Hopkins University Press.

Ghosh, S and M.K.Saggar (1998), 'Narrow Banking: Theory, Evidence and Prospects in India', *Economic and Political Weekly*, May, 1091-1103.

Goldstein, M (1996), *The Case for an International Banking Standard*, Washington: Institute for International Economics.

Goldstein, M., G.Kaminsky and C.M.Reinhart (2000), *Assessing Financial Vulnerability: An Early Warning System for Emerging Markets*, Institute for International Economics: Washington.

Goodhart, C (1995), *The Central Bank and the Financial System*, McMillanPress.

Goodhart, C. (1995), 'Should the Functions of Monetary Policy and Banking Supervision Be Separated?' *Oxford Economic Papers*, 539-560.

Goodhart, C., and D.Schoenmaker (1998), 'Institutional Separation Between Supervisory and Monetary Agencies', in C.Goodhart (*ed.) The Emerging Framework for Financial Regulation*, Central Banking Publications: London.

Gopinath, S and A.Prasad (1998), 'Managing Financial Risks in India: A Note', *RBI Occasional Papers*, 417-438.

Government of India (1991), *Report of the Committee on the Financial System* (Chairman: Shri M.Narasimham), Reserve Bank of India, Mumbai.

Government of India (1998), *Report of the Committee on Banking Sector Reforms* (Chairman: Shri M.Narasimham), Government of India, New Delhi.

Hanson, J (2001), 'Indian Banking: Market Liberalization and the Pressures for Reform of Institutions and the Market Framework to Improve Incentives', Paper presented at the Conference on Indian Economic Policy: Trade, Finance and Public Finance, Stanford University, June.

Hawkins, J and P.Turner (1999), 'Bank Restructuring in Practice: An Overview', in *Bank Restructuring in Practice*, Bank for International Settlements, Basle, Switzerland.

Hellmann, T.F., K.C.Murdock and J.E.Stiglitz (2000), 'Liberalisation, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough?', *American Economic Review*, 90, 147-165.

Honohan, P (1997), 'Banking System Failures in Developing and Transition Economies: Diagnosis and Predictions', *BIS Working Paper* No. 39, Basle, Switzerland.

Hyytinen, A and T.Takalo (2000), 'Enhancing Bank Transparency: A Re-assessment'*, Bank of Finland Discussion Paper* No.10, Bank of Finland: Finland.

Jalan, B (2000), 'Finance and Development-Which Way Now?', *RBI Bulletin, January,* 29-45.

Jalan, B (2001), 'Banking and Finance in the New Millennium', *RBI Bulletin, February,* 215.232.

Lindgren,C.J., G.Garcia and M.Saal (1996), *Bank Soundness and Macroeconomic Policy*, IMF:Washington.

McKinnon, R (1973), *Money and Capital in Economic Development*, Brookings Institution, Washington.

McKinnon, R (1989), 'Financial Liberalisation and Economic Development: A Reassessment of Interest Rate Policies in Asia and Latin America', *Oxford Review of Economic Policy*, 5, 29-54.

Nachane, D.M., Aditya Narain, Saibal Ghosh and S.Sahoo (2000), 'Capital Adequacy Requirements and the Behaviour of Commercial Banks in India: An Analytical and Empirical Study', *DRG Study* No.22, Reserve Bank of India: Mumbai.

Nayak, P.J (1995), 'Reform of Indian Financial System', in S.N.Zahid (*ed.) Financial Sector Development in Asia*, Asian Development Bank, Manila.

Owens, E., A.M.Leone, M.Gill and P.Hilbers (2000), 'Microprudential Indicators of Financial System Soundness', *IMF Occasional Paper* No.192, IMF:Washington DC.

Rangarajan, C (1998), *Banking Sector Reforms: Rationale and Relevance*, SICOM Silver Jubilee Memorial Lecture, Mumbai.

Rangarajan, C (1998), *The Indian Financial System: The Emerging Horizon*, Phiroze Jeejeebhoy Memorial Lecture, Mumbai.

Rangarajan, C (2000), *Perspectives on Indian Economy*, UBSPD.

Reddy, Y.V. (1999),'Financial Sector Reform: Review and Prospects', *RBI Bulletin*, January, 33-93.

Reddy, Y.V. (2001a), 'Implementation of International Financial Standards and Codes: Indian Perspective and Approach', *BIS Review No.*20*,* April, BIS: Basel

Reddy, Y.V. (2001b), 'Developments in Monetary Policy and Financial Markets in India', *BIS Review No.*32*,* April, BIS: Basel

Reddy, Y.V. (2001c), 'Issues in Choosing Between Single and Multiple Regulators of Financial System', *Lecture Delivered at Indian Council for Research on International Economic Relations,* New Delhi, May.

Reddy, Y.V.(2000), *Monetary and Financial Sector Reforms in India: A Central Banker's Perspective*, UBSPD.

Reserve Bank of India (1954), *All-India Debt and Investment Survey*, RBI: Bombay.

Reserve Bank of India (1978), *Chart Book on Financial and Economic Indicators*, RBI: Bombay.

Reserve Bank of India (1983), *The Reserve Bank of India: Functions and Working*, Bombay.

Reserve Bank of India (1985), *Report of the Committee to Review the Working of the Monetary System* (Chairman: Dr.S.Chakravarty), Bombay.

Reserve Bank of India (1987), *Report of the Working Group on the Money Market* (Chairman: Shri N. Vaghul), Bombay.

Reserve Bank of India (1999), *Report of the High-Power Committee on Urban Cooperative Banks* (Chairman: Shri K.Madhava Rao), RBI: Mumbai.

Reserve Bank of India (1999), *Report of the Working Group on Restructuring Weak Public Sector Banks* (Chairman: Shri M.S.Verma), RBI: Mumbai.

Reserve Bank of India (1999), *Report on Reforms in Deposit Insurance in India* (Chairman: Shri J.Capoor), RBI: Mumbai.

Reserve Bank of India (2000), *Report of the Advisory Group on Banking Supervision* (Chairman: Shri M.S.Verma), RBI: Mumbai.

Reserve Bank of India (2001), *Report of the Advisory Group on Bankruptcy Laws* (Chairman: Dr. N.L.Mitra), RBI: Mumbai.

Reserve Bank of India (2001), *Report of the Advisory Group on Corporate Governance* (Chairman: Shri R.H.Patil), RBI: Mumbai.

Reserve Bank of India, *Annual Report* (various Issues), RBI: Mumbai.

Reserve Bank of India, *Monetary and Credit Policy Statements* (various years), RBI: Mumbai.

Reserve Bank of India, *Report on Currency and Finance* (various issues), RBI: Mumbai.

Reserve Bank of India, *Report on Trend and Progress of Banking in India* (various issues), RBI: Mumbai.

Reserve Bank of India, *Statistical Tables Relating to Banks in India* (various issues), RBI: Mumbai.

Rojas-Suarez, L and S.R. Weisbrod (1994), 'Financial Market Fragilities in Latin America: From Banking Crisis Resolution to Current Policy Challenges', *IMF Working Paper No.*117, IMF: Washington.

Rojas-Suarez. L. (1997), *Safe and Sound Financial System*, Inter-American Development Bank, Johns Hopkins University Press, Washington D.C.

Sarkar, J., S.Sarkar and S.K.Bhaumik (1998), 'Does Ownership Always Matter? Evidence from the Indian Banking Industry', *Journal of Comparative Economics*, 26, 262-281.

Sheng, A (1996), *Bank Restructuring: Lessons from the 1980s*, IBRD, Washington.

Standard and Poor and CRISIL (1999), *Indian Banking's Capital System Shortfall*, CRISIL: Mumbai.

Stiglitz, J.E. (1999), 'Principles of Financial Regulation: A Dynamic Portfolio Approach', *Lecture Delivered at NCAER*, New Delhi.

Stiglitz, J.E.(2000), 'The Contributions of the Economics of Information to Twentieth Century Economics', *Quarterly Journal of Economics*, November, 1441-1478.

Summers, L (2000), 'International Financial Crises: Cases, Prevention, and Cures', *American Economic Review: Papers and Proceedings*, 90, 1-16.

Talwar, S.P (2001), 'Financial Stability and the Role of Banks', *RBI Bulletin*, February, 233-241.

Tarapore, S.S. (1999), *India's Financial Policy: Adapting to New Realities*, UBSPD.

Tarapore, S.S. (2000), Malaise of Indian Financial System: Need for Reforms, *Economic and Political Weekly*, August, 2821-2826.

Verma, M.S. (1992), 'Commercial Banking: New Vistas, New Priorities', IIM, Ahmedabad (*mimeo).*

Williamson, J and M.Mahar (1998), 'A Survey of Financial Liberalisation', *Princeton Essays in International Finance*, November, Princeton: New Jersey.

World Bank (2000), *Global Economic Prospects and the Developing Countries*, Washington: World Bank.

Table 1: Composition of Gross Domestic Saving

(as percentage of GDP at market prices)

Item	1970-71 to 1974-75	1980-81 to 1984-85	1990-91	1995-96	1999-2000
1	**2**	**3**	**4**	**5**	**6**
I. Household Sector	12.0	14.1	19.3	18.1	19.8
I.1 Financial Saving	4.0	6.7	8.7	8.9	10.5
Of which [a]					
Bank Deposits	42.9	41.9	31.8	29.1	33.7
Claims on Government	2.4	10.5	13.5	7.9	12.2
Currency	15.2	12.3	10.6	13.8	8.9
Shares and Debentures	1.1	3.4	8.4	6.5	6.3
Life Insurance Fund	10.2	7.3	9.5	11.6	11.4
II. Private Corporate Sector	1.7	1.6	2.7	4.9	3.7
III. Public Sector	3.0	3.7	1.1	2.0	-1.2
IV. Gross Domestic Saving	16.6	19.4	23.1	25.1	22.3

a: as percent of financial saving

Source: Central Statistical Organisation and Reserve Bank of India.

Table 2: Indicators of Banking Policy: 1970-2001

(Selected Years)

Year	Bank Rate	Deposit Rate (1 year) (% per annum)	Loan Ceiling Rate[a] *Loan Minimum Rate*[a] (% per annum)	CRR (% of NDTL)	SLR (% of NDTL)
1	**2**	**3**	**4**	**5**	**6**
1974	9.0 (July)	8.0 (Dec.)	16.5 (Mar 1976)	4.0	33.0 (July)
1981	10.0 (July)	7.5 (Dec.)	19.5 (March)	7.5	35.0 (October)
1987	--	9.0 (October)	16.5 (April)	10 (October)	37.5 (April)
1991	12.0 (October)	10.0 (July) 12.0 (October)	*19.0 (April)*	15.0 (May)	38.5 (September, 1990)
1994	--	<10	*14.0 (March) Free (October)*	15.0 (August)	31.5 (October)
1997	9.0 (October)	Free	*Free*	10 (December)	25.0[b] (October)
1999	8.0 (March)	Free	*Free*	9.0 (November)	25.0
2000	8.0 (July)	Free	*Free*	8.5 (August)	25.0
2001	7.0 (March)	Free	*Free*	8.0 (March) 7.5 (May)	25.0

a. Effective October 1988, ceiling rate abolished and minimum rate imposed.

b. Minimum as under Section 24 of the BR Act, 1949.

Figures in brackets under Column (4) and (5) indicate the effective date.

Source: Reserve Bank of India.

Table 3: Indicators of Financial Development

Period/Year	Finance Ratio (FR)	Financial Inter-relations Ratio (FIR)	New Issue Ratio (NIR)	Intermediation Ratio (IR)
1	**2**	**3**	**4**	**5**
1970-71 to 1974-75	0.168	1.379	0.788	0.770
1980-81 to 1984-85	0.344	2.421	1.429	0.690
1990-91	0.401	1.745	1.005	0.736
1993-94	0.473	2.825	1.489	0.898
1995-96	0.493	2.260	1.328	0.702

FR=Total Assets/National Income; FIR=Total Issues/Net Domestic Capital Formation
NIR=Primary Issues/ Net Domestic Capital Formation
IR=Secondary Issues (i.e., issuers by banks and financial institutions)/ Primary Issues
National Income=Net National Product at factor cost at current prices (1980-81 series)
Source: Reserve Bank of India.

Table 4: Capital Restructuring of Nationalised Banks (Rs. crore)

Bank	1993-94	1994-95			1995-96	1996-97	1997-98	1998-99	Capital Returned to GoI.
		Tier-I	Tier-II	Total					
Allahabad Bank	90.0	356.2	101.61	457.81	160.0				
Andhra Bank	150.0	184.32	0.00	184.32		165.0			
Bank of Baroda	400.0	0.00	0.00	0.00					381.0
Bank of India	635.0	848.38	348.22	1196.60					93.47
BoM	150.0	334.19	0.00	334.19	80.0				
Canara Bank	365.0	0.00	0.00	0.00			600.0		
CBI	490.0	632.46	0.00	632.46		500.0			
Corporation Bank	45.0	0.00	0.00	0.00					30.0
Dena Bank	130.0	6.11	72.28	78.39					
Indian Bank	220.0	230.96	180.94	411.90			1750.0	100.0	
IOB	705.0	258.60	132.74	391.34					
OBC	50.0	0.00	0.00	0.00					
P&S	160.0	116.03	0.00	116.03	72.0	150.0			
PNB	415.0	0.00	0.00	0.00					138.33
Syndicate Bank	680.0	278.59	88.79	367.38	172.0				
UCO Bank	535.0	515.52	0.00	515.52	110.0	54.0	350.0	200.0	
Union Bank of India	200.0	0.00	0.00	0.00					
UBI	215.0	538.87	0.00	538.87	256.0	338.0		100.0	
Vijaya Bank	200.0	62.31	0.00	62.31		302.0			
Total	5700	4362.54	924.58	5287.12	850	1509	2700	400	642.80

BoM: Bank of Maharashtra; CBI: Central Bank of India; IOB: Indian Overseas Bank; OBC: Oriental Bank of Commerce; P&S: Punjab and Sind Bank; PNB: Punjab National Bank; UBI: United Bank of India.
Source: Reserve Bank of India.

Table 5: Details of Public Equities by Public Sector Banks:1993-2000

(Amount in Rs.crore)

Name of the Bank Date of Issue	Equity Capital before public Issue	Size of the Public Issue			Equity after public issue	Post Issue Shareholding	
		Equity	Premium	Total		GoI/RBI	Others
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
State Bank of India December 1993	200.00	274.00	1938.17 (Rs.90 per share)	2212.17	474.00	314.34 (66.3)	159.67 (43.7)
State Bank of India (GDR) October 1996	474.00	52.28	1218.12 (Rs.233 per share)	1270.40	526.28	314.34 (59.7)	211.94 (40.1)
State Bank of Bikaner & Jaipur - November 1997	36.40	13.60	59.84 (Rs.440 per share)	73.44	50.00	37.5 (75.0)	12.5 (25.0)
Oriental Bank of Commerce October 1994	128.00	60.00	300.00 (Rs.50 per share)	360.00	192.54	128.0 (66.5)	64.54 (33.5)
Dena Bank December 1996	146.82	60.00	120.01 (Rs.20 per share)	180.01	206.82	146.82 (71.0)	60.0 (29.0)
Bank of Baroda December 1996	196.00	100.00	750.00 (Rs.75 per share)	850.00	296.00	196.0 (66.9)	100.0 (29.1)
Bank of India February 1997	489.00	150.00	525.00 (Rs.35 per share)	675.00	639.00	489.0 (77.0)	150.0 (23.0)
Corporation Bank October 1997	82.00	38.00	266.00 (Rs.70 per share)	304.00	120.00	82.0 (68.3)	38.0 (31.7)
State Bank of Travancore January 1998	35.00	15.00	75.00 (Rs.500 per share)	90.00	50.00	38.0 (76.0)	12.0 (24.0)
Syndicate Bank October 1999	346.97	125.00	(Rs. 10 per share)	125.00	471.97	346.97 (73.5)	125.0 (26.5)
Andhra Bank February 2001	347.95	150.00	(Rs. 10 per share)	150.00	450.00	299.98 (66.6)	150.03 (33.4)
Vijaya Bank December 2000	259.24	100.00	(Rs. 10 per share)	100.00	359.24	259.24 (72.2)	100.0 (27.8)

Figures in brackets indicate percentage shareholding.

Source: Reserve Bank of India.

Table 6: Changes in the Regulatory Framework

Variable/ Year	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
CRAR (per cent of RWA)								
Domestic Banks with International Business	*	8	8	8	8	8	8	9
Other Domestic Banks	4	4	4	8	8	8	8	9
Foreign Banks	8	8	8	8	8	8	8	9
NPA (period overdue in quarters)								
Sub-standard Assets@	4	3	2	2	2	2	2	2
Doubtful Assets	8	8	8	8	8	8	8	8#
Provisioning Requirements (%)								
Standard Assets	--	--	--	--	--	--	--	0.25
Sub-standard Assets	10	10	10	10	10	10	10	10
Doubtful Assets (Secured Portion)	20-50	20-50	20-50	20-50	20-50	20-50	20-50	20-50
Doubtful Assets (Unsecured Portion)	100	100	100	100	100	100	100	100
Loss Assets	100	100	100	100	100	100	100	100
Mark to Market $	30	30	30	40	50	60	70	75

* To achieve 8 per cent as early as possible and in any case, before end-March 1994.
The concept of past due (grace period of 30 days) was dispensed with effective April 1, 2001.
Reduced to 6 quarters effective March 31,2001; reduced to 2 quarters effective March 31, 2004.
$ Revised valuation norms for banks announced in the *Monetary and Credit Policy* of October 2000. According to the guidelines, banks have been permitted to hold a maximum of 25 per cent of their investment in Government securities under 'Held to Maturity' category, which need not be marked to market.
@ Reduced to one quarter effective March 31, 2004.
Source: Reserve Bank of India.

Table 7: Provisioning Requirements for Non-performing Loans

(as percent of original loan value)

Country	Performing	Sub-standard	Doubtful	Loss
Asia				
China	General: 1	--	--	--
Hong Kong		20	50	100
Indonesia	General: 1 Special Mention: 5	15	50	100
Korea	Normal: 0.5 Precautionary: 2	20	75	100
Malaysia	General: 1.5	20	50	100
Singapore		10 (of unsecured portion)	50	100
Thailand	Pass: 1 Special Mention: 2	25	50	100
Latin America				
Argentina		25		
Brazil		20 (Coll.) 50 (not Coll.)	50 (Coll.) 100 (not Coll.)	100
Chile	Potential Risk: 1 Expected Loss: 20	60	90	100
Mexico	Low Risk: 1	20 (Medium Risk)	60 (High Risk)	100 (Irrecoverable)
Transition Economies				
Czech Republic	Watch: 5	20	50	100
Hungary	Watch: 0-10	11-30	31-70	71-100
Poland		20	50	100

Coll. Collateralised

Source: Hawkins and Turner (1999).

Table 8: Spreads and Profitability of Banking Sector (percentage of assets)

Variable / Year	PSBs	Private Sector Banks		Foreign Banks	SCBs
1	**2**	**3**	**4**	**5**	**6**
1993-94		Old	New		
Interest Income	8.57	8.93	--	10.00	8.70
Interest Expense	6.21	5.89	--	5.80	6.16
Spread	2.36	3.04	--	4.20	1.54
Non-Interest Income			--		
Operating Expense	2.65	2.45	--	2.65	2.64
Operating Profit	0.99	1.89	--	3.78	1.25
Provisions	2.14	1.24	--	2.06	2.09
Net Profits	-1.15	0.65	--	1.72	-0.83
1996-97					
Interest Income	9.69	10.65	10.14	11.08	9.88
Interest Expense	6.53	7.72	7.26	6.95	6.66
Spread	3.16	2.93	2.88	4.13	3.22
Non-Interest Income	1.32	1.48	2.03	2.49	1.45
Operating Expense	2.88	2.52	1.94	3.00	2.85
Operating Profit	1.60	1.89	2.98	3.62	1.82
Provisions	1.03	0.98	1.24	2.44	1.15
Net Profits	0.57	0.91	1.76	1.19	0.67
1999-2000					
Interest Income	8.92	9.58	7.53	9.87	8.96
Interest Expense	6.22	7.24	5.65	6.02	6.24
Spread	2.70	2.33	1.87	3.85	2.72
Non-Interest Income	1.28	1.68	1.66	2.60	1.43
Operating Expense	2.52	2.18	1.42	3.21	2.49
Operating Profit	1.47	1.84	2.11	3.24	1.66
Provisions	0.89	1.00	1.15	2.07	1.00
Net Profits	0.57	0.84	0.97	1.17	0.66

Spread is the difference between interest income and interest expense.

Source: Reserve Bank of India.

Table 9: Non-Performing Assets of Public Sector Banks

End-March	NPAs (Rs. billion)	Gross NPAs as percent of Advances	Gross NPAs as percent of Assets	Net NPAs as percent of Advances	Net NPAs as percent of Assets
1	**2**	**3**	**4**	**5**	**6**
1993	392.5	23.2	11.8		
1994	410.4	24.8	10.8		
1995	383.8	19.5	8.7	10.7	4.0
1996	416.6	18.0	8.2	8.9	3.6
1997	435.8	17.8	7.8	9.2	3.6
1998	456.5	16.0	7.0	8.2	3.3
1999	517.1	15.9	6.7	8.1	3.1
2000	532.9	14.0	6.0	7.4	2.9

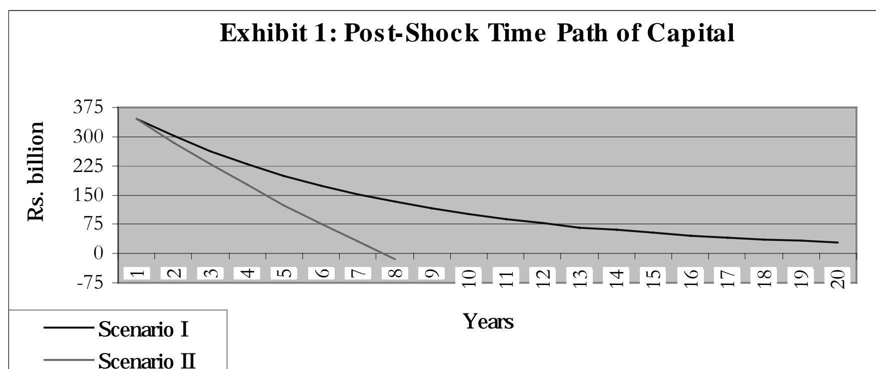
Source: Reserve Bank of India.

Table 10: Stress Test of Credit Risk- Public Sector Banks

(Rs. billion)

		Scenarios	
		I	II
Year/ Item	March 1999	Post-Shock	Post-Shock
Standard Loans	3407.1	2964.2	3236.8
Non-Performing Loans	517.1	960.0	687.5
Loan Loss Provisions	277.3	321.6	336.9
Additional Provisioning	--	44.3	59.6
Loss of Interest Income	--	55.4	21.3
Total Capital*	345.3	301.0	285.7
Risk Weighted Assets	3122.4	3078.1	3062.7
CRAR (per cent)	11.1	9.8	9.3
			(as per cent of assets)$
Standard Loans	35.8	31.2	34.0
Non-Performing Loans	5.4	10.1	7.2
Loan Loss Provisions	2.9	3.4	3.5
Additional Provisioning	--	0.5	0.6
Loss of Interest Income	--	0.6	0.2
Total Capital	3.6	3.2	3.0
Risk Weighted Assets	32.8	32.6	32.2

$ As per cent of assets of Scheduled Commercial Banks (excluding Regional Rural Banks) as at end-March 1999.
Scenario 1: NPAs grow at 13 per cent. Average interest rate on loans is 12.5 per cent. Provisions made at 10 per cent for loans becoming sub-standard.
Scenario 2: NPAs grow at 5 per cent. Average interest rate on loans is 12.5 per cent. Provisions made at 35 per cent for loans becoming sub-standard.
Source: Authors' calculations



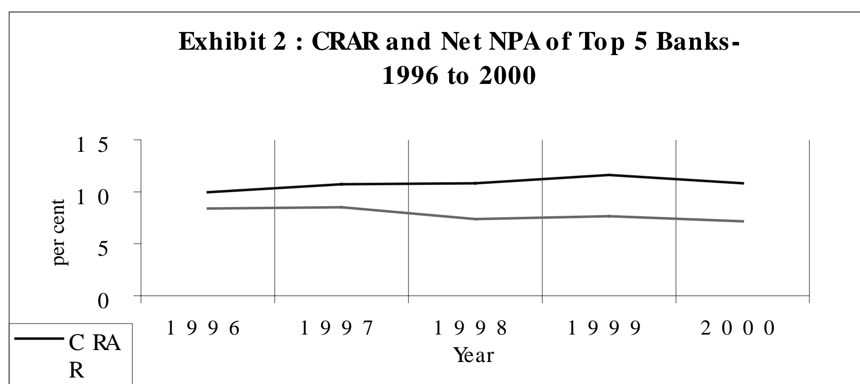


Table 3: Progress of Commercial Banking in India

Indicators	June 1969	December 1980	March 1991	March 1995	March 2000
1	**2**	**3**	**4**	**5**	**6**
No. of SCBs	73	154	272	281	297
No. of Bk. Offices	8262	34594	60570	64234	67339
Of which					
Bk. Offices in rural and semi-urban areas	5175	23227	46115	46602	47334
Population per Office ('000s)	64	16	14	15	15
Deposits of SCBs (Rs. billion)	46.5	404.4	2011.9	3868.6	8515.9
Per capita Deposit (Rs.)	88	738	2368	4242	8247
Credit of SCBs (Rs. billion)	35.9	250.8	1218.7	2115.6	4540.7
Per capita Credit (Rs.)	68	457	1434	2320	4705
Share of Priority Sector Advances in Total Non-Food Credit of SCBs (%)	15.0	40.3	39.2	35.8	35.9*
Deposits (% of National Income)	15.5	36	48.1	46.4	48.7*
Total Assets (Rs. billion)	68.4	710.8	3275.2	5215.4	11516.2

*as at end-March 1999.

Source: Reserve Bank of India.

Table 11: Indicators of External Debt Sustainability

Year	Total External Debt (Rs. billion)	CAD (% of GDP)	Debt Service Ratio	Reserves (months of imports)	Short-term Debt/Total Debt (%)
1	**2**	**3**	**4**	**5**	**6**
1990-91	1630.0 (10.3)	3.2	35.3	2.7	10.2
1994-95	3116.8 (4.3)	1.1	26.2	8.5	4.3
1997-98	3696.8 (5.4)	1.3	19.0	6.9	5.4
1998-99	4145.9 (4.5)	1.0	18.0	8.2	4.5
1999-2000	4292.7 (4.1)	0.9	16.0	8.2	4.1

Figures in brackets indicate percentage of short-term debt to total external debt.

Source: Reserve Bank of India.

Table 12: Foreign Investment Inflows and Foreign Exchange Reserves

(US $ million)

Year	Direct	Portfolio	Reserves
1	**2**	**3**	**4**
1994-95	1,314	3,824	25,186
1997-98	3,557	1,828	29,367
1998-99	2,462	-61	32,490
1999-2000	2,155	3,026	38,036

Source: Reserve Bank of India.

Monetary Policy and Financial Markets : Recent Initiatives*

Monetary Policy Instruments /Target / Operating Procedures
Focus : Movement to indirect instruments & better targetting

Pre-Reform	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
• CRR (15%) and SLR (38.5%) were the principal instruments of monetary policy. • Segmented refinance with fixed quantum of funds available at fixed rates of interest.	• SLR rationalized to 25 per cent • Reduction in CRR had commenced. Intention to reduce CRR to 10% in two stages announced. • Segmented refinance still available • M3 was the main intermediate target.	• OMO emerging as important instrument • Reactivation of Bank Rate • Cash Reserve Ratio (interest on CRR given at 4 %)reduced to 10% • SLR rationalised to uniform 25% • General Refinance to banks plus • Liquidity Support to PDs (pre-determined amount and rate)	• Flexibility in use of short-term repo rate (fixed or auction rate, as appropriate) • CRR continues to be an important tool • Continuation of refinance in same form • Multiple Indicator Approach	• CRR, OMO, and Repos are important tools. • ILAF (General Refinance to banks withdrawn)	• CRR, OMO and Repo important instruments. • Two-Way Quotes in T-Bills (exclusive to PDs) • CRR • First Phase of LAF from June 5, 2000. Daily repo and reverse repo auctions by RBI to give liquidity and interest rate signals. • Legal Amendments for greater flexibility in	• Transition to phasea 2 and 3 of LAF announced. Standing facility available to system and introduction of backstop facility. • Intention to announce fixed rate repos if interest rate signals are warranted. • Changes in operational procedures of LAF .

					monetary policy proposed.	• Progress towards separation of monetary and debt management • Interest on CRR increased to 6 %.
<u>Money Market</u> Focus : To make transmission mechanism of monetary policy more efficient	•		•	•		
• Only banks and FIs were participants in call money market • CRR/SLR on interbank liabilities • Prior permission of RBI required	• PDs allowed as borrowers and lenders in call money market • Mutual funds permitted to lend and corporates permitted to route lending through PDs. • Term money	• Increasing the eligible instruments for repo to cover all dated securities and T-Bills • T-Bills of varying maturities introduced • Permitting non-	• Reduction in minimum lock in period for CDs/MMMFs • Intention to make call money market purely interbank including PDs	• Permit non-banks/FIs two-way access in repo market • MMMFs under regulation of SEBI • Cheque writing facility for MMMFs	• Further Flexibility in use of FRA/IRS • Reduced minimum maturity of CDs • Extended Period of facility of routing of call money	• Timetable for phasing out of non-bank participants from inter-bank call money market announced. • Banks/PD/ FIs/ SDs directed to

for CP
• CP carved out of working capital limits
• Large minimum size and minimum maturity of 3 months for CP
• MMMFs did not exist
• CDs issued only by commercial banks on slightly inflexible terms
 	
Government Securities Market Focus :
	borrowing permitted for FIs.
	• Improved terms for issuance of CP and CD
	• MMMFs in operation
		banks as lenders in repo market
		• Extending facility of routing in call money market to all PDs
		• Reduction in minimum size of CD
				• Cheque writing facility for Gilts
				• Introduced FRA/IRS
					transactions through PDs up to end-December 2000.
					• Steps being taken to extend repo facility to all such entities through SGL II Accounts.
					• Work being carried on with regard to RTGS and Securities Clearing Corporation
					    • New norms for CP announced. CP emerges as a standalone instrument.
					    • Working Group on Bills Discounting
						invest in CP only in demat form.
						• Exemption to inter-bank term money liabilities of maturities of 15 days from minimum CRR

Increasing the depth and liquidity by continuing to bring about improvements in the instruments, institutions and operational efficiency in the market as also to establish a strong legal and regulatory framework conducive to technological innovations						
• Absence of internal debt management policy • Automatic monetisation of fiscal deficit at 4.6%	• Active Debt management policy in operation • Abolition of System of Ad-Hoc T-Bills from April 1, 1997 • Auction System	• Uniform price Auction for 91-Day T-Bills • Notified Amounts in all T-Bills Auctions • Non-Competitive bides to be kept	• Reintroduction of 182 day T-Bills • FII entry in T-Bills market	• Increased Role for PDs (100 % underwriting) • Decision to issue loans on price basis to facilitate consolidation	• SCRA Amendment • Special Facility for Securities Settlement • Withdrawal of Commission payment to PDs for T-Bills	• In-principle agreement for separation of monetary and debt management functions. • Intention to adopt uniform

• System of Tap Treasury Bills at 4.6% • Long dated Securities at pre-determined coupon rates • 182-Day T-Bills • No specialized institutional structure **<u>Deposit / Lending Rates</u>** **Focus : Complete deregulation of deposit and lending rates and flexibility in interest rate structure**	for issuance of Government Securities • System of PDs in place • STCI in operation • Variety of Instruments	outside notified amount • FIIs entry in G-Sec market made more flexible • Repos in PSU bonds/private corporate debt in demat form through recognised stock exchanges		and pave way for STRIPS • Calendar for T-Bills	• Introduction of Capital Adequacy for PDs • Announcement of Intention for Debt Securities Clearing Corporation announced • Government Securities Act in anvil • Work relating to RTGS in progress • Work relating to Negotiated Dealing System in progress • Efforts to retail Government Securities • Securities Clearing Corporation being operation-alised	price auction for Dated Securities. • 14- and 182-Day T-Bills discontinued. 91 and 364 day T-Bills exist. • Liquidity Support for PDs discontinued. • Non-competitive Bids through PDs/SDs to encourage retailing. • Clearing Corporation and electronic Negotiated Dealing system to be established by June 2001.

• Administered interest rate structure for all categories of deposits and lending **<u>Prudential Norms</u>** **Maintain stability in the system and bring all prudential and regulatory norms on par with international**	• Banks given freedom to fix deposit rates of maturity 30 days and above • Rationalisation of lending rates from 6 categories to two categories • Banks given freedom to fix their PLR to deposits above Rs.2 lakh.	• Further Deregulation of term deposit rates • Progressive Deregulation of lending rates • Introduction of TPLR • Participation in Consortium non-obligatory • Loan system for bank credit • Freedom to assess working capital limits	• Minimum maturity of term deposit reduced to 15 days • Flexibility to banks in deposit and lending activities (uniform rate for deposits removed, freedom to fix penalty for premature deposits, etc)	• Tenor Linked PLR • Modification of norms relating to PLR	• Fixed Rate Loans permitted • Flexibility to FIs to raise deposits/bonds	• In deposit side ceiling on FCNRB reduced to LIBOR. • Flexibility to banks in offering interest rates on term deposits to senior citizens, on overdue deposits and on premature withdrawals. • Minimum maturity of term deposit reduced from 15 to 7 days for deposits over Rs.15 lakh. • On lending side, banks permitted to lend at sub-PLR.

standards						• PLR emerges as benchmark rate. • Sub-PLR lending permitted
• No capital adequacy requirements • Assets classified into 8 health codes and income recognition based on health code system. • Provisioning norms left to discretion of banks • Investments were at book value • Entry of foreign banks restrictive	• BIS capital adequacy norms introduced • NPA defined • Asset classification in 4 broad groups • Provisioning norms introduced • Investment valuation norms introduced • New private sector banks permitted • BFS in operation for 2 years • Exposure norms in force	• Norms for Advances to shares by banks tightened • ALM for banks under discussion	• Mark-to-market - Intention to move to 100% • Implementation of Narasimham Committee II • Increase in CAR from 8 to 9 % in phases • Provisioning for standard assets • Risk-weight for Govt Securities at 2.5 % • Risk-weight for forex open positions at 100% • ALM for FIs under discussion • Bank exposure norms tightened	• Mark to market for current investments increased to 75 % • Limits on cross holdings of banks Tier-II capital • Risk weight for interest rate risk for non-SLR bonds • Bank exposure norms tightened • New valuation norms for banks investment portfolio • Debate on UB	• Intention to move to consolidated accounting • New capital adequacy framework of BIS reviewed • Additional capital in banks books for subsidiaries • Internal risk management systems in banks urged	• Adoption of 90-Day Norm for recognition of loan impairment from the year ending March 31, 2004. • Adoption of 180 day norm for recognition of loan impairment for FIs with effect from year ending March 31, 2002. • Credit exposure norms based on international

• No new foreign banks • Disclosure norms were poor						best practices. • Group on Risk Based Supervision. • Group to look into introduction of consolidated accounting of banks. • Credit Information Bureau set up by banks • Discussion Paper on Prompt Corrective Action being finalized. • Prudential norms for cooperative banks strengthened • New regulatory structure for cooperative

						banks proposed.

* Most of the reforms in the financial sector were initiated in the period between 1992 and 1996. The period witnessed the introduction of capital adequacy requirements, prudential norms, exposure norms, etc. The period also saw a marked change in the environment governing financial markets. Reforms were undertaken towards instrument/institution development and improving the market microstructure. The period after 1996-97 basically built upon the foundation laid during this period.