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Financial Reform and Development in the Philippines, 1980-1997: Imperatives, Performance and Challenges

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I. INTRODUCTION

The currency and financial turmoil in East Asia in recent months has raised concerns about the financial systems and macroeconomic policies in East Asia in the context of capital account liberalization and increased international financial integration. Specifically, the recent turmoil has brought to the fore issues related to the health and stability of the financial sectors of East Asian countries, problems related to the regulatory climate and the institutional capacity of the regulatory institutions in these countries, macroeconomic challenges posed by large capital flows, and the structural adjustment problems facing the economies themselves. It is to be noted that most of the countries that have been affected by the current currency and financial turmoil in the region also experienced financial and/or economic crises in the early and mid-1980s, i.e., Korea, Thailand, Philippines, Malaysia and Indonesia. The crises of the 1980s were local although largely contemporaneous. In contrast, the recent turmoil is a regionwide contagion, starting from Thailand. The contagion effect reflects the greater interdependence of

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countries within East Asia through trade and investment since the late 1980s, the larger magnitude of capital flows in the 1990s, and the greater importance that portfolio capital has played in financing large current account deficits in the region in recent years.

The Philippines, which experienced the deepest economic decline and worst financial and economic crisis in the early 1980s among the East Asian countries, has been less adversely affected by the current currency and economic turmoil in the region. Analysts and observers consider that an important reason behind the greater resilience of the Philippine economy to the current regional crisis is its apparently more robust financial sector compared to those of the other more adversely affected countries. The apparently greater resilience of the country's financial sector stems from the policy and institutional reforms the country undertook during the past one and a half decades. A number of the reforms redirected the nature of governance in the financial sector but most of them centered on the overall economy and policy environment. Nevertheless, as the recent currency and financial turmoil in the region suggests, the institutional and policy environment in the financial sector in the country would need to be improved further in order to effectively address the challenges of increased international financial integration, greater competition among various financial institutions, and continuing financial innovations and technology improvements.

The paper discusses financial reform and development in the Philippines during the past one and a half decades and the challenges facing the financial sector (especially in respect to improving its management) in the light of greater international financial integration. The paper consists of eight sections. Section II describes very briefly the ups and downs of the Philippine economy during 1980-97. Section III discusses the major policy reform efforts in the financial sector in the Philippines since 1980. Section IV looks into the microeconomics of financial reform and development in the country. Section V discusses the macroeconomic and microeconomic aspects of capital flows in the Philippines during the 1990s. Section VI focuses on the issue of prudential regulation, especially on improving further the prudential regulatory framework in the country. Section VII considers areas for strengthening regulatory institutions. The last section summarizes key lessons from the Philippine and Southeast Asian experience as well as major policy recommendations to push forward financial reforms and strengthen further the Philippine financial sector.

Some analytical framework. Finance is special, not only because it is an input to much economic activity but also because it involves the exchange of a generally certain current asset with an uncertain future asset and return (White 1995). The development of the financial sector is intimately related to the development of the whole economy. At the same time, instability in the macroeconomy usually reverberates into the financial sector, and vice versa.

Empirical studies indicate that the scope, quality and efficiency of the financial system contribute to economic growth. For example, Berthelemy and Varoudakis (1996) show a clear positive relationship between the level of financial development in 1960 (proxied by the ratio of liquid assets to GDP in 1960) and the level of per capita income in 1985; similarly, there is a positive relationship between the level of financial development and the rate of growth of per capita income during 1960-85. The contribution of finance to growth is best seen in terms of an efficient and adaptable payments system (in order to have a reliable means of payment) and in terms of saving mobilization and resource pooling (Berthelemy and Varoudakis 1996).

Equally important and probably more problematic in terms of policy is the direct and indirect role of the financial system in screening and monitoring investments among "firms" rather than just among sectors. This latter role stems from the creation, dissemination and utilization of information by financial institutions inherent in their provision of financial services so that they can intermediate differences in time preferences, investment opportunities and risk preferences among different households, firms and other economic agents, taking into consideration problems of moral hazard, adverse selection and incentives in the face of asymmetric information (Dietrich 1996; Stiglitz 1989). Financial markets improve the utilization of capital and productive efficiency of the whole economy and enhance the international competitiveness of the economy by screening and monitoring "investment projects," managing and diversifying various kinds of risks, and designing contracts and institutional arrangements to address the problems of adverse selection and moral hazard.

The special character of finance – with its attendant risk management, and the screening and monitoring roles of the financial system – has important implications on the use of alternative financial instruments and the development of financial institutions. First, informal finance is likely most prevalent in the early stages of economic development because traders and moneylenders have greater and longer access at less cost to local- and person-specific information needed for effective screening and monitoring. Second, within the formal financial sector, banks rather than the securities or bond markets are the major sources of financing because debt contracts with fixed repayment schedules prevail over equity financing in cases where there are productivity ı sks, asymmetry of information between lenders and borrowers, and costly monitoring processes (Berthelemy and Vasoudakis 1996). Third, among banks, universal banks (which can hold shares of enterprises and are represented in the management boards of enterprises) may have advantages over regular banks in attenuating the problems of asymmetry of information and the conflict of interest between shareholders and lenders (Berthelemy and Varoudakis 1996). And fourth, as the information base and analytic capacity deepens within the financial institutions and external specialized information gathering and analysis institutions (e.g., rating agencies) in a country develop, and as the secondary market for financial instruments grows, the distinct advantages of equity financing (especially the sharing of risks between entrepreneurs and providers of credit) and bonds (which allow firms to pursue long-term projects) become more salient. As a result, securities and bond markets grow in importance, although not to the same degree as banks (see Stiglitz 1989). In short, financial development is a long process of building institutions, deepening the information base and analytic capacities, and developing niches in value creation in financial services through a widening array of instruments, arrangements and contracts in response to the changing environment and needs of firms, households and other economic agents.

However, financial markets are particularly vulnerable to economic booms and bust because of the intertemporal nature of financial transactions, the leveraged nature of banks (with their liabilities greater than their net worth), and the problems of asymmetric information and imperfect information markets. Indeed, financial institutions are very much in the center of such booms and busts. Investment boom means sharply higher demand for credit. Where prudential regulations and monitoring of banks by the government are not effective, credit expansion during an investment boom increases the fragility of banks and the financial system. This is especially the case where domestic credit expansion is facilitated by, or complemented by, foreign borrowing by the banks themselves or domestic firms, respectively, under generally fixed exchange rate regimes. At the same time, the highly leveraged nature of banks makes them susceptible to loss of confidence by depositors (the banks' major source of external funds) and bank runs. Thus, in many cases, economic crises are preceded (if not triggered) by bank runs and financial crises. In short, the same characteristics of the financial system and financial transactions that require a long period of time in order for the financial system to deepen, widen and strengthen are also the same characteristics that make the financial system vulnerable to and intimately involved in economic booms and busts and financial crises.

The discussion above indicates that, because of the inherent imperfections of the financial market, the government plays a critical role in the management and development of the financial sector. Three major areas of concern stand out. The first is the management of the macroeconomy consistent with the long-term deepening of the financial system. The second is the development of competitive and prudential conditions of the various interacting financial submarkets for a more efficient and stable financial system. And the third area of concern is the strengthening of prudential regulation and supervision as well as the regulatory institutions themselves.

The Philippine economy, 1980-97. The Philippines experienced an economic roller coaster ride during the 1980s and the 1990s. The Philippine economy went from a tailspin in the early 1980s to a deep recession during 1984-85, recovered gradually through the latter 1980s, stagnated during 1991-92 and registered a solid recovery from 1994 to the first half of 1997 but is expected to slow down in 1998 because of the current regional currency and financial turmoil.

After a strong growth in the 1970s, the Philippines slid into a debt and economic crisis in the early 1980s. Gross national product (GNP) progressively decelerated during 1981-83 and then declined by 7.1 percent in 1984 and another 4.1 percent in 1985. The progressive deterioration of the Philippine economy has many roots, including the following: the external debt-financed investment boom of the latter 1970s was inefficiently allocated as indicated by a high and rising incremental capital-output ratio, the sharp deterioration in the country's external terms of trade, the largely inward-oriented trade and industrial policy that made the economy increasingly vulnerable to external shocks, a deepening crisis in the financial sector that shook depositors' confidence, a worsening external debt structure whereby short-term external debt reached 25 percent of total external debt and more than 100 percent of the country's gross international reserves by 1981, and the heightened political uncertainty arising from the assassination in 1983 of the then leading political opposition leader. The moratorium on external debt payments in October 1983 led to a cut-off in external financing and, given the country's low level of international reserves, necessitated import compression that led to the decline in overall economic activity in 1984-85. Per capita income fell by about 20 percent during 1982-86, thereby providing an important underpinning to the political upheaval and eventual change in the government administration in 1986 (Intal and Pante 1991).

The Philippine economy recovered during the 1986-90 period, with GNP growing at an average rate of 3.7 percent per annum. The economic recovery was aided by the improvement in the external terms of trade, the restructuring of foreign loans and increase in the level of foreign aid, the improvement in investor sentiment and rise in the investment rate, and an initial government pump priming program that saw an increase in the government deficit during the period. However, the recovery led to sharply higher imports and rising trade and current account deficits. In addition, the domestic financing of the government deficit, together with the large losses of the Central Bank amid a weak domestic financial sector, led to rising inflationary pressures and the crowding out of the private sector from the domestic credit market. The fragile domestic macroeconomic environment was aggravated by major domestic political and natural shocks, especially the December 1989 coup attempt and a major earthquake in 1990. The government undertook a tight macroeconomic policy and imposed import levies in order to prevent turning the brewing balance-of-payments problem into another full-blown crisis. Moreover, another major natural disaster struck the country in 1991 (i.e., the eruption of Mt. Pinatubo and the consequent problem of lahar or pyroclastic flows in the country's erstwhile rice bowl) while the uncertainties in the international oil market resulting from the Gulf War provided an additional adverse external shock to the oil-importing country. As a result, the Philippine economy stagnated during 1991-92.

The Philippine economy recovered strongly starting in 1994. Because the Philippines had been undertaking a wide range of policy and institutional reforms since the latter half of the 1980s, the economic recovery was underpinned by strengthening macroeconomic and structural foundations. GNP growth averaged about 5.9 percent per year from 1994 to the third quarter of 1997 as compared to only 2.2 percent per annum during 1990-93. Merchandise exports grew in real terms at an average of 13.2 percent per annum during 1994-97, more than twice the 5.2 percent average growth rate per annum during 1990-93. The investment rate increased significantly from 19.8 percent in 1991 to 26.9 percent during the first semester of 1997. The acceleration in the economic activity occurred in the context of a fiscal surplus of 0.6 percent of GNP during 1994-96 as against a fiscal deficit of 2.1 percent of GNP during 1990-93. In addition, the inflation rate declined drastically from 18.7 percent in 1990 to 4.7 percent during the first seven months of 1997 (see Intal and Basilio 1997). The recent currency and economic turmoil in the region has clouded growth prospects for 1998 although the country has had greater success so far in weathering the current regional currency and financial turmoil compared to Thailand, Indonesia and Korea.

II. FINANCIAL REFORM: IMPERATIVES AND REGULATORY AND INSTITUTIONAL CHANGES

Imperatives. The Dewey Dee Affair[1] in January 1981, which marked the start of the crisis in the country's financial sector, can arguably be considered also as the start of the gathering economic storm in the country that culminated in a deep economic recession during 1984-85. The financial crisis, which contributed substantially to the emergence of the economic crisis, deepened over the course of the economic crisis, thereby exacerbating the economic crisis itself and posing constraints to the economic recovery process (Nascimento 1991). The financial crisis heightened the imperative for deepening the financial reform process in order to address regulatory and institutional weaknesses in the sector. The financial reform program, initiated

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1. Dewey Dee was an industrial magnate who borrowed heavily in the commercial paper market and fled the country in January 1981, leaving several millions of debt in pesos. This led to insolvencies of investment houses and finance companies with significant exposures on him. Small depositors shifted their funds to commercial banks. The Dewey Dee Affair triggered the collapse of the commercial paper market in 1981 (Nascimento 1991; Bautista 1992).

earlier than the financial crisis, was implemented over the course of the 1980s and the 1990s. Financial reforms in the Philippines did not start under crisis conditions but gathered momentum in the aftermath of the crisis.

The initial impetus for reforms was the rapid expansion and apparent fragmentation of the banking system during the 1950s and 1960s in part because of the passage of various banking laws. The expansion of the banking system and the emergence of new financial intermediaries posed growing challenges to the Central Bank (CB) because the regulatory system was still rudimentary: e.g., minimum initial capital was not enforced except as a precondition for availment of the CB rediscount window; monitoring and examination of bank operations were confined to compliance with the 15 percent risk-asset solvency ratio and required reserves (Bautista 1992).

A Joint IMF-CB Banking Survey Commission was established in 1971 to review the overall system and make recommendations. Based on the Commission's recommendations, a number of amendments were incorporated into the General Banking Act and the Central Bank Act in 1972-73. Apart from a redefinition of types of financial institutions and a clarification of rules and incentives as they relate to Central Bank's authority and responsibility, the amendments included the elimination of the pursuit of economic growth as part of CB's responsibilities and the prohibition on new banks. In addition, the Central Bank allowed the entry of foreign banks primarily through equity participation in domestic banks and the creation of offshore banking units. An IMF-IBRD Financial Sector Survey was also conducted in 1979. Among the recommendations of the 1979 survey were the deregulation of interest rates and the introduction of "universal" banking to reduce the fragmentation of the financial system. The recommendations began to be implemented in 1980 with the gradual liberalization of interest rates, the adoption of universal banking and the increase in minimum capitalization of banking institutions, with the highest level of minimum capitalization imposed on "universal" banks. (See World Bank 1988.)

The financial crisis, however, brought out the serious deficiencies of the Philippine financial system. Central Bank supervision of banks was weak, encouraging loose banking practices. Capital requirements, defined as the ratio of net worth to risk assets, were reduced from 15 to 10 percent in 1973 and, after 1980, even to 6 percent with the approval of the Monetary Board. The Central Bank also relaxed its rules by 1980 regarding credit accommodation to directors, officers, stockholders, and related interests (DOSRI). Given the interest rate regime which encouraged debt-financed investments together with the prevalence of political accommodation in lending, the relaxation of rules (and the weak enforcement of such rules) led to substantial lending to DOSRI that significantly contributed to bank failures and weakening of the financial sector. Political accommodation in bank lending was particularly acute in the two largest government banks, the Philippine National Bank (PNB) and the Development Bank of the Philippines (DBP), leading to their technical insolvency at the height of the financial crisis which consequently required the transfer of huge nonperforming loans to the government to assist their rehabilitation. (See Nascimento 1991 for details.)[2]

The 1980 reforms did not include Central Bank rules on the treatment of overdue loans, the provisioning of debt and the examination of deposit transactions by CB examiners. This contributed to the worsening of the financial crisis. In addition, the nonuniform supervisory rules over money market operations by the Central Bank (which had jurisdiction over nonbank quasi-banks and monitored transactions on a "with recourse" basis) and the Securities and Exchange Commission (which supervised other participants and monitored transactions on a "without recourse" basis) led nonbank quasi-banks to circumvent CB regulations and monitoring of their money market operations, including their practice of issuing less-than-prime commercial papers. These practices led to the collapse of the commercial paper market in 1981 triggered by the Dewey Dee Affair.

2. This paragraph and the succeeding paragraph are based on Nascimento (1991).

The Central Bank also expanded its developmental functions in the 1970s by overseeing the implementation of a number of selective credit programs to target or favor industries and their funding through the rediscount window. The liberal access to the CB rediscount window by the rural banks ultimately undermined the rural banking system because the banks became largely conduits of cheap government funds, neglecting the mobilization of deposits and the judicious management of loan portfolios. When arrearages mounted in the late 1970s and the access to the rediscount window became restrictive, many rural banks became insolvent. (See Bautista 1992.) Similarly, the Central Bank's relaxation of foreign capital controls, especially with the access of domestic residents to dollar loans from the foreign currency deposit units of banks, encouraged overborrowing in the face of negative real foreign interest rates in the late 1970s and negative real domestic lending rates in 1979 and 1980. The mounting external debt, increasingly short term in maturity, eventually led to the debt and economic crisis in the country in 1983-85.

Reforms. The most important reforms in the financial sector cover important areas such as institutional reforms and the rehabilitation of the financial system, interest rate reforms and the liberalization of the foreign exchange market. (See Bautista 1992; Lamberte 1993; and Lamberte and Llanto 1993 for details.)

Institutional reforms. In the light of several bank failures in the 1980s, the government toughened prudential regulations during the late 1980s and early 1990s. These include regulations on single borrower limit, limits on DOSRI loans and interlocking directorship, capital adequacy, compliance with the minimum risk-asset ratio, and provisions for loan loss or doubtful accounts.

(a) *Single Borrower Limit.* The single borrower's limit of 15 percent of the unimpaired capital and surplus of banks was imposed through the 1980s although the limit has been increased to 25 percent recently. However, contingent liabilities have been included in the single borrower limit. The regulation limits the aggregate ceiling of the guarantee to 50 percent of a bank's unimpaired capital and, with some exceptions, surplus standby letters of credit.

(b) *DOSRI Loans/Interlocking Directorship.* DOSRI loans should not exceed at any one time the outstanding deposits and book value of paid-in capital of the borrowing bank officer in the lending bank. In addition, unsecured credit accommodation should not exceed 30 percent of total credit accommodation to the borrowing office. Also, the borrowing official must sign a waiver of his right to confidentiality of deposits in case the loan is secured by assignment of deposits. Similarly, there shall be no concurrent officership of a bank and a nonbank financial institution or of two banks if the majority interest is held by one bank, without the approval of the Monetary Board. These rules are meant to prevent insider abuse, which contributed to bank failures in the early 1980s.

(c) *Capital Adequacy.* The minimum capital requirement for banks was steadily increased over time to help improve the stability of the banking system. For example, the minimum capital requirement for universal banks was increased from 500 million pesos in 1980 to 1.0 billion pesos in 1990, 2.5 billion pesos in 1995 and 4.5 billion pesos in 1996 (to be met by 1999). Similarly, the minimum capital requirement for ordinary commercial banks was steadily increased from 100 million pesos in 1980 to 500 million pesos in 1990, 1.25 billion pesos in 1995 and 2.0 billion pesos by 1998 or so. Thrift banks were also required to significantly increase their minimum capital from 20 million pesos in 1980 to 150 million pesos currently for those with headquarters in Metro Manila. The rise in capital requirement, while an entry barrier, helped banks weather financial volatility and contributed to greater confidence in the stability of the system. Historically, the Central Bank has strongly encouraged bank mergers as a way of meeting the rising minimum capital requirement. One reason for this is that Philippine banks are small compared to their counterparts in the East Asia region.

(d) *Audit and Reporting Requirement.* The Central Bank now requires an annual financial audit of banks by independent auditors. Banks are required to maintain complete records of all pertinent loan documents and to make them available for examination/inspection. The Central Bank established a monitoring and review system in the management of loan portfolio and other risk assets. In response to the recent currency and financial turmoil in the region, the Monetary Board raised the required loan loss reserves. Also, the Central Bank[3] has proposed new disclosure rules requiring banks to make periodic reports that are more detailed than current reports of their loan exposures (including nonperforming loans, restructured loans, DOSRI loans, loan loss provisions for specific accounts, etc.) starting March 1998 to provide authorities advance warning on the health of the financial institutions (*Philippine Daily Inquirer*, January 1, 1998, p. B1). All of the increasingly more detailed and stringent reporting and disclosure rules help improve the transparency of the financial system.

Rehabilitation and restructuring of the financial system. Apart from the strengthening of prudential regulations, the government undertook the rehabilitation and restructuring of the financial sector during the 1980s and early 1990s. PNB and DBP, which accounted for nearly 50 percent of all banking assets, became insolvent in 1985 due to a host of reasons including the predominance of politically motivated loans, poor internal controls, the takeover of troubled corporations, and the sharp devaluation of the peso (Nascimento 1991). The rehabilitation of the two institutions effectively involved a government bailout, as most of their nonperforming assets were transferred to the national government at the same time that the national government assumed the banks' nongovernment deposit liabilities (which eventually formed part of government debt). The banks were recapitalized, restructured and streamlined with sharply lower assets after the transfer of the nonperforming assets to the national government. The rehabilitation programs were successful, with PNB turning in one of the highest rates of profitability and eventually becoming privatized successfully (with the national

3. With the Central Bank's rehabilitation in 1993, its name was changed to Bangko Sentral ng Pilipinas (BSP). In this paper, Central Bank and BSP are used interchangeably especially in the discussion of recent events and the policy recommendations of the paper.

government remaining a minority equity player) and the DBP strengthening its niche in wholesale banking and overseeing the industry-related credit guarantee (e.g., Industrial Guarantee and Loan Fund) and specialized credit programs of the government (e.g., ASEAN-Japan Development Fund).

The government also undertook a rehabilitation program for the battered rural banking sector in 1986 through a capital buildup program. Nearly one-half of the licensed rural banks were approved for capital buildup under the program. But perhaps the most important rehabilitation program undertaken by the government was the rehabilitation of the Central Bank itself. The Central Bank generated losses in its operations, specifically from forward cover losses, losses from swap arrangements, and interest rate losses during the 1980s. The CB losses made macroeconomic manage-ment much more difficult (Lamberte 1993; Vaez-Zadeh 1991). The rehabilitation of the Central Bank was implemented through the enactment of a new Central Bank Act of 1993 creating an independent monetary institution with a large capitalization. In addition, problem assets of the old Central Bank were transferred to a separate body for liquidation. The new Central Bank, now called Bangko Sentral ng Pilipinas (BSP), began to register surpluses, and this was the expected normal state of affairs for an institution with monopoly power over monetary creation.

Liberalization of bank entry and branching. In contrast to the restrictive policies of the 1980s, the government liberalized bank branching and entry into the banking system during the 1990s. In 1983, commercial banks and thrift banks were required to purchase 5-year Central Bank Certificates of Indebtedness; the following year, bank branching was suspended in so-called heavily branched, overbranched and ideally underbranched areas. It was in 1989 that restrictions on new branches in rural areas were lifted. Finally, in 1993, banks were allowed to open branches anywhere so long as requirements on capital adequacy, liquidity, profitability and soundness of management were met (Paderanga 1995).

New commercial banks were also allowed. One process was through the approval of a request for conversion of a thrift bank into a commercial bank as long as the requirements of commercial banks were met. But the most important policy change with respect to bank entry was the liberalization of entry of a number of foreign banks (in addition to the existing four) in 1994, either as fully-owned full-service branches (of which only 10 banks were allowed), through equity purchase in an existing bank, or the establishment of a joint venture between foreign and local groups.

Interest rate reforms. The interest rate policy regime in the Philippines was for a long time shaped by the Usury Act of 1916 which set ceilings on secured and unsecured loans. Accordingly, the Central Bank also set ceilings on deposit interest rates in 1956. It was only in 1976 that the Usury Act was abolished. In the 1970s, the Central Bank adjusted administratively the level and structure of interest rates. In 1976, the Central Bank also set interest rate ceilings on deposit substitutes in order to prevent the flow of financial savings deposits to deposit substitutes. Nevertheless, in response to the recommendation of the IMF-World Bank Financial Sector Study of 1979, the Central Bank started easing the ceiling rates and eventually removed them. All bank rates, except for short-term loans and purchases of short-term receivables, were deregulated in 1981. Short-term lending rates were deregulated at the start of 1983.

Related to the interest rate reform is the reform of the Central Bank rediscount policy. Hitherto, the rediscount window was a source of subsidized credit to favored sectors through higher rediscount values and lower rediscount rates compared to less favored sectors. With the overhauling of the rediscount facility, all rediscount values and rates were made uniform. Moreover, the rediscount rate was aligned to the market rate, based on the Manila Reference Rate (MRR) 90 which is a weighted average of interest rates on promissory notes and time deposits with 90-day maturity. Also related to this was the transfer of directed credit and guarantee schemes from the Central Bank to other institutions, specifically to the Development Bank of the Philippines for the Industrial Guarantee and Loan Fund and to the Land Bank of the Philippines for the Agricultural Loan Fund.

With the interest rate and CB rediscount policy reforms, interest rates are now, in principle, market-determined. This shows that, in effect, the government influenced the level and structure of interest rates through indirect measures and no longer through direct administrative mechanisms.

Foreign exchange market reforms. Up until the 1980s, the foreign exchange market and foreign exchange transactions were highly regulated. For example, exporters could retain at most 2 percent of their dollar proceeds; invisible foreign exchange receipts needed to be converted into pesos in banks within 3 days; limits were set on foreign exchange purchases for travel, educational and medical expenses, and support of dependents abroad; outward investment by residents was not allowed; repatriation and remittance of investments had to be staggered over 3-9 years with Central Bank approval; etc. The foreign exchange market was effectively segmented into three submarkets, with off-floor trading among banks prohibited and the parallel market considered to be as large as the official customer market between banks and their customers. (See Lamberte and Llanto 1993.)

The liberalization of the foreign exchange market during the early 1990s involved the elimination of the restrictions in the current account and sharply reduced regulations on inward and outward capital flows. Thus, for example, exporters can now retain 100 percent of their foreign exchange earnings; there are no limits on foreign exchange purchases; there is full and immediate repatriation of investment without CB approval for foreign investments duly registered with the Central Bank or custodian bank; etc. At the same time, the Central Bank lifted the prohibition on off-floor foreign exchange trading (Lamberte and Llanto 1993). The reforms have transformed a highly regulated foreign exchange market with significant controls on capital flows into a highly deregulated one, with the country having a virtually open capital account.

III. THE MICROECONOMICS OF FINANCIAL REFORM AND DEVELOPMENT

Structure of the Philippine financial sector. The Philippine (formal) financial sector covers a wide range of bank and nonbank financial institutions. The banking sector consists of commercial banks (both universal banks and regular commercial banks), thrift banks (savings banks, private development banks, and stock savings and loan associations), specialized government banks (until 1996 when all had been absorbed into the commercial banks group), and rural banks. The nonbank financial institutions include investment houses, financing companies, securities dealers and brokers, pawnshops, fund managers, lending investors, nonstock savings and loan associations, pension funds and insurance companies. The nonbank financial institutions are under the supervision of either the Securities and Exchange Commission, the Central Bank or the Insurance Commission.

The banking system accounts for about three quarters of the Philippine financial system, excluding private insurance companies (Table 1). Within the banking sector, commercial banks have increased their share of total bank assets during the period, from less than three-quarters in the early 1980s to nearly five-sixths in the early 1990s. Among nonbank financial institutions, the government institutions, primarily the two social security institutions (GSIS and SSS) and a home mortgage institution (HMDF), became dominant, accounting for nearly two-thirds of the total assets of nonbank financial institutions by 1995.

Financial deepening. The development of the financial sector has not been smooth. Table 1 shows that the absolute level of total assets of the system declined during the mid-1980s because of the financial and economic crisis at that time. The two most important government financial institutions, PNB and DBP, were rehabilitated but with a much lower asset base. As the table indicates, there was a significant decline in the ratio of total assets of the financial sector (especially the banking sector) to GNP during the early to mid-1980s. The share inched slowly during the late 1980s but it was during the 1990s that the share significantly picked up to recover to its 1980 level by 1995.

TABLE 1
Total Assets of the Financial System
(Amount in billion pesos; share in percent)

	1980		1985		1987		1990		1995		1996	
Institution	**Amount**	**Share**	**Amount**	**Share**	**Amount**	**Share**	**Amount**	**Share**	**Amount**	**Share**	**Amount**	**Share**
I. Banking System	188.8	76.2[a/]	395.2	78.6[a/]	330.4	73.1[a/]	609.5	(76.1)[a/]	1595.6	78.6[a/]	2109.5	82.13[a/]
Commercial Banks	138.4	(73.3)[b/]	283.3	(71.7)[b/]	274.5	(83.1)[b/]	539.7	(88.5)[b/]	1347.4	(84.4)[b/]	1876.2	(88.94)[b/]
Thrift Banks	10.6	(5.6)[b/]	15.1	(3.8)[b/]	19.6	(5.9)[b/]	37.6	(6.2)[b/]	143.3	(9.0)[b/]	185.1	(8.77)[b/]
Specialized Gov't Banks	34.2	(18.1)[b/]	88.0	(22.3)[b/]	26.3	(8.0)[b/]	18.5	(3.0)[b/]	68.2	(4.3)[b/]	0.2	(0.01)[b/]
Rural Banks	5.6	(3.0)[b/]	8.8	(2.2)[b/]	10.0	(3.0)[b/]	13.7	(2.2)[b/]	36.7	(2.3)[b/]	48.0	(2.28)[b/]
II. Nonbank Financial Institutions	58.9	23.8[a/]	107.3	21.4[a/]	121.4	26.9[a/]	191.8	23.9[a/]	434.4	21.4[a/]	459.1	17.87[a/]
Government NBFI	20.1	(34.1)[c/]	60.60	(56.5)[c/]	67.0	(55.2)[c/]	107.8	(56.2)[c/]	277.2	(63.8)[c/]	277.7	(60.49)[c/]
Private NBFI	38.8	(65.9)[c/]	46.70	(43.5)[c/]	54.3	(44.7)[c/]	84.0	(43.8)[c/]	157.2	(36.2)[c/]	181.4	(39.51)[c/]
Grand Total	247.7		502.5		451.8		801.3		2030.0		2568.6	
Percent share to GNP		101.6		90.4		67.4		74.3		103.6		112.5

Notes: [a]Percent share to grand total
[b]Percent share to banking system total
[c]Percent share to NBFI total

Sources of Data: Central Bank Statistical Bulletin, 1988 (for 1980, 1985, 1987)
Central Bank Statistical Bulletin, 1995 (for 1990, 1995)

The pattern of development in total assets is also echoed in the share of the financial sector to gross domestic product. At current prices, the share of the sector was 3.9 percent in 1980, dropping to 3.0 percent in 1985, and then inching back up to 4.0 percent in 1990. The share was about 4.2 percent in 1995 but this share rose significantly to 4.8 percent by 1997 (in the first three quarters), reflecting the sharp expansion of the financial sector during the past three years.

The extent of financial deepening is indicated in Table 2. The real value of narrow money and broad money (with or without deposit substitutes) expanded significantly during the late 1970s, and, for broad money, into 1983. The levels declined during 1984-85 but recovered and continued expanding afterwards. The economic crisis in 1993-95 resulted in some disintermediation as indicated by the reduction in the shares of narrow and broad moneys to GNP. It was not until 1989 when the M2/GNP ratio recovered to the peak obtained in the early 1980s; for the M3/GNP ratio, the full recovery to earlier highs occurred only in 1993. The ratios rose significantly during the past three years to reach 38 percent of GNP by 1996, reflecting the "boom" in the financial sector. Nevertheless, despite the rise in the ratio of broad money to GNP in recent years, it may be noted that the shares as of the third quarter of 1997 for the Philippines are still lower than the ratios for Indonesia, Thailand, Taiwan, and even India in 1990 (White 1995).

An indication of the strengthening of the financial sector is the secular reduction in the reliance of financial institutions for sources of funds on borrowings, and their corresponding greater emphasis on deposits. For example, commercial banks relied for nearly one-fourth of their funds on borrowings during much of the 1970s and early 1980s for only less than one-tenth in the early 1990s. The decline in reliance on borrowings was particularly drastic for rural banks, from more than 50 percent of their funds in the 1970s to only about one-eighth in the early 1990s. This drop in the share of borrowings to total funds, especially for rural banks and commercial banks, is in contrast to the sharp rise in the share of deposits as a source of funds for

TABLE 2
Indicators of Financial Deepening, 1975-96

Year	Real Value of Monetary Aggregates* (At constant 1988 prices; in billion pesos)			Percent Share to GNP		
	Money Supply	Broad Money	Domestic Liquidity	Money Supply	Broad Money	Domestic Liquidity
1975	53.3	99.3	149.5	9.6	17.8	26.8
1976	57.1	117.9	169.4	9.6	19.8	28.5
1977	64.2	140.1	189.3	10.3	22.5	30.4
1978	67.8	161.6	207.7	10.1	24.2	31.1
1979	64.2	154.9	195.9	9.2	22.3	28.2
1980	65.0	159.9	195.7	9.2	22.8	27.9
1981	60.0	167.4	209.6	8.4	23.4	29.3
1982	54.4	182.2	220.6	7.5	25.1	30.4
1983	68.6	204.4	240.4	9.0	26.7	31.4
1984	47.2	155.7	171.4	6.6	21.9	24.1
1985	40.1	140.7	150.3	6.5	22.6	24.2
1986	47.9	156.6	162.1	7.2	23.4	24.2
1987	57.1	172.4	176.4	7.8	23.6	24.1
1988	59.7	195.9	198.4	7.5	24.7	25.1
1989	70.0	223.8	226.3	8.6	27.5	27.8
1990	69.5	232.1	234.6	8.3	27.6	27.9
1991	66.7	226.4	228.4	8.0	27.3	27.5
1992	67.7	230.6	232.7	8.1	27.6	27.8
1993	75.1	268.5	269.4	8.9	31.9	32.0
1994	78.2	310.3	312.7	8.8	34.7	35.0
1995	88.0	359.6	362.6	9.4	38.6	38.9
1996	97.5	384.2	387.1	9.7	38.3	38.6

* Deflated by CPI (1988=100)
Sources of Data: PIDS Data and Information Resource Program
BSP Selected Philippine Economic Indicators
NSCB National Income Accounts

the institutions (Table 3). For commercial banks, the rise was from less than one-half in the 1970s and early 1980s to about two-thirds by the early 1990s. For rural banks, the rise in the share of deposits as a source of funds was from less than one-third during the 1970s and early 1980s to about three-fifths during the early 1990s. Among the financial institutions, it is the savings banks that have preponderantly relied on deposits for

TABLE 3
Share of Deposits to GNP and Total Funds By Institution 1975-95 (In percent)

Year	Share of Deposits* to GNP	Share of Deposits to Total Funds: Phil. Banking System	Comm'l Banks	Thrift Banks	Savings Banks	Private Dev't Banks	Rural Banks	Specl'd. Gov't Banks
1975	25.89	40.29	40.75	75.89	83.83	54.64	24.67	35.42
1976	27.49	43.13	45.68	75.97	86.66	55.90	28.16	28.74
1977	29.43	43.97	56.73	80.79	88.23	55.84	38.84	20.70
1978	32.64	44.08	48.37	82.39	90.19	54.82	32.01	18.75
1979	34.30	44.44	48.41	82.09	89.98	55.34	32.18	18.68
1980	36.81	46.23	50.48	75.72	83.18	47.79	30.75	20.85
1981	35.52	43.57	46.97	71.94	85.76	45.97	31.64	24.81
1982	38.09	43.24	47.76	74.05	86.70	54.80	32.24	19.23
1983	39.17	42.96	48.53	69.40	80.54	53.61	33.54	12.89
1984	30.20	38.71	47.35	46.53	39.87	48.26	32.51	6.74
1985	29.57	42.36	51.57	68.74	82.76	53.26	35.10	8.13
1986	27.95	57.52	59.64	72.79	85.97	57.14	41.38	33.31
1987	26.55	59.09	61.88	75.92	87.04	61.50	46.67	21.94
1988	28.63	62.88	65.38	74.91	86.58	59.14	48.80	27.18
1989	31.72	62.27	64.25	74.83	83.86	56.24	50.99	23.12
1990	33.30	60.64	62.45	71.97	81.52	54.62	52.08	30.37
1991	33.70	62.42	64.99	71.55	79.30	53.05	54.82	32.49
1992	36.32	63.00	66.02	67.31	77.64	45.13	57.60	40.35
1993	43.29	64.83	67.85	67.89	75.42	52.15	60.19	48.30
1994	46.49	64.31	68.40	61.05	62.61	54.83	63.09	41.51
1995	52.46	63.40	65.11	64.76	66.33	60.08	64.49	49.80

*Total deposit liabilities of the Philippine Financial System
Sources: Bangko Sentral ng Pilipinas, Philippine Financial System Factbook
NSCB National Income Accounts

their funds, accounting for at least three-quarters (more often, more than four-fifths) of total funds during much of the past two decades.

The rising importance of deposits as a source of funds for the banking institutions is reflected in the rising real value of total deposits and in the share of deposits to GNP during the past two decades. With the exception of the decline in the real value of deposits during 1984-85, the real value of total deposits has increased over time and the share of total deposits to GNP has correspondingly increased secularly: from 33 percent in 1978 to 38 percent in 1982, 27 percent in 1987, 43 percent in 1993 and

53 percent in 1995. The sharp rise in the ratio of total deposits to GNP during 1994-95 is worth noting because this coincided with the liberalization in bank branching and entry into the banking sector, the sharp expansion in the use of banking technologies, especially automated teller machines, and the greater variety of offerings of financial products in addition to the improvement in the economy which saw an increase in the saving rate. The rising financialization of savings is also indicated by the rising ratio of the increase in total deposits to the gross saving. This ratio has increased from a range of 33-35 percent during 1988 to 1992 to an average of 54 percent during 1993-95.

Expansion of financial institutions. The significant pickup in the total assets of the financial system during the 1990s is also reflected in the substantial rise in the number of offices of the financial institutions. The number of offices hovered between 5,290 and 6,000 during 1980-86, rose to 7,349 by 1990 and around 10,000 in 1993 but jumped by more than 60 percent in the 1990s to reach 16,314 by June 1997 (Table 4). The sharpest increase in absolute level occurred during 1994-96 in response to the liberalization in bank branching, the opening up of new banks, and the improvement in the economy. The rise in the number of offices is across-the-board on all forms of banking and nonbank financial institutions. However, drawing from the pattern of growth of banking offices by region, the financial institutions have been expanding more than proportionately in the Metro Manila area, the fast growing Region IV (specifically the so-called CALABARZON area), and Central Visayas (especially Cebu). The share of Metro Manila to the total number of banking offices increased from about 30.5 percent in 1984 to 34.5 percent in 1995 while the share of Region IV increased from 14.1 percent in 1984 to 16.0 percent in 1995. Central Visayas' share in 1995 was 6.7 percent, up from 6.1 percent in 1984.

The sharp expansion of the banking system in the past two years has been bolstered by the expansion in the presence of foreign banks in the domestic banking system as a result of the limited opening up of the domestic banking system to new foreign

TABLE 4
Number of Offices By Institutional Group, 1976-97
End of period

Institution	1976	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997a/
Phil. Financial System																			
Head Offices		2466	2554	2509	2601	2767	2758	3347	3697	3904	4006	4192	4498	4627	5134	5648	6163	7458	7746
All Offices		5004	5290	5401	5674	5858	5637	5979	6349	6805	7135	7349	7855	8909	9938	11073	12438	15486	16314
Banking Institutions																			
Head offices		1209	1214	1132	1122	1098	1055	1024	994	982	962	940	919	920	912	920	937	961	987
All Offices		3419	3661	3718	3861	3829	3632	3614	3547	3562	3588	3638	3739	4296	4657	5096	5569	6332	6745
Commercial Banks																			
Head offices	31	32	33	34	34	34	30	30	29	29	29	30	31	33	33	34	46	49	52
All Offices	1107	1501	1738	1496	1904	1922	1744	1766	1727	1746	1765	1813	1923	2381	2694	2924	3221	3647	3809
Thrift Banks																			
Head offices	95	144	140	137	136	121	118	116	112	110	106	103	101	98	97	100	99	108	113
All Offices	392	671	639	677	704	650	671	665	658	664	675	653	663	718	780	821	925	1171	1341
Private Dev't Banks																			
Head offices	33	43	44	45	45	43	45	43	42	41	41	40	38	37	37	37	37	39	40
All Offices	98	154	182	202	218	209	225	213	205	205	206	211	202	218	250	265	310	432	534
Savings & Mortgage Banks																			
Head offices		10	9	8	8	8	7	7	8	8	8	7	7	7	8	12	12	19	24
All Offices		266	189	195	209	211	226	231	243	250	277	270	285	316	334	347	367	428	472
Rural Banks																			
Head offices	805	1030	1038	958	949	940	904	875	850	840	824	804	784	787	780	784	790	804	822
All Offices	887	1155	1168	1103	1152	1157	1117	1083	1058	1048	1043	1045	1063	1140	1195	1274	1346	1514	1595

Table 4 (CONTINUED)

Institution	1976	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997[a]
Specialized Gov't Banks																			
Head offices	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0[b]	0[b]
All Offices	73	92	116	97	97	100	100	100	104	104	105	127	142	184	205	225	251	0[b]	0[b]
Non-Bank Fin'l Intermediaries																			
Head offices	1056	1178	1260	1295	1398	1590	1621	1897	2271	2631	2860	2984	3190	3707	4222	4728	5226	6497	6759
All Offices	1259	1475	1549	1601	1731	1949	1922	2283	2719	3158	3465	3629	3954	4612	5282	5977	6849	9154	9569

[a]as of June

[b]Specialized Government Banks have been consolidated as Commercial Banks. Development Bank of the Philippines became a commercial bank on February 1996 while Al-Amanah Islamic Investment Bank of the Philippines became a commercial bank on June 1996.

Source: Bangko Sentral ng Pilipinas

banks. Whereas there were only 4 foreign full service banks (not representative offices or offshore banking units) in operation in the country for much of the postwar period, the controlled liberalization of entry of foreign banks since 1994 has led to the increase in the number of banks operating in the country to 17 by the third quarter of 1997. The share of foreign banks to the total assets of the banking system, which declined secularly from 10.2 percent in 1984 to 6.1 percent in 1995, jumped significantly to 14.3 percent by September 1997.

Financial sector stability and competitive environment. One very important effect of the series of increases in minimum capital requirements imposed on banks during the past several years is the relatively robust capital-adequacy ratios compared to the BIS (Bank of International Settlements) requirement. The capital-adequacy ratio defined as the ratio of net worth to risk assets, stayed within the range of 16.9 percent to 20.2 percent from 1992 to June 1997 (Table 5). This ratio is twice the BIS requirement of 8 percent. It is likely that a major reason why the Philippine banking system has been able so far to weather the current currency and financial turmoil in the region is the robust capital-adequacy ratio of the Philippine banking system.

The rising minimum capital requirements for banks is in principle a barrier to entry. For sometime also, the predominant bias of the Central Bank was for a few but large banks. Nevertheless, as Table 4 indicates, the higher minimum capital requirement was not an effective entry barrier inasmuch as the number of commercial banks shot up from 31-34 during much of the 1980s and early 1990s to 46 in 1995 and 52 as of June 1997.

There are also some indications that the liberalization in the entry of banks has increased the competition for deposits. Table 5 shows the share of the five largest commercial banks to the total deposits of commercial banks, either including or excluding PNB. Including PNB, the share did not rise significantly over time; excluding PNB, the share rose dramatically. The rise in the share of the top five banks, excluding PNB, in total deposits during the 1980s is likely the result primarily of the "flight to

TABLE 5
Capital Adequacy Ratio and Share of Five Largest Commercial Banks to Total Deposit of Commercial Banks (In percent)

Year	Capital-Adequacy Ratio[a]	Share of Five Largest Banks	
		Incl. PNB	Excl. PNB
1975	...	51.1	22.3
1980	...	46.9	27.4
1985	...	48.7	39.0
1990	...	53.7	44.0
1991	...	52.7	40.2
1992	20.24	52.0	39.8
1993	19.19	52.8	39.6
1994	18.55	52.0	42.3
1995	18.79	50.3	41.6
1996	16.84	...	...
1997	17.47[b]	49.9[c]	40.8[c]

[a]Net Worth/Risk Assets; ratios for the whole banking system
[b]as of June
[c]as of third quarter
Sources: PNB Philippine Commercial Banking System Quarterly Report Bangko Sentral ng Pilipinas

quality" by depositors during the period of financial, economic and political uncertainty in the 1980s. However, what is noteworthy is that the concentration of deposits in the top five banks, either including or excluding PNB, has been declining since 1994, a period of liberalized bank entry and branching as well as a period of economic expansion. Indeed, the increased competition for deposits in recent years is reflected not only in the reduction in deposit concentration but in the competition in the provision of deposit and financial services, as reflected in the expansion of automatic teller machines (ATMs), innovative banking services like phone banking, and the introduction of dollar-denominated ATMs for depositors in banks' foreign currency deposit units (FCDU).

The reduction in bank deposit concentration is worth noting in the light of indications that there are economies of scale but not economies of scope in banking in the Philippines (Okuda 1997). In addition, earlier studies (e.g., Lamberte and Llanto 1993) indicate that bank concentration has a bearing on the level of the bank spread, suggesting some element of monopoly power. It is likely that the liberalization of bank entry in 1994, especially of a number of major international banks which brought with them solid reputations, encouraged greater deposit-taking to banks other than the top five.

The pattern over time of the shares of savings deposits and time deposits to total deposits by banking institutions is also worth noting. For example, commercial banks relied increasingly on savings deposits during 1986 to 1994 when the share of savings deposits to total deposits rose from 50.8 percent in 1986 to 68 percent in 1994; however, this share declined significantly during the past three years, ending at 59.1 percent as of June 1997. The share of time deposits to total deposits of commercial banks has correspondingly declined and increased over the same period. In contrast, the thrift banks (savings banks and private development banks) have increasingly relied on savings deposits for their funds, i.e., from about 65 percent and 48 percent for savings banks and private development banks, respectively, in 1986 to the low 80s for both types in 1996-97. As a result, the share of savings banks and private development banks to the total savings deposits in the whole banking system increased, while that of commercial banks correspondingly decreased. Specifically, the shares of savings banks and private development banks rose from 5.4 percent and 1.9 percent, respectively, in 1986 to 7.3 percent and 5.3 percent, respectively, by June 1997. In contrast, the share of commercial banks in total savings declined from 87.8 percent in 1986 to 84.3 percent by June 1997 at the same time that commercial banks increasingly locked up the banking sector's time deposit liabilities during the period.

The apparent niching of the banking institutions is likely a result in part of increased banking competition, with the thrift banks relying on the retail market and small depositors while the commercial banks increasingly focused on the more affluent depositors through time deposit offerings. At the same time, however, the growing reliance of banks on time deposits meant that the interest differential between the banks' lending rates and deposit (increasingly time) rates narrowed. As Table 6 shows, the differential between the average lending rate and the time deposit rate is much lower than the differential between the average lending rate and the saving rate. With the narrowing of the interest differential over time, there appears to be a growing pressure on commercial banks to become "universal" banks in order that a larger share of the banks' income would come from allied services and investments allowed to universal banks. Commercial banks have also relied significantly on fee-based "off balance sheet" activities like trust accounts. Philippine banks are considered more diversified than their counterparts in a number of countries in the region, although as Okuda (1997) notes, the substantial share of noninterest income to total income of banks in the late 1980s can be explained in part as due to the issuance of high priced Treasury bills because of high fiscal deficits during the late 1980s.

Table 6 shows three subperiods of high interest rates during the 1980-97 period. These are the 1981-85 subperiod, the 1989-92 subperiod and the subperiod starting in 1997 and still ongoing. The first subperiod corresponds to the financial and economic crisis of the early and mid 1980s, the second subperiod corresponds to the regime of monetary and fiscal tightening in response to the large fiscal deficits, and the third one stems from the ongoing regional currency and financial turmoil starting in mid-1997. The movement of interest rates and the changes in the economy impacted on the loan behavior of banks. Table 7 presents the term structure of loans outstanding of commercial banks. The table shows that the share of short-term loans to total loans outstanding declined during the crisis period of the early 1980s, rose during the 1989-92 period, and then declined during the economic recovery period of 1993-95. The decline in the share of short-term loans appears inconsistent with usual banking behavior during a period of financial and economic

TABLE 6
Interest Rate Structure, 1975-97
(In percent)

Year	Nominal Interest Rates: Manila Ref. Rate	Bank Average Lending Rate	T-Bill All Maturities	Interbank Call Loan Rates	Savings Deposit	Time Deposit	Inflation Rate
1975	...	12 to 14	...	...	6.0	...	9.7
1976	...	12 to 16	...	...	7.0	...	9.4
1977	...	12.8	...	...	7.0	...	7.5
1978	...	12.7	...	...	7.0	...	17.5
1979	...	12.7	...	...	9.0	...	18.2
1980	...	13.5	...	11.9	9.0	...	13.1
1981	...	17.1	...	14.9	9.8	16.7	10.2
1982	19.2	18.2	...	12.2	9.8	15.8	10.2
1983	15.0	19.3	...	16.7	9.7	15.3	10.0
1984	22.2	26.7	...	28.1	9.9	24.2	50.3
1985	21.1	28.2	...	16.2	10.8	21.8	23.4
1986	12.3	17.3	...	12.5	8.0	14.8	-0.4
1987	9.4	13.3	12.9	12.0	4.5	9.8	3.0
1988	12.4	16.0	15.5	14.2	4.1	13.4	8.9
1989	16.0	19.5	19.7	15.4	6.2	17.0	12.2
1990	21.3	24.3	24.7	14.8	10.8	20.2	14.2
1991	17.8	23.5	22.5	15.7	11.0	18.5	18.7
1992	14.8	19.4	17.0	16.7	10.6	14.1	8.9
1993	11.3	14.6	13.1	13.7	8.3	10.4	7.6
1994	11.6	15.0	13.8	13.4	8.0	10.7	9.0
1995	10.0	14.6	12.5	12.1	8.0	9.3	8.1
1996	11.7	14.8	13.0	12.6	8.0	11.5	8.4
1997*	14.9	18.2	16.1	15.7			5.3

Table 6 (CONTINUED) . . .

Year	Real Interest Rates: Manila Ref. Rate	Bank Average Lending Rate	T-Bill All Maturities	Interbank Call Loan Rates	Savings Deposit	Time Deposit	Weighted Average Int. Rate**	Weighted Real Ave. Int. Rate
1975	...	...	...	...	-3.7	...	13.6	3.9
1976	...	...	...	...	-2.4	...	13.0	3.6
1977	...	5.3	...	...	-0.5	...	12.6	5.1
1978	...	-4.8	...	...	-10.5	...	10.7	-6.8
1979	...	-5.5	...	...	-9.2	...	12.8	-5.4
1980	...	0.4	...	-1.2	-4.1	...	13.3	0.1
1981	...	6.9	...	4.7	-0.4	6.5	15.7	5.4
1982	9.0	8.0	...	2.0	-0.4	5.6	14.2	4.0
1983	5.0	9.3	...	6.7	-0.3	5.3		
1984	-28.1	-23.6	...	-22.2	-40.4	-26.1	27.2	-23.1
1985	-2.3	4.8	...	-7.2	-12.6	-1.6	20.6	-2.8
1986	12.7	17.7	...	12.9	8.4	15.2	13.3	13.7
1987	6.4	10.3	9.9	9.0	1.5	6.8	11.1	8.1
1988	3.5	7.1	6.6	5.3	-4.8	4.5	13.4	4.5
1989	3.8	7.3	7.5	3.2	-6.0	4.8	15.7	3.5
1990	7.1	10.1	10.5	0.6	-3.4	6.0	18.0	3.8
1991	-0.9	4.8	3.8	-3.0	-7.7	-0.2	17.6	-1.1
1992	5.9	10.5	8.1	7.8	1.7	5.2	15.7	6.8
1993	3.7	7.0	5.5	6.1	0.7	2.8	12.6	5.0
1994	2.6	6.0	4.8	4.4	-1.0	1.7	11.0	2.0
1995	1.9	6.5	4.4	4.0	-0.1	1.2	13.3	5.2
1996	3.3	6.4	4.6	4.2	-0.4	3.1		
1997*		9.6	12.9	10.8	10.4			

... no available data

* September

** Based on Money Market Transactions

Sources: Tan(1997), "Financial Liberalization, Savings Mobilization and Financial Innovations," paper prepared for the Symposium in Honor of Dr. Sicat and Dr. Encarnacion, September.
BSP SPEI, October 1997.
BSP Statistical Bulletin, various years.

crisis as in the early 1980s. However, this is largely statistical because banks actually reduced their lending activities during the period, with short-term loans necessarily providing the largest room for adjustment. During the period 1989-91, the high Treasury bill rates used to mop up liquidity and finance the large fiscal deficits encouraged banks to focus on short-term lending given the high short-term rates and the likely reduction in demand for long-term loans due to the economic recession. The 1993-95 period suggests that banks responded favorably, in terms of a rising share of long-term loans, to an economic environment aimed at improving macroeconomic stability in a growing economy.

Nevertheless, as Table 7 shows, commercial banks are lending preponderantly in the short term (i.e., one year or less). This is not surprising given the source of funding of banks, the fluctuations in the economy and in the interest rate, and the problems of asymmetric information that lead banks to lend in the short-term to put borrowers on a leash for effective monitoring. In this light, the development of the country's securities market during the past few years provides an important if volatile complement to the banking system. The Philippine stock market grew significantly during the 1990s, with market capitalization as a ratio of GNP increasing from 15 percent in 1990 to 80 percent in 1994 and 93 percent in 1996 (Table 8). The magnitude of capital raised through the stock market has been substantial especially during 1994-95. In fact, the capital raised through the stock market during 1994-95 comprised 83 percent of the increase in the total loans outstanding and 708 percent of the increase in the long-term loans outstanding of commercial banks during the same period. Considering that capital raised in the stock market is largely comprised of long-term funds provided to the issuer, the figures above indicate that indeed the stock market can be a major source of funding. However, as Table 8 indicates, the stock market is highly volatile, reflecting the thinness of the market and the strong dependence of the local stock market on foreign investors. The sharp fall in stock prices and the turnover during the past few months in the face of the

TABLE 7
Loans Outstanding of Commercial Banks By Maturity, 1980-95
(In billion pesos)

Year	Total Outstanding Loans	Percent Share to Total Loans		
		Short term*	Intermediate	Long term
1980	77.20	78.1	10.0	11.9
1981	86.51	73.4	17.3	9.3
1982	98.24	69.0	18.1	12.9
1983	115.39	69.0	15.2	15.8
1984	120.36	60.6	24.2	15.1
1985	91.83	65.9	17.0	17.0
1986	88.33	69.2	17.9	12.9
1987	101.11	71.5	22.6	5.9
1988	126.62	71.0	21.0	8.1
1989	165.86	74.7	19.2	6.2
1990	199.65	80.0	16.6	3.4
1991	144.31	78.3	16.3	5.4
1992	256.32	77.7	18.5	3.8
1993	432.83	74.4	14.5	11.0
1994	542.80	70.5	17.4	12.1
1995	737.26	70.6	16.9	12.4
1996	1120.26	69.5	18.2	12.3
Jun-97	1277.83	70.1	17.4	12.5

* Including Demand

Note: Short-term = 1 year or less; Medium-term = more than 1 year to 5 years;
Long-term = more than 5 years

Source: Lamberte and Llanto (1996)
Philippine Stock Exchange

TABLE 8
Stock Market Capitalization and Prices, 1986-96

Year	Market Capitalization (in million pesos)	Market Capitalization as % of GNP	Capital Raised (in million pesos)	Stock Price Index*
1986	41214	6.91	734	...
1987	61108	9.11	1261	813.17
1988	88591	11.19	3060	841.65
1989	261022	28.55	4897	1104.57
1990	161219	14.95	18537	651.78
1991	297743	23.58	25991	1151.87
1992	391231	28.24	22143	1256.87
1993	1088820	72.57	36252	3196.08
1994	1386464	79.83	149381	2785.81
1995	1545728	78.55	102241	2594.18
1996	2121059	92.91	122523	3170.56

*Composite Index; annual closing prices
Sources: Lamberte and Llanto (1996)
Philippine Stock Exchange

regional currency and economic turmoil highlights the vulnerability of the securities market to overall macroeconomic conditions as well as the sentiments of foreign investors.

In *summary*, the Philippine financial sector has recovered from the crisis of the early 1980s towards financial deepening, stronger presence of foreign financial institutions in the domestic financial market, and greater reliance on deposit mobilization as a source of funds for the banking sector. This recovery and deepening is coincident with the reform process in the economy in general and in the financial sector in particular. However, as the past decade shows, and as the ongoing currency and financial turmoil in the region brings out, financial institutions like banks and the stock market are strongly influenced by the macroeconomic environment. At the same time, financial institutions, as key conduits of capital flows within the country and between the country and the rest of the world, help shape significantly the country's macroeconomy.

IV. FINANCIAL LIBERALIZATION, CAPITAL FLOWS AND THE MACROECONOMY

The liberalization of the capital account of many developing countries like the Philippines through the liberalization of the foreign exchange market, substantially widens the arena of financial intermediation but at the same time poses many difficult issues of prudential regulations and macroeconomic (including exchange rate) policies. For example, capital market liberalization opens up a potentially huge supply of funds for domestic firms to tap. However, only few large (and likely internationally known) domestic firms can be expected to be able to directly tap foreign capital markets. The more likely route is either through foreign borrowing or bond flotation of domestic banks (or other domestic financial institution) abroad which the banks can then lend to local firms or through the domestic stock market where foreign investors can invest. The route through the domestic banks can lead to currency mismatches and may make domestic banks and other financial institutions vulnerable to exchange rate shocks. In addition, the predominant role of banking institutions in the country's financial system implies that banks are also indirectly affected by capital flows directly sourced from abroad by domestic firms when the firms deposit such funds with the banks. Thus, the soundness of the banking sector and the integrity of bank credit decisions are very important ingredients in managing capital flows (Folkerts-Landau et al. 1995).

Similarly, the thinness and lack of liquidity of the domestic stock market implies that foreign funds coming into the country or getting out of the country wield tremendous impact on the prices of the domestic securities. Moreover, the internationalization of institutional funds management has increased the flow of funds that are sensitive to changes in sentiment about the economic prospects of recipient countries (Folkerts-Landau et al. 1995). As such, the domestic equities market and the whole economy become vulnerable to sudden shifts in market sentiment as the recent regional economic turmoil has shown. In addition, through whichever route foreign capital comes into the country, surges in capital flows have significant impact on monetary and fiscal policy as well as on the country's exchange rate. The policy responses of the recipient country ultimately affect foreign sentiments on the economic prospects of the country, thereby making the foreign community an additional "public" that macroeconomic managers in the recipient countries would have to take into consideration when they devise their policies. Thus, the liberalization of the capital account and the greater reliance on foreign capital flows in recipient countries have significantly changed the parameters of macroeconomic policy making and financial regulations in the recipient country, simply because capital flows do not only offer potentially large benefits but also pose substantially higher risks to the financial sector and the whole economy unless they are managed well.

Evolution of capital flows to the Philippines. As a recipient of significant capital flows, the Philippines is a latecomer in East Asia. While APEC developing countries have hogged the limelight as major destinations of international capital flows during the past decade, such flows have largely gone to China, Thailand, Malaysia and Indonesia. A key reason for the country's laggard status is because the Philippines was largely cut off from the international capital market resulting from the debt moratorium of 1983. Indeed, as Table 9 suggests, the process of the Philippine re-entry into the international capital market started with debt restructurings and debt conversions. It was only in the 1990s that the country was able to float bonds and (on a limited scale) international equity issues. The Philippines, alone among the ASEAN countries, has yet to get back to an investment grade credit rating by reputable international credit rating agencies. Nevertheless, the country's attractiveness for capital inflows appears to have been improving over time during the 1990s. The changes in the structure of foreign liabilities of the country are suggestive of the improving access of the Philippines in the international capital market (Table 9). The level of foreign indebtedness of the public nonbanking sector (i.e., the government) has been declining since 1994 while those of the banking and private nonbanking sectors have increased

TABLE 9
Balance of Payments, 1985-96
(In percent of GDP)

Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Current account	-0.33	3.20	-1.34	-1.03	-0.34	-5.81	-1.92	-1.62	-5.54	-4.60	-3.47	-4.50
Capital account	6.00	0.96	2.14	2.60	0.45	5.60	6.54	4.43	5.24	7.41	4.32	9.40
Direct investment	0.15	0.49	1.09	2.60	0.13	1.20	1.17	1.27	1.59	2.01	1.61	1.46
Portfolio investment	-0.10	-0.02	-0.11	0.01	0.07	-0.11	0.28	0.12	-0.10	0.42	1.28	-0.20
Other long-term (net)	7.06	2.84	1.78	-1.54	0.15	0.87	3.02	2.12	1.38	2.16	1.55	3.20
Other short-term (net)	-1.12	-2.35	-0.63	1.53	0.10	3.65	2.07	1.80	2.36	2.82	-0.11	4.94
Change in gross international reserves	0.57	4.68	-1.51	-4.63	4.97	-0.75	5.47	1.41	1.07	1.86	0.86	4.76
Errors and omissions	2.08	0.11	-0.43	1.11	0.09	0.98	1.29	-0.68	0.15	0.25	-1.85	-1.33
Change in commercial banks' NFA	0.00	0.00	0.00	0.00	0.00	0.27	-0.40	0.87	-1.01	0.73	1.76	5.63
Peso Conversion of FCDUs	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.02	0.03	0.04	0.07	0.07
Overall surplus or deficit (-)	5.66	4.16	0.80	1.57	0.11	-0.21	4.62	2.81	-0.31	2.81	0.85	4.90
Memorandum Items:												
Workers' remittances	2.26	2.33	2.44	2.31	0.23	2.72	3.64	4.19	4.18	4.69	5.22	5.14
Current account less workers' remittances	-2.59	0.86	-3.78	-3.34	-0.58	-8.54	-5.56	-5.81	-9.73	-9.29	-8.69	-9.64
Capital account with workers' remittances	8.25	3.30	4.58	4.90	0.68	8.33	10.19	8.63	9.42	12.10	9.54	14.53
Of which: Other short-term workers' remittances	1.14	-0.02	1.81	3.84	0.34	6.37	5.72	6.00	6.55	7.51	5.11	10.08

Sources of Data: Bangko Sentral ng Pilipinas
PIDS Data and Information Resource Program

significantly. What is noteworthy is the sharp rise in foreign liabilities of the private sector, especially the private commercial banks, during 1996 and the first half of 1997. This raises the issue as to whether (a) the macroeconomic and incentive considerations that led to the recent financial crises in Thailand and Indonesia were also present or developing in the Philippines, and (b) the private sector borrowing binge internationally was just nipped in the bud by the onset of the currency crisis in the region.

The balance of payments of the Philippines is presented in Table 10 and Figure 1. The current account deficit as a ratio of GDP, although lower than those of Thailand and Malaysia, is not negligible and was higher than those of Chile and Colombia in recent years. The capital account surplus was larger than the current account deficit such that there has been a continual increase in the international reserves since 1990. The financing of the current account deficit has changed somewhat during the past few years. Direct investment arose primarily from debt conversions during the early 1990s and privatization proceeded especially during 1994 and 1995. Portfolio investments have been inconsistent on a net basis, although the level of gross inflows rose tremendously in recent years. Medium and long-term loans have remained as the more important source of financing than foreign direct investment. What is most striking, however, is the sharp rise in short-term capital inflow in 1996, primarily because of the increase in the net foreign assets of private commercial banks. This was largely caused by the sharp rise in their foreign currency deposits, from a level of $9.1 billion in 1995 to $14.5 billion in 1996, although a number of local banks also borrowed abroad mainly in terms of floating rate certificates of deposits (FRCDs).[4] The bulk of the foreign currency deposits was considered to be owned by Filipinos and therefore somewhat

4. For example, five top private commercial private banks floated FRCDs amounting to $510 million. Moody's has recently downgraded the ratings of the FRCDs of the five local banks along with the dollar debts of other banks in China, Indonesia, South Korea, Malaysia and Thailand as a result of the currency turmoil (*Business World*, January 19, 1998, p. 15).

TABLE 10
External Debt Restructuring, Capital Issues and Foreign Exchange Liabilities
(In billion US dollars)

Year	Medium- and Long-term Debt Restructured[a]	Debt Conversions[d]	Bond Issues	International Equity Issues	Total Foreign Exchange Liabilities					
					Total (a) + (b) + (c)	Banking System (a)	Commercial Banks	Private Commercial Banks	Public (b)	Private (c)
1987	9.01									
1988										
1989	0.78	0.63								
1990	1.34[b/]	0.38			28.55	7.81	2.32	1.71	16.96	3.79
1991	4.47[c/]	0.49		0.08	29.96	7.47	2.14	1.80	18.45	4.04
1992		0.38	0.02	0.33	30.93	4.21	1.91	1.45	21.75	4.98
1993		0.35	1.27	0.56	34.28	2.40	1.12	0.52	26.58	5.30
1994		0.18	1.31	0.30	37.08	3.03	2.17	0.98	27.19	6.86
1995			0.25[e/]	0.38[e/]	37.78	4.19	2.98	2.00	26.34	7.25
1996					41.88	8.63	7.22	5.38	24.13	9.11
1997[f/]					44.81	10.89	9.08	7.04	23.06	10.86

[a]By year of agreement in principle
[b]Face value of debt extinguished in buyback
[c]Financing packages involving debt and debt-service reduction
[d]Face value of debt converted under official ongoing schemes. Figures do not include large-scale, one-off cash buybacks and debt exchanges.
[e]First and second quarters only
[f] As of June 1997

Sources: IMF World Economic and Financial Surveys (November 1995)
BSP Selected Philippine Economic Indicators (November 1997)

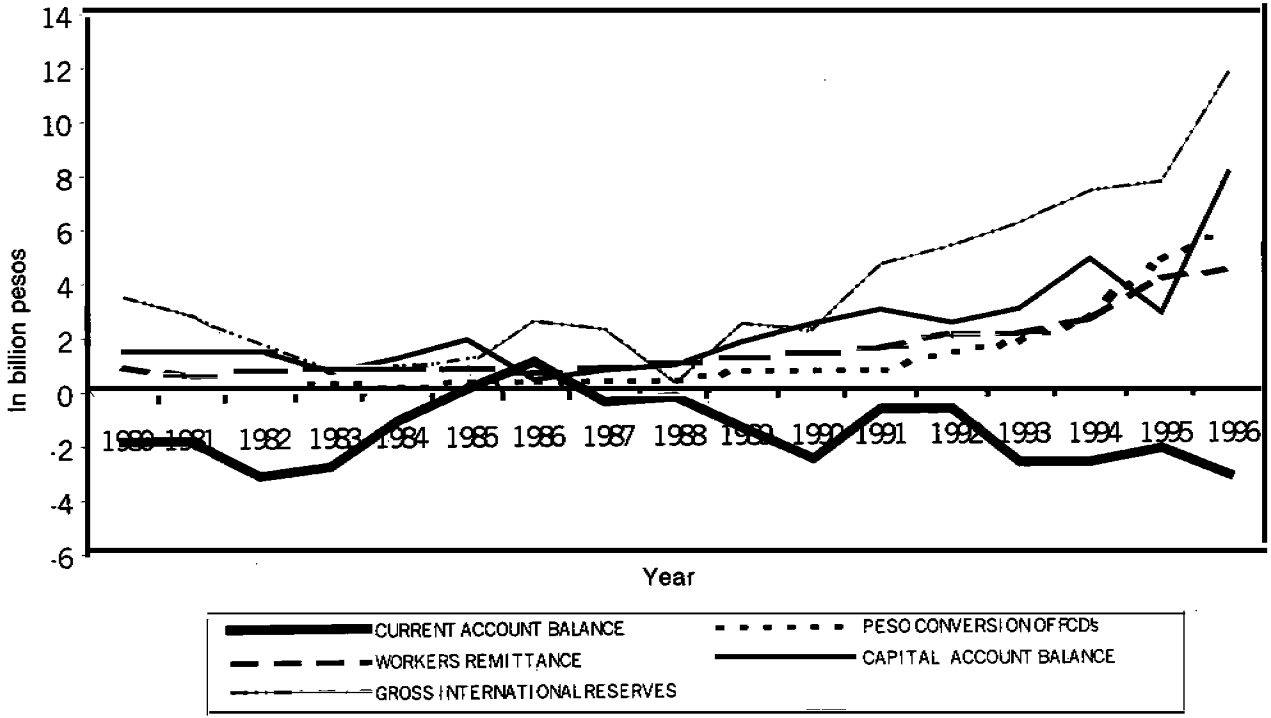

FIGURE 1

Current and Capital Account Balances, Gross International Reserves, Workers' Remittances and Peso Conversion of FCDs, 1980-96

(In billion pesos)

more stable than the short-term foreign borrowings that other Southeast Asian banks in Thailand and Indonesia resorted to, for example (Folkerts-Landau et al. 1995). Nevertheless, considering that the commercial bank loans from their foreign currency deposit units did not all go to exporters and fully hedged firms, the sharp increase in foreign exchange liabilities of the private commercial banks in 1995 and 1996 increased the vulnerability of the country's banking system to the recent currency turmoil.

The Philippines relies significantly on the remittances of Filipino workers working abroad. The officially recorded amount of workers' remittances reached more than 5 percent of GDP in 1995 and 1996. Workers' remittances are recorded under the nonmer-chandise trade account; they can also be viewed as a relatively more permanent source of financing of the current account deficit net of the remittances. To some extent, the pressure for appreciation of the peso is linked to the rise in the value of workers' remittances into the country, thereby resulting in a mild form of Dutch Disease. Table 10 shows the implications on the level of current account deficit and the capital account surplus depending on how the remittances are put in the balance of payments.

The composition of the foreign capital inflow has a bearing on the sustainability of the flows. Foreign direct investments are generally viewed to be the most ideal source of finance because of the correlative technology, managerial and marketing impacts on the recipient country. Long-term loans are also preferred because they are more untied and flexible. Portfolio capital is generally viewed to be riskier and more sensitive to the macroeconomic policy regime and environment in a country. Despite the risks, portfolio capital has become the most important source of foreign capital in the world. In addition, portfolio capital can turn largely long term if the macroeconomic environment is stable and the growth of the economy is sustainable. The macroeconomic challenges in managing portfolio capital flows are substantial partly because there is an element of herd behavior in international portfolio capital flows and the magnitude of such flows is large internationally. Nevertheless, precisely because portfolio capital is a potentially important source of foreign capital, it is important that the structural, institutional and policy foundations of the macroeconomy are continuously improved in order that portfolio capital can be harnessed well for economic growth.

The evolution of the composition of the Philippines' balance of payments points to some reasons why the country has not been as hard hit as Thailand by the recent currency turmoil. The country has relied more on medium and long-term loans and foreign direct investment than on portfolio capital to finance its current account deficits. The Philippines has not attracted a huge net inflow of portfolio capital so far. This is not the result of a deliberate policy but rather of not having been the "darling" of the foreign investors. Nevertheless, as the 1996 numbers suggest, and considering the still considerable impact of the regional currency crisis on the Philippine currency and financial markets, there is apparently large scope for further improvement of the country's macroeconomic and financial institutions, regulations and policies.

Capital flows, banking and macroeconomic policy. In recent years, monetary aggregates in the Philippines expanded faster than the gross national product, providing a measure of financial deepening in the country (see Table 2). A question arises as to whether capital inflows have a large bearing on this development and whether such financial expansion is "excessive" enough to bring its own dynamic of future crisis. Related to the financial deepening has been the rise in the money multiplier[5] in recent years, from a range of mainly 2.5 to 2.8 during 1978-93 to above 3 by 1994 and reaching 3.34 in 1996 (Figure 2a). The increase in the money multiplier is linked to the significant reductions in the reserves-to-deposit ratio and the currency-to-deposit ratio (Figure 2b). The reduction in the reserves-to-deposit ratio is the result of the reduction in the reserve requirement from 24 percent in 1993 to 15 percent in 1995 and 14 percent in early 1997. The

5. Here, measured in terms of the ratio of broad money M2 to the monetary base.

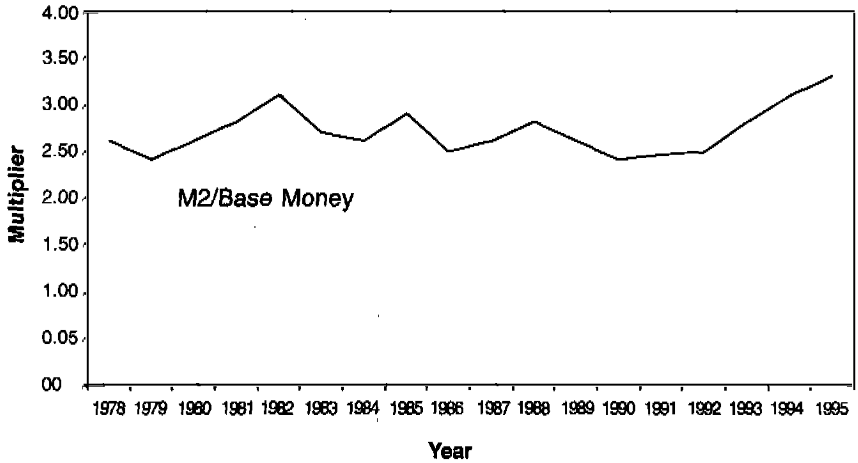

FIGURE 2a
Money Multiplier, 1978-95

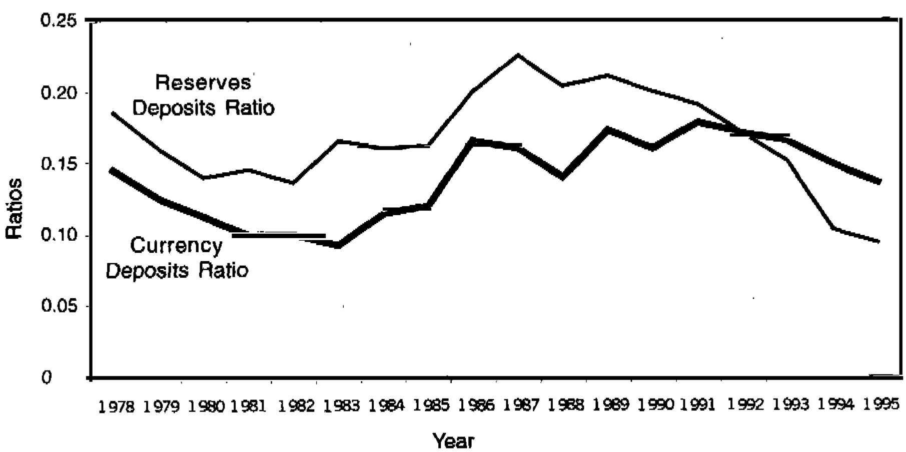

FIGURE 2b
Reserves- and Currency-Deposits Ratios, 1978-95

reduction in the currency-to-deposit ratio may have resulted in part from the significant increase in the use of automated teller machines and the growth of credit cards in recent years (see Paderanga 1995). It may be noted that the increase in the money multiplier happened at the same time that the inflation rate dropped secularly in the past few years.

The experience of a number of Southeast Asian countries and Korea is that the periods of large net capital inflows were associated with rapid expansion in the banking sector, in both their foreign liabilities, deposits and domestic lending (Folkerts-Landau et al. 1995). The Philippine experience in the past three years seems to indicate a similar trend (Table 11). The sharp rise in foreign liabilities of banks in 1996 contributed to the sharp rise in loans and advances to the private sector and the total assets of the banking system. Thus, it is apparent that the soundness of the banks' credit decisions has a large bearing on whether the capital flows will eventually result in a robust economy or eventually undermine the growth process.

A particular concern is the extent of total loans granted to industries that are prone to asset bubbles, especially the real estate, as well as to the nontraded sector. In the Philippines, the ratio of real estate loans to total loans outstanding of commercial banks averaged 4.7 percent during 1994-96 as against 3.8 percent during 1989-92. In a special survey of 25 sample banks in March 1996, the Central Bank found that the average share of real estate loans was 9.2 percent, although the ratio for an individual bank in the sample went as high as 28.6 percent. The sample banks also held commercial papers of real estate companies amounting to only 0.5 percent of the combined assets of the sample banks. Finally, the sample banks' equity investment in real estate companies amounted to 5.1 percent of the total equity investments of the sample banks. Overall, the combined loans and equity exposure of the sample banks to the real estate sector amounted to about 52 percent of the unimpaired capital of the sample banks (BSP 1996).

The average ratio for the Philippines appears to be comparable to Thailand's 9.4 percent share to total commercial banks' bills,

TABLE 11
Indicators of Banking* Activity, 1980-97
(In percent of GDP)

Year	Total Assets	Total Deposits	Loans and Advances to Private Sector	Total Investment in Securities		Foreign Assets	Foreign Liabilities
				Govern-ment	Private		
1980	56.8	30.7	30.9	2.2	3.3	7.3	15.9
1981	58.5	29.0	32.4	2.4	3.1	7.1	13.8
1982	60.2	30.0	32.7	3.4	2.5	7.6	15.1
1983	69.5	32.3	36.3	3.8	2.3	7.8	19.0
1984	57.1	26.2	23.7	3.1	3.1	8.3	17.9
1985	51.9	26.0	19.4	2.5	3.0	7.2	13.9
1986	43.5	24.0	13.9	3.6	2.1	7.3	9.5
1987	42.1	23.0	15.5	3.4	1.3	8.1	9.4
1988	42.8	24.9	15.0	4.5	1.1	8.8	9.4
1989	45.4	27.3	16.8	5.6	1.1	8.6	9.6
1990	50.3	29.0	18.9	5.1	1.6	10.1	12.2
1991	48.1	29.4	17.6	4.6	3.6	8.0	10.6
1992	51.1	31.6	20.2	6.1	2.4	8.4	13.1
1993	58.6	37.8	25.7	5.3	2.9	9.0	15.0
1994	62.5	40.7	29.1	7.3	2.6	8.7	16.2
1995	70.7	45.8	37.2	7.8	2.8	8.8	19.7
1996	85.4	51.0	49.3	...	...	9.8	31.6
1997	90.0	53.2	51.8	...	...	...	...

* Commercial Banking System
Sources: BSP Statistical Bulletin, various years.
BSP Department of Economic Research

loans and overdrafts in 1995 (BSP 1996). Nevertheless, it appears that Thailand's share understates the exposure of the Thai banks to the real estate sector because a large portion of the real estate loans was through the finance companies, many of which are subsidiaries of the banks. It is likely that the lower exposure of the Philippine banking system to the real estate sector may have prevented the Philippine banks from going under from the slackening real estate market in the country. It is apparent, however, that if the current high interest rate regime continues for some time, the real estate sector would slow down further, possibly making the Philippine banking system more vulnerable to loan defaults.

Despite the significant expansion in bank credits in recent years, the overall inflation rate declined during the period. Contributory to this is the facilitative effect of the fiscal stance, which was in surplus during 1994-96, thereby cushioning the monetary impact from the increase in domestic credits to the private sector. The fiscal surplus was also complementary to the policy of the government to sterilize capital flows. BSP became a net purchaser of foreign exchange during the past few years in an attempt in part to prevent a sharper appreciation of the peso arising from the inflows. In order to minimize the monetary effect of such foreign exchange purchases, the BSP sold government securities in its portfolio. In Figure 3, the increase in net foreign assets of the monetary authorities was offset somewhat by a decrease in the net domestic credits of the monetary authorities in 1994 and 1996.

The sterilization of the capital flows appears to have also contributed to the persistence of a higher interest rate domestically as compared to foreign interest rates. However, the relationship is not clear-cut: comparing the interest rate on the 91-day peso Treasury bill and the 91-day LIBOR adjusted for the rate of peso depreciation, the interest differential declined significantly from about 10.81 percent in 1994 to 8.32 percent in 1995 and 4.87 percent in 1996. The reduction in the interest differential was caused primarily by the changes in the exchange rate, rather than in the domestic interest rate. The reduction in the interest differential through the peso depreciation in the face of the rise in capital flows during 1994-96 seems to be inconsistent with the implications of increased financial integration internationally. Indeed, the results seem to suggest that there remains a significant risk premium on the Philippines, which discouraged large net inflows of portfolio capital into the country given the domestic interest rate (i.e., the domestic interest rate was not high enough).

Instead, the interest differential encouraged large private borrowing from abroad by domestic firms and banks to take advantage of the lower dollar interest rate. Indeed, the policy of

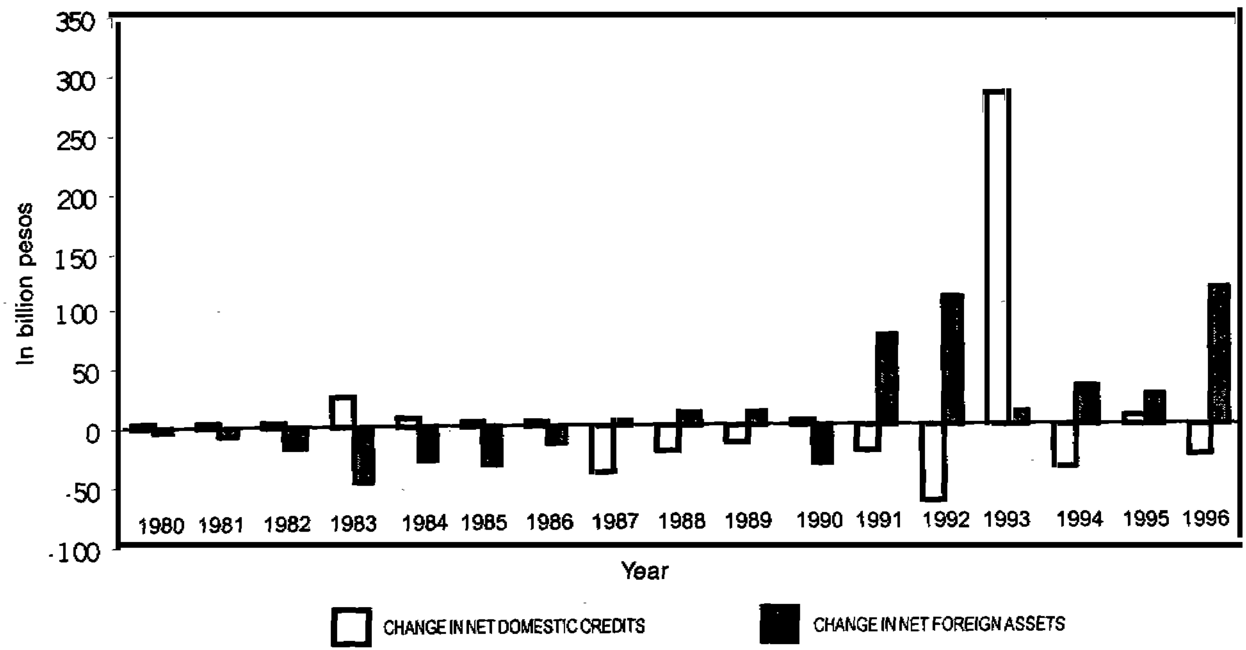

FIGURE 3

Changes in Net Domestic Credits and Net Foreign Assets of Monetary Authorities, 1980-96 the government was to encourage Philippine direct and indirect exporters to tap the foreign currency deposit units for dollar loans in order to reduce their interest cost and thereby retain their international competitiveness in the face of the appreciation in real terms of the Philippine peso. In the light of the significant depreciation of the peso in recent months, this particular policy has made banks vulnerable to currency risk and possible mismatch of maturity terms. This is because much of the increase in the international indebtedness of banks was in foreign currency deposits which are viewed to be short term given that depositors can withdraw them anytime. As Table 11 indicates, banks' foreign exchange assets are lower than their foreign exchange liabilities.

Exchange rate, competitiveness and economic restructuring. The evolution of the country's real bilateral exchange rate (viz., the US dollar) and real effective exchange rate during the 1975-96 period can be subdivided into three phases, namely: a phase of appreciation during the late 1970s through the early 1980s, followed by a secular if volatile depreciation during 1983-88, and finally another phase of secular appreciation during 1989-96 (Figure 4a). Figure 4a also shows the country's external terms of trade, which deteriorated secularly during the late 1970s and the 1980s and improved during the 1990s. Figure 4b shows the significant rise in the ratios of workers' remittances and peso conversions to GDP during the 1990s.

The theoretical literature suggests that there is an inverse relationship between the external terms of trade and the real exchange rate; that is, it is expected that considerable improvement (deterioration) in the external terms of trade would lead to an (equilibrium) appreciation (depreciation) in the real exchange rate. The appreciation of the peso in the 1990s appears to stem in part from the improvement in the external terms of trade. It is also likely that the real appreciation of the peso is attributable to the rise in the workers' remittances and the peso conversions of foreign currency deposits (which are either workers' remittances, export proceeds or foreign loan proceeds deposited in the foreign currency deposits). Considering the small and inconsistent flows into the Philippines on a net basis (see Table 10), it is likely that

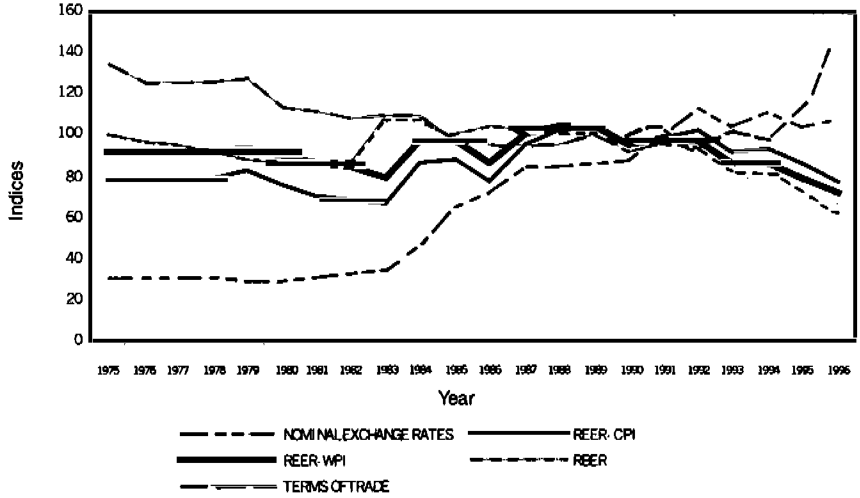

FIGURE 4a
Nominal, Real Effective and Bilateral Exchange Rates and External Terms of Trade, 1975-96

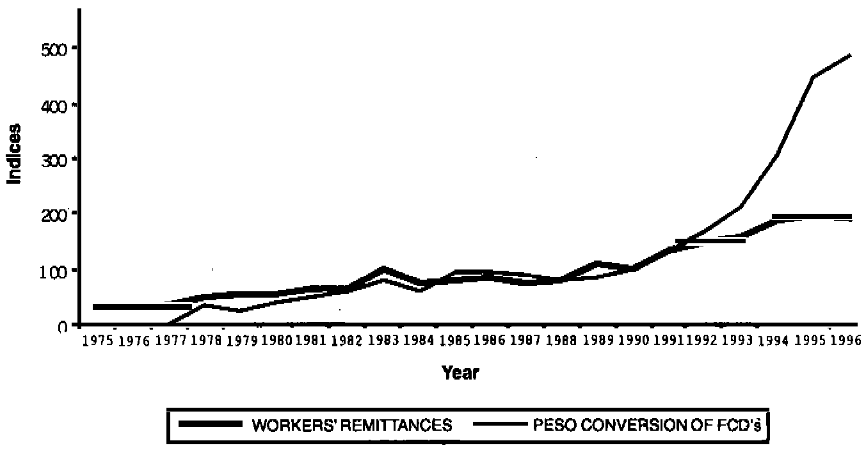

FIGURE 4B
Ratios of Workers' Remittances and Peso Conversion of FCDs to GDP, 1975-96

portfolio capital was not a major cause of the real appreciation of the peso. Thus, to some extent, the real appreciation of the peso in recent years appears to be a mild form of "Dutch disease" rather than a result of the impact of foreign portfolio flows.

The real appreciation of the peso in recent years contributed to the pressures for restructuring of the industrial sector. Specifically, a number of labor-intensive industries in the country, especially garments and textiles, were forced to streamline operations. For example, domestic production and employment of textiles declined at the same time that exports of textiles increased. This arose because grossly inefficient firms closed down while others began to operate new machines which were less labor using. As a result, a few firms have started finding their export niches. In the garments industry, both exports and domestic production declined in 1996 and 1997, suggesting that the industry may be losing competitiveness in the international and domestic markets. Industry officials have blamed the rising wage rates and real appreciation of the peso as major causes for the deteriorating international competitiveness of the industry, suggesting that productivity improvements in the industry have not been substantial enough to offset the rise in input costs. The decline in the textile and garments industries in the Philippines may be viewed as surprising given the low per capita income of the country relative to the other countries in the region which are still significant garment and/or textile exporters (e.g., Thailand, Indonesia, Hong Kong). It is in this light that the real appreciation of the peso in recent years has a significant bearing on the fortunes of such industries in the Philippines.

International competitiveness is, of course, a product of many factors apart from the exchange rate. Most of the other factors can possibly be put under the rubric of "productivity" factors, including infrastructure, quality of labor and transactions cost of trading (especially in the export of outputs and import of inputs). The real appreciation of the peso necessitates, in effect, greater reliance on productivity factors in order to maintain/improve international competitiveness. However, the performance of the

Philippines in this area also leaves much to be desired. Thus, in the Philippine context, addressing the international competitiveness challenges would involve both improvements in the "productivity" factors and adjustments in the real exchange rate (Intal 1995).

Managing capital flows and the exchange rate. The experiences of countries in East Asia and Mexico in recent years indicate that managing capital flows is not easy. Under a fixed exchange rate regime, large capital flows influence the real exchange rate via the increase in the inflationary pressures in the domestic economy arising from the monetary effect of the capital inflows, especially where there is incomplete sterilization of the capital inflows. On the other hand, a complete sterilization of the capital flows results in domestic interest rates that are significantly higher than world interest rates (e.g., LIBOR) especially where the domestic market for government securities is still thin. The high domestic interest rate under a fixed exchange rate regime encourages foreign borrowing by domestic firms or by domestic banks and other financial institutions for relending domestically. In this case, the danger of unsound credit decisions increases. In addition, the higher domestic interest rate may encourage further interest rate sensitive capital inflows, and this gives rise to the issue of whether the flows are effectively absorbed and converted into real capital expansion (i.e., physical capital) rather than asset inflation (especially in the real estate sector) or simple reserve accumulation (World Bank 1996). As the recent Thai or Indonesian cases indicate, where prudential regulations are either weak or poorly implemented, a currency and financial crisis can eventually occur because of overborrowing, distortions in credit allocations, asset bubbles and deteriorating export competitiveness.

Under a regime of flexible exchange rates, the financial system is shielded more from the capital flows, as monetary policy has greater leeway. Nevertheless, large capital inflows tend to lead to a nominal (and therefore real) appreciation of the currencies of the recipient countries. Where such exchange rate appreciation is large, exporters may lose customers in the export market which, as the hysteresis literature indicates, are difficult to woo back.

Considering that increased capital inflows means increased indebtedness of the country, it is important that export growth remain robust in the recipient country.

Drawing from the above discussion, in either case of floating exchange rate or fixed exchange rate, large capital inflows can potentially be distortive when the domestic financial market is not large or deep enough to accommodate such flows. The impacts of large capital inflows can be a mixture of nominal currency appreciation, asset inflation, increasingly risky credit decisions, domestic inflationary pressures, real exchange rate appreciation, and likely eventual deteriorating export performance. Thus, there seems to be some merit in moderating capital inflows especially when macroeconomic or microeconomic problems start to appear.

In this regard, the experience of Chile is relevant. Chile imposed differential regulations on capital flows. Specifically, Chile is fairly liberal with respect to foreign direct investment, except for a one-year minimum stay. More stringent rules are imposed on foreign borrowing to limit foreign indebtedness by the imposition of minimum credit ratings by three internationally recognized risk-rating agencies. Regulations on debt-related capital flows and on deposits of nonresidents are even tighter through the imposition of a 30 percent reserve requirement. These regulations have allowed Chile to manage better capital inflows such that there is more equity and long-term financing rather than foreign debt and short- term financing. The macroeconomic results have been impressive: high growth, lower inflation rate and low current account deficit. (See Le Fort and Budnevich 1997.) As a result, Chile stands out as an important exception to the problem that beset Mexico in 1994 and the Southeast Asian economies in 1997.

Chile's foreign exchange regulations can best be viewed as transitional rules in the meantime that the country deepens and develops its financial system. It may be noted that Chile's financial sector is open with respect to equity participation of foreign investors and banks into the country's financial system. Thus, Chile's is a case of a relatively open financial sector in terms of foreign equity participation in the sector but relatively more regulated with respect to capital flows. Chile's case contrasts somewhat with those of a number of East Asian countries where capital flows have been relatively free while foreign equity participation in the financial sector has been more limited.

V. STRENGTHENING PRUDENTIAL REGULATION AND SUPERVISION

The need to strengthen prudential regulation and bank supervision. The recent turmoil in the region's financial markets indicates the pressing need to strengthen prudential regulation and bank supervision. In the Philippines as in other countries which have liberalized and deregulated their financial markets, the process of competition, liberalization and growing financial integration has brought to the financial marketplace various financial innovations and practices that meant better products and services to depositors and borrowers alike. At the same time, however, banking has become more competitive, and, given the incentive to lend to the nontradable sector, some banks have taken large exposure in certain risky activities, e.g., the property sector, which present excellent opportunities for speculation. While aggressive risk-taking may have bolstered the profitability of some banking institutions, in retrospect, this has undermined the viability of the institutions concerned. Fearful of the local banks' aggressive lending to the property sector, the Bangko Sentral conducted a special investigation of the loan portfolios of banks to determine potential loan default problems and, subsequently, enjoined banks to limit their lending exposure to the property sector. More generally, the structural changes in the real economy require a robust financial system and, thus, the health and efficiency of the banking system, especially since it still dominates the financial system, are paramount concerns of the regulatory authorities. This calls for efficient and effective supervision and regulation, which in turn require the strengthening of the regulatory institutions. The experience of other countries in strengthening prudential regulation and supervision is instructive, allowing us to draw some insights from it. (See Box A.)

The emerging financial system indicates the areas where supervision and regulation must be strengthened. In the developed countries, the trend is toward a "disintermediated, liquid, securitized structure" where "the more creditworthy corporate borrowers in major industrial countries are increasingly able to satisfy their liquidity, risk-management, and financing needs directly in liquid securities markets" (Goldstein et al. 1992). In those countries, commercial paper, repurchase agreements, money-market mutual funds and exchange-traded futures and options are the main financing instruments. The so-called "relationship banking" is rapidly giving way to "transactions-driven securities finance" which has caused the decline of banks' on-balance sheet activities and the rise in off-balance sheet activities (e.g., standby lines of credit, forward interest rates, foreign exchange contracts, and the rapidly growing derivative business). Transactions-driven securities finance requires different skills and techniques from regulatory institutions although there are some areas such as information disclosure procedures, accounting and auditing, etc., which demand a common set of skills and approaches.

In contrast, in developing countries such as the Philippines, banks, especially commercial banks, continue to dominate the financial system despite the substantial developments taking place in the equities and securities markets in the region. Because of the continuing dominance of the banking system, most of the areas for improvement and strengthening with respect to supervision and regulation pertain to banking activities. For example, many banks in the region have liquidity problems. State-directed lending, political pressures and poor lending practices, particularly by state-owned banks, remain pervasive while accounting and auditing, and disclosure procedures are not up to international standards (Claessens and Glaessner 1997a). Strong prudential regulation and bank supervision are extremely important to avoid moral hazard in the credit markets arising from excessive risk- taking by banks, corruption or fraud as

Box A. Banking crisis and financial regulation: Chile and Malaysia

The Chilean experience shows that, without a proper framework of prudential regulation, economic and financial liberalization may lead to abuses of market power, conflicts of interest and unsustainable and imprudent expansion.

In 1982, the private sector overborrowed, leaving banks overextended. The massive inflow of foreign funds helped fuel the unprecedented credit expansion. Chilean analysts (Morande 1988; Valdes 1989) later pointed out that foreign inflows systematically preceded the peso appreciation and that the imprudent period of foreign borrowing in 1981 was motivated by the perception of a permanent boom. This perception led to overborrowing and relaxation of credit standards. The authorities tried to maintain a fixed exchange rate policy which spurred even greater foreign borrowing as economic agents anticipated the collapse of the peg and took advantage of the implicit subsidy on foreign exchange risk. Meanwhile, throughout the three years of the fixed exchange rate regime, the spread between the peso deposit rate and the LIBOR remained stable but very high. The financial collapse was triggered by the rise in international interest rates in the last quarter of 1981. Real interest rate in pesos rose from 5 percent in 1980 to 30 percent in 1982! The weak banking system and the high level of indebtedness in the economy and massive withdrawal of foreign credit at the end of 1981 led to a deep recession. The authorities had to intervene to avert a complete collapse of the financial system. They provided emergency loans to all banks, with the central bank assuming all bad loans, or some 28 percent of the total loan portfolio of the banking system. Considerable reform was introduced in the financial markets. Prudential regulation and supervision were strengthened. The costly lesson from the financial sector's point of view: prudential regulation and supervision are extremely important alongside macroeconomic stability and an undistorted set of incentives in building a robust and efficient financial system.

Source: Hernan-Cortes Douglas (1992).

Box A (continued)

The Malaysian experience is a study in contrast. It underwent a banking crisis and restructuring in the mid-1980s. In 1985-86, Malaysia suffered from deflation. Nominal GNP declined more rapidly than real GNP. The financial system suffered immensely from steep falls in commodity, securities, and property prices. Previously, there was a long period of expansion and speculative investments in property and equities. In 1986, property loans accounted for 36 percent of all bank loans, up from 26 percent in 1980. Faced with a potentially major financial crisis, the authorities acted decisively. Fortunately for Malaysia, there was in place an effective system of bank supervision: stiff requirements for provisioning against bad and doubtful debts, suspension of interest accrual. Additionally, the authorities introduced key changes in banking laws and regulations to emphasize prudential standards, such as minimum capital requirements, dispersion of ownership controls on connected lending, limits on risk concentrations, guidelines on provisions for loan losses and suspension of interest accrual on nonperforming loans, and improved statistical reporting to the central bank. The central bank was also authorized to enter and search offices, detain persons, impound passports, freeze property, issue cease and desist orders, and assume control of bank operations. By taking prompt action to assess the extent of losses and address problems of capital adequacy and competent management in the banking system, the potentially major financial crisis and loss of confidence in the financial system were averted.

Source: Dimitri Vitas (1992).

exemplified by fictitious loans provided by banks in collusion with government agricultural technicians under the government's subsidized agricultural credit program for rice production (*Masagana 99* program) in the 1980s and by the recent experience of a thrift bank which nearly collapsed because of an enormous loan collection problem (see Box B).

Capital adequacy. Prudential regulation and bank supervision are intended to gain stability and public trust in the financial system. This requires adequate and effective management of potential systemic risk and protection of depositors. The

Box B. ***Keeping an eye on borrowers and loan collection***

Monte de Piedad was the oldest thrift bank in the country. It had survived two world wars and the severe economic and financial crisis of 1983-85. In 1991, it implemented a loan program for teachers and tricycle drivers. It also engaged in a lending scheme via conduits to help the poor. But lack of control and abuse by bank officials who implemented the lending scheme forced an audit in January 1994. Auditors found out that most of the borrowers were fictitious persons. In August 1994, the conduit in the loan programs, the Strategic Lending Investors (SLI), stopped collecting the loans for the bank. In October 1994, SLI closed shop. The bank temporarily closed shop in April 1997 because of the huge collection problems.

The Bangko Sentral ng Pilipinas (BSP) noted that the bank had extended some P2.5 billion in tricycle and salary loans to public school teachers without keeping any record of the borrowers' names and determining their capacity to pay. In 1997, to avert the collapse of the bank, shares were sold to the Keppel Group of Singapore, which is now the majority shareowner of the bank. The BSP, meanwhile, conducted an audit and found out the following:

- Management failed to maintain essential accounting records such as the individual or subsidiary ledgers for the loan accounts.
- The lack of essential records and loss of internal control made the monitoring system utterly unreliable.
- The lending scheme was a program without borrower records and internal controls, and with an unreliable monitoring system.
- The loans envisioned for the underprivileged were coursed through the SLI, a corporation that had a capitalization of only P100,000.
- The bank tapped SLI to act both as its conduit and collection arm for the loans, an arrangement that was deemed by the BSP to be one-sided and disadvantageous to the bank.

The BSP found directors and officials of the bank guilty of unsound banking practices and ordered them to pay administrative fines ranging from P50,000 to P80,000 for the P2.5 billion that the bank failed to account for and collect.

Source: Manila Times, January 5, 1998.

immediate requirement, therefore, is to strengthen prudential regulation with respect to capital adequacy and the method of banking supervision. Philippine banks are not as sufficiently capitalized as their regional counterparts. BSP has time and again called for adequate capitalization of banks as the first line of defense against market volatility and uncertainty. It has encouraged the adoption of the BIS risk-based capital adequacy guidelines. The government has proposed an amendment to the General Banking Act, a law crafted in 1948, which will require banks to adopt the international formula for capital adequacy prescribed by the Bank for International Settlements (BIS).

There is some trade-off between the ease of entry and competition in the banking industry and the stability and safety of banking institutions arising from higher capital requirements. Given the trend toward financial integration and more innovations in the financial marketplace, adequate capital will be a must to maintain the stability of the banking system and protect clients. However, a number of local researchers have voiced fear about greater concentration that may be brought about by high capital requirements, exacerbating the oligopolistic structure of the banking industry (Tan 1989; Lamberte 1993). In the money market, Yap et al. (1990) observed the interlocking with investment institutions, which increased the relative importance of certain banks and made the money market less diversified. Yap documented that three banks directly accounted for only 13 percent of total deposit substitutes of all financial institutions with quasi-banking licenses, but their affiliates had 35 percent of total money market balances.

Nevertheless, the danger of greater concentration and, therefore, worsening of the oligopolistic structure of the industry could be offset by introducing greater competition, contestability, and transparency in the financial markets. Thus, for example, eliminating restrictions imposed on banks and specialized financial institutions will foster competition. The abolition of subsidized loan programs and the privatization of government financial institutions will also introduce greater competition in the financial markets. Similarly, further development of the securities markets can offer greater direct competition to loans provided by banks. Finally, the entry of foreign banks into the sector can also be eased further.

The more valid fear should arise from interlocking ownership, which may be aggravated by high capital requirements. The Philippines is no exception to interlocking ownership, which exists among some of the biggest financial, trading and industrial firms. The interlocking ownership creates the incentive to provide credit to ailing but jointly owned firms for certain reasons. The antidote here is not a policy that blocks high capital requirements but a policy that fosters greater competition and contestability in the financial marketplace and effective prudential regulation and supervision that requires transparency and disclosure of information.

Comprehensive risk-based supervision. Traditionally, the regulatory institutions and banks alike have concerned themselves only with credit risk. However, the new emerging financial environment and structural changes in the real economy have engendered new types of risks or have highlighted the existence of various types of risks heretofore ignored by regulators and banks. Risk-based supervision, in the sense of a more comprehensive risk perspective, is a new area for the Bangko Sentral. Given the fiduciary responsibilities of the banking sector, risk management is more difficult for this sector than for the securitized market (Goldstein et al. 1992).

The growing competition from the securities market has induced banks to shift to higher-risk but higher-return activities. This strategy is shown by the commercial banks' exposure to off-balance sheet activities such as contingent commitments, underwriting of security issues, swap transactions, derivatives and other activities yielding noninterest incomes. However, the decline of on-balance sheet activities and the expansion of off-balance sheet activities have contributed to the "growing opaqueness of the financial system" (Goldstein et al. 1992). The net effect is the increased riskiness of banks and the inadequacy of traditional prudential regulation and supervision approaches to deal with it. Borrowers now have the advantage of reducing their exposure to risk because of different risk management instruments offered by banks. The problem is that "it has become increasingly difficult to assess the risk exposure of the entire consolidated balance sheet of financial institutions that are counterparties to these (risk or hedging) instruments." (*ibid.*)

Prudential regulations must cover the entire spectrum of risks in the banking industry (Fischer and Reisen 1992). Traditionally, prudential regulation and supervision covered only credit risk. Recent research (Fitzgerald et al. 1997) indicates that Philippine bank regulation and supervision have assessed risk without the benefit of a formal framework and terminology. Informal analysis was the order of the day as banks prior to deregulation and liberalization had a narrow scope of products and services. The complexity of the deregulated and liberalized financial markets is now forcing a reassessment of the risk management technology employed by banks and regulators. Fitzgerald et al. (1997) hold the view that "traditional methods for looking at risk are being strained and are often inadequate." The suggestion is for Philippine bank regulators and supervisors to consider a formal process and common terminology for assessing risk and risk management systems such as those found in national banks in the United States.

In this respect, the Office of the Comptroller of the Currency (OCC, United States Treasury Department) identified and defined nine risks that must be assessed to develop accurate risk profiles of banking institutions for which requisite regulatory action may be developed (*ibid.*). The nine different types of risks are as follows[6]:

- *Credit risk*: Credit risk exists when a bank is dependent upon another party to make or keep the loans integral. On- and off-balance sheet exposure creates credit risks for banks.
- *Liquidity risk*. This arises when a bank has insufficient access to funds and is too heavily dependent on limited sources of

6. The short discussion for each type of risk is from a presentation of Thomas Fitzgerald to bank examiners of BSP in July 1997.

funding. The inability to meet deposit withdrawals and loan requests and to liquidate assets without significant loss to the bank constitutes liquidity risk.

- *Price risk.* This is comprised of risk to capital, earnings and liquidity arising from changes in the value of portfolios of financial institutions. Market making, dealing and position taking may give rise to price risk.
- *Transaction risk.* This is brought about by problems associated with service or product delivery. This is also known as operating or operational risk. The accuracy and timeliness of reports, presence of security controls, fraud prevention and fraud detection measures are important elements of bank operation, and the inadequacy of these measures creates transaction risk.
- *Interest rate risk.* The movement of interest rates affects the portfolios of financial institutions and inability to adjust interest rates to changing economic and financial conditions constitutes interest rate risk.
- *Foreign exchange risk.* This pertains to risks associated with movements in foreign currency rates and will matter a lot if a bank has foreign currency denominated loans and equity investments. Table 12 reproduces some statistics cited by a well-known columnist from a Deutsche Morgan Grenfell (DMG) report on the status of US dollar denominated loans of eight Philippine banks. It vividly illustrates the risk associated with having a large exposure in a foreign currency denominated loan. What may make matters worse is that some 20 percent of the dollar borrowers do not have foreign currency (dollar) revenues. Dollar loans increased by some $5.7 billion between 1995 and 1996. The contribution of US dollar loans to the growth in total loans rose from 12 percent in 1993 to as much as 40 percent during the first half of 1997.
- *Reputation risk.* The bank's public reputation affects its ability to establish or sustain customer relationships. This is because banking is essentially a trust business and good reputation is a *sine qua non* in the industry.

TABLE 12
US Dollar Loans of Eight Philippine Commercial Banks

Year	Loans ($ M)	Increase in $ Loans	Growth of Loans (%)	Contribution of Loans to Loan Growth (%)
1993	2,493	464	23	12
1994	3,595	1,102	44	24
1995	5,408	1,813	50	24
1996	11,094	5,686	105	35
1997Q1	11,585	4,946	74	40

Source: Solita Monsod, citing a DMG report.

- *Strategic risk.* This type of risk pertains to the implementation of the bank's business plan. It focuses on how the implementation of those plans affects the bank's value. It is important to consider how the bank management handles uncontrollable factors such as changes in rules and regulations, new competition, changes in technology, and the financial environment.
- *Compliance risk.* The bank's nonconformance with laws, regulations, accounting standards, ethical standards, etc., results in compliance risk. The corresponding fines, penalties, damages or sanctions harm the bank's reputation and operational capacity.

What is evident is that the present credit risk based supervision must give way to a more comprehensive risk-based supervision, which takes into account various types of risks that may affect the viability of a financial institution. The last three risks are less quantifiable than the first six as noted in the Fitzgerald report. However, the identification of these different risks implies that the BSP and the Philippine Deposit Insurance Company (PDIC) must start looking at advanced risk management techniques.

The traditional check against credit risk is the existence of a collateral (usually real estate mortgage, liquid government securities, hold-on deposits at the lending bank) which the bank can seize upon loan default. However, heavy reliance on collateral "mitigates risk by avoiding risk rather than managing risk" (Fitzgerald et al. 1992). The immediate effect is that banks tend to be very conservative, thereby serving fewer borrowers. Conversely, "good risk management techniques" will enable "lenders to take on more risks, serve more borrowers, and earn higher returns while reducing the risk of loss *(ibid.)*. The suggestion is that understanding and employing advanced risk management techniques could be helpful to both financial institutions and regulatory institutions. The former can maximize returns while minimizing risk of loss while the latter can anticipate and prevent systemic risk in the financial markets.

In summary, the common practice is to check on compliance with banking laws and regulations which does not necessarily imply that activities or decisions posing the greatest risk to the bank are being considered at all.[7] Examiners routinely check compliance with banking laws, assess internal controls and apprise management. They do not necessarily evaluate the bank's lending policies although they profile loans but do not necessarily consider loans that are in the initial stage of delinquency (Fitzgerald et al. 1997). Hence, it is important for the BSP and PDIC to move away from simple checking of compliance with banking laws and regulations to risk-based assessment and supervision. To do this, Polizatto (1990) recommends, among others, a "top-down approach" which reviews the direction and policies laid down by the board of directors and top management. It is not enough for one to determine the magnitude of the problem. Far more important is the ability to anticipate problem areas and prevent the likelihood of their occurrence.

Information disclosure and adequate accounting and auditing standards. The integrity of the financial system rests on adequate information disclosure by the supervised financial institutions.

7. For example, the failure to anticipate the rise of problem loans is shown in the experience of Monte de Piedad Savings Bank (Box B above) and also that of several commercial banks which were shocked by the loan default of the EYCO group of companies and Victorias Milling Corporation which owed them several billion pesos of loans. EYCO asked for a moratorium on its debt payments to 22 creditor banks. The estimated total loans of EYCO ranged from P2 billion to P5 billion.

The intertemporal character of financial transactions compels the disclosure of information on the bank and its activities not only to shareholders but also to bank supervisors and, to some extent, the public. Because of limited bank supervisory resources, off-site surveillance is extremely necessary. Adequate information disclosure is, thus, imperative. Philippine banks generally adhere to accepted accounting and auditing standards and, thus, provide information that is reflective of their true financial condition (Lamberte and Llanto 1995). They submit regular reports to the BSP which help supervisors in gauging their financial condition.

Nonetheless, accounting and auditing standards need to be strengthened. Standards to be established include guidelines for asset classification, a stricter definition of past dues and nonperforming assets, prohibition against capitalization of refinancing of interest which is due and unpaid, reversal of previously accrued but uncollected interest on nonperforming assets, adequate provision for actual or potential loan losses, and guidelines for the recognition of foreign exchange losses and other losses (Polizatto 1990).

It is imperative that the BSP and PDIC not be content with checking the submitted reports for compliance with rules and regulations, e.g., those pertaining to liquidity, and reserve requirements, credit guidelines, and computation of certain balance sheet ratios, e.g., for CAMEL rating purposes. More information is needed on data on the bank's loan portfolio, especially delinquencies, problem assets, foreign exchange position, off-balance sheet commitments, and other risk areas. It is instructive that when there was great concern about the exposure of the banking industry to the property sector, the BSP had to resort to a special survey of selected banks to get the information.

The adherence of banks to improved accounting and disclosure standards is critical. Banks represent the first key line of defense against systemic risk and weakening of the financial system. Thus, banks need to be induced to adopt better risk management techniques, especially vis-à-vis innovations in the financial marketplace, e.g., derivatives. Goldstein and Folkerts-Landau (1994) point out the increasing importance of derivative positions and activities among banks, securities firms and other players. Accurate risk assessment has up to now been hobbled by a lack of transparency about this type of exposure. A bank's balance sheet cannot be assumed to be sufficient to protect a bank from trading exposure. The bank must have an effective risk management strategy that "will catch an ill-conceived trading strategy or a faulty hedge before it takes place, or failing to do that, at least ensure that when losses reach a pre-specified limit, operations are cut back to prevent even larger losses from being sustained" (Goldstein and Folkerts-Landau 1994, p. 30).

Asset classification and provisioning. The balance sheet and the income statement may not provide accurate information on the actual condition of the bank if there has been a failure to classify problem assets, make provision for losses, and apply consistent charge-off or write-off policies. Apparently, Philippine practice in this area has been deficient. A recent study (Fitzgerald et al. 1997) revealed that there is no official or uniform charge-off or write-off policy. Banks are required to submit quarterly reports on loan charge-offs. The BSP uses the ratio of loan charge offs to the total loan portfolio as an indicator for its off-site supervision. However, while lending institutions determine when a loan is to be charged off, the timing of the loan charge-off depends partly on its effect on the bank's capital position and the associated tax effect. Thus, a loan charge-off could be postponed because it will deplete capital and the depletion will trigger the need to bring in more capital. If no new capital is in sight, then the loan charge off could be deferred. The tax angle comes into the picture because, under the country's tax rules, loans must first be charged off before they are allowed as deduction for income tax purposes. The timing of the charge-off is partly determined by the tax avoidance process of banks and not necessarily by the need to reflect the true financial condition of the bank which may require new capital. Clearly, the priority is to have a transparent charge-off policy with the paramount objective of reflecting the bank's true financial condition. Thus, a strict implementation of a loan charge-off policy is needed.

In view of the regional currency and financial turmoil, the BSP is set to require[8] banks to submit detailed and regular reports on nonperforming loans. The intention is to have an accurate gauge of the financial health of banks. The BSP has, thus, required banks to set up a general loan loss provision equivalent to 2 percent of the total loan portfolio in addition to the allowance for probable losses on substandard and doubtful loan accounts. It also redefined nonperforming loans as "loans in arrears for more than 3 months." Previously, nonperforming loans were those in arrears for more than six months. According to the BSP, in addition to nonperforming loans the banks would be required to report every quarter the following: restructured loans, loans to directors, stockholders and related interests (so-called DOSRI loans), amount of general loan loss provision, loan loss provision for specific accounts, provision for losses of other asset accounts, unbooked valuation reserves and investment in government securities. The banks claim that these are already contained in the reports they have submitted to the BSP. However, it seems that these details are not reflected in those reports.

Incentives for monitoring the bank's financial soundness. Are there alternatives to the traditional exhortation to monetary authorities and banks to monitor the financial soundness of these institutions? Recent literature (Caprio 1997) has suggested that, apart from bank regulators/supervisors and bank managers, the owners of banks represent an interest group that could be motivated to monitor the financial soundness of banks. There has been a debate on the appropriate approach to bank regulation and supervision: should we go for stronger regulatory institutions (following the BIS requirement for higher capital and improved monitoring) or should there be more of the market approach (relying on incentives to managers and owners) proposed by the Reserve Bank of New Zealand? Although this paper is not the

8. Newspaper reports say the BSP is targeting the implementation of the new reporting policies in March 1998.

place to analyze the contrasting positions, the idea of bank owners as an interest group needing appropriate incentives to look after the health of banks is intuitively appealing. Thus, in addition to creating an incentive structure that will motivate bank regulators and supervisors and bank managers to foster the financial soundness of banks, a complementary incentive mechanism for bank owners is most ideal. Caprio (1997) argued that greater liability limits, increasing the franchise value of bank licenses or higher capital may improve incentives for bank owners and minimize the need for supervisory oversight.

Incentives and disclosure are the main elements of the market-based approach. The New Zealand authorities minimized public sector presence and involvement in the economy, including the financial markets. Thus, they showed a commitment to an open banking system and to keep compliance costs low. Market discipline in this case is expected to promote the soundness and efficiency of the financial system (Caprio 1997). Box C describes the market-based approach adopted by New Zealand.

VI. STRENGTHENING REGULATORY INSTITUTIONS[9]

The regulatory institutions are, principally, the Bangko Sentral ng Pilipinas (BSP) and, secondarily, the Philippine Deposit Insurance Corporation (PDIC). The PDIC oversees the activities of banks that have secured deposit insurance from it as required by law, although its focus has been mainly on the rural banking system. The BSP was recently created by an Act of Congress

9. Instead of strengthening regulatory institutions, New Zealand has proposed a market approach. Regulatory constraints on banks would be reduced in favor of public disclosure and market discipline. Prudential requirements would be eliminated except capital standards. Bank directors will have a greater responsibility for sound management of their banks. Credit rating will be extensively utilized and displayed on bank premises as part of strengthened public disclosure requirements. See Morris Goldstein and David Folkerts-Landau, "International Capital Markets: Developments, Prospects and Policy issues," World Economic and Financial Surveys, International Monetary Fund, 1994, pp. 13-14.

Box C. New Zealand's market-based approach to bank regulation

The focus of the market-based approach is on disclosure and incentives. Banks must issue quarterly public disclosure statements which carry the usual information on the balance sheet and income statement, the composition of the board of directors, any conflict of interest any member may have, asset quality and provisioning, loan concentration data to individuals and sectors, lending to related parties, risk management systems, capital adequacy and off-balance sheet exposure, market risk exposure, any guarantees and their credit ratings. This extensive disclosure system can induce bank management to be more prudent. Full disclosure is available on demand and abbreviated statements must be posted in all bank branches. If the authorities discover information not available in the market, they are obliged to disclose it within the quarter.

Source: Caprio (1997) citing Peter Nicholl, "Market-based Regulation," mimeo., The World Bank.

because the former Central Bank of the Philippines (CBP) had to close shop in view of its inability to implement monetary policy resulting from its huge stock of accumulated losses. The CBP's effectiveness in implementing monetary policy was diminished because it had to continuously create money or issue debt instruments to service its indebtedness. The BSP was given the prime task of maintaining price stability while at the same time remaining as the supervisor and regulator of financial institutions. The law that created the BSP established a Central Bank Board of Liquidators with the unenviable task of retiring the huge indebtedness of the defunct Central Bank of the Philippines. Congress also provided for a P50 billion capitalization of BSP and the simplification of its mandate by asking it to focus on the maintenance of price stability. Thus, the BSP is a much stronger institution than the old Central Bank of the Philippines.

A critical aspect of bank regulation and supervision is clarity about the role of regulatory/supervisory institutions in the mind of the public and policymakers. Bank regulation and supervision have to do with the protection of depositors, monetary stability and an efficient and competitive financial system. Thus, bank regulators/supervisors must have the support of the banking industry and government to remain independent and honest. This also means that political interference must be avoided. Preservation of the integrity of the financial system must be paramount, and this cannot be sacrificed for short-term political goals, e.g., unsustainable subsidized credit programs. Without the required support and understanding of their role, bank regulators/supervisors will be ineffective (see Polizatto 1990).

In this regard, a review of BSP's regulatory and supervisory powers under the General Banking Act is in order. Specifically, the following amendments have been proposed:

- updating of banks' classification system
- prescribing the duties and responsibilities of directors and officers
- regulating the payments of compensation to directors and officers in exceptional cases
- authorizing the Monetary Board (of BSP) to suspend or remove directors and officers found unfit to continue holding office
- rationalizing the powers of banks to invest in allied and nonallied enterprises
- clarifying the operations of trust entities
- allowing flexibility in complying with international conventions.

These bring to mind the ability of the Malaysian authorities to act decisively in averting an impending financial crisis. As related in Box A above, the Malaysian authorities exercised ample powers to restore confidence and stability in their financial system. The proposed amendments seek to provide the BSP with clearer and stronger bank regulation and supervision authority, for there is a prevailing view that the law which created it did not vest it with ample regulatory and supervisory powers.[10]

The supervisory approach relying on checking compliance with banking laws and regulations should be complemented by a risk-based supervisory approach. Presently, there is heavy emphasis on on-site examination. This paper suggests that a bank supervision approach composed of (1) off-site supervision, (2) on-site examination, and (3) the compliance function could be more effective. The operating departments of the Supervision and Examination Sector of BSP use mainly on-site examination as their supervisory tool. There is limited off-site analysis conducted by these departments. The BSP has a Supervisory Reports and Special Studies Office (SRSO) which receives regular financial reports. It generates the financial statistical reports for the use of the operating departments. Its main mission is to review systems and procedures related to supervision and to propose policy recommendations and amendments to existing policies, rules and regulations. Given the information on the banking sector that it possesses and can collect further, it may be able to develop an effective early warning system to identify potential problem banks. Thus, it could be a more effective off-site examination office. There should thus be greater interaction between the two operating departments of the BSP, namely, the Supervision and Examination Sector (SES) and the SRSO. Through such interaction, the complementarities of off-site and on-site examination can be exploited and even enhanced.

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10. For example, the BSP deputy governor for supervision was quoted by print media as having said that Section 28 of the new law (R.A. 7653) removed the "surprise element" of bank examination. He allegedly said that BSP examiners were allowed to look into the books of banks "once every 12 months" with the next examination to be scheduled "at least 12 months" later. A special examination must have prior approval of the Monetary Board. A majority vote of 5 out of 7 (members) is needed to conduct a special examination of banks. It seems the BSP cannot just summarily remove errant bankers but must observe "due process." It can mete out preventive suspension of errant bankers for 120 days and impose fines of up to P30,000 a day (which is too small, according to some quarters). Another issue is the desire of the BSP to have the power to remove bank officials. R.A. 7635 authorizes the BSP to suspend but not remove bank officials. This is a hotly contested issue with an opposition legislator arguing against the "power to remove" idea.

The third component of the risk-based supervision approach is the compliance function. Its purpose is to introduce corrective action on the deficiencies uncovered during on-site and off-site examination. The compliance unit can thus monitor the implementation of corrective action in cooperation with the concerned banks and recommend further improvements and sanctions.

The PDIC also conducts an examination of banks but relies on the SES for information, for findings of BSP examiners, etc. Under R.A. 7653 (New Central Bank Act of 1993) the receivership and liquidation of rural banks were to be transferred to the PDIC. The same recommendation on risk-based supervision is appropriate for PDIC. It must likewise be strengthened in view of its crucial role in deposit insurance and the receivership and liquidation of rural banks. Finally, improved coordination between PDIC and SES is desirable in view of their shared objective of maintaining a sound and efficient financial system.

Strengthening monetary institutions for monetary policy surveillance. Financial reform in the Philippines aimed at greater flexibility in interest rates and greater market orientation in credit allocation. These two meant a deemphasis on reserve requirement as a monetary tool. The reserve requirement of the Philippines has historically been much higher than that of other countries in the region. The high reserve requirement imposed a high intermediation cost which contributed to comparatively high domestic lending rates and low saving rates. The program of reduction in the reserve requirements in recent years is consistent with the financial deregulation and reform program.

With the increasing deemphasis on the reserve requirement as a monetary tool, the country necessarily would have to rely more on indirect instruments of monetary control, especially open market operations. This means changed transmission channels of monetary policy, with possibly a diminished predictive ability of monetary targets. The liberalization of the foreign capital account further complicated the conduct of monetary policy, as the exchange rate became a critical channel of monetary policy itself. Thus, monetary authorities may have to look at a basket of indicators to serve as basis for monetary decision making. (See Milo 1997.)

In the Philippine context, much remains to be done to understand the transmission of monetary policy in the new regime of financial deregulation and open capital accounts. There is yet little technical, analytical and modelling research done in this area. The weak result for both domestic credit and interest rate in the output equation of Milo's (1997) vector autoregression (VAR) model highlights the need for more in-depth analysis on the interaction of the monetary, international and production sectors of the economy in order to help monetary authorities finetune their open market operations. This means the need for greater technical analysis capacity in the monetary institutions, especially the Bangko Sentral, apart from encouraging more domestic research in monetary policy in the country.

VII. CONCLUDING REMARKS

The experience of the Philippines and Southeast Asian countries during the past two decades suggests the following key lessons:

1. Macroeconomic stability is critical to long-term growth of the financial sector. Macroeconomic crises lead to financial disintermediation as the Philippine experience during the mid-1980s shows. The robust economic recovery since 1994 in the Philippines has encouraged greater financial deepening. The stable macroeconomy in recent years, with the implicit low inflation expectations, has encouraged the expansion of formal financial institutions deeper into the countryside and the urban informal sector, thereby providing a stronger competitive pressure vis-à-vis informal financial intermediaries (e.g., money lenders).

2. Prudential regulation and supervision is central to the robust growth of the financial sector. The inherent problems of risk management and asymmetric information in finance demand a marked policy bias for effective prudential regulation, monitoring and supervision of financial institutions. The financial

crisis in the Philippines in the early 1980s was substantially caused by lax prudential regulations and supervision and loose banking practices. The ineffective prudential regulatory climate was aggravated by distortions in incentives in the financial market, especially through the subsidized directed credit schemes, that further discouraged sound credit decisions especially by the undercapitalized rural banking sector. As a result, the rural banking sector, which neglected deposit mobilization, was especially hard hit by the economic troubles of the early 1980s.

3. Capital flows can exacerbate weaknesses in the macroeconomic regime and in prudential regulations and supervision. Negative real borrowing rates from abroad combined with a protectionist trade and industrial policy at home encouraged foreign-debt financed investment expansion primarily in the protected and nontradable sectors during the latter half of the 1970s in the Philippines. The result was inefficient allocation and utilization of investment and a worsening external debt service problem at the start of the 1980s. This contributed significantly to the country's slide into a deep economic crisis in the mid-1980s.

4. Large capital flows – and the attendant high current account deficits and/or fast rising level of international reserves in recipient countries – under an open capital account create significant macroeconomic policy challenges and rising credit risks. At the very least, the domestic financial market and macroeconomic conditions are vulnerable to changes in expectations of foreign investors. Unsterilized capital flows lead to domestic inflationary pressures and real appreciation of the domestic currency, thereby resulting in a loss of international competitiveness of exports. Effective sterilization, on the other hand, leads to a higher domestic interest rate which encourages foreign borrowing by domestic firms. This, however, raises problems of poor credit decisions and/or investment decisions which ultimately lead to growing concerns about the sustainability of the large current account deficit. In short, large capital flows under a liberalized foreign exchange market and open capital account demand a deep and efficient financial sector as well as strong prudential regulations and

supervision in order to minimize the potential distortive and risk-augmenting effects of the flows.

5. The financial reforms during the past one and a half decades, together with overall reforms in the economy and the strengthening of macroeconomic fundamentals in the Philippines, have resulted in the strengthening of the financial sector. The financial reforms have focused on strengthening prudential regulations, minimizing pricing distortions in credit decisions (by eliminating subsidized credit from the ambit of the Central Bank and imposing a uniform and market-based rediscount rate), and (controlling) the liberalization of the entry of foreign banks into the country's financial sector. The effects have been a significant expansion of financial institutions, the entry of a number of important international financial institutions, financial deepening, a comparatively high capital adequacy ratio, and the introduction of innovative banking services. In short, the country's financial sector became more robust. As a result, the country has so far been able to withstand the substantial depreciation of the peso, the rise in the interest rate and the slowdown of the economy without any incidence of a failed bank or financial institution, unlike in Thailand, Indonesia and South Korea.

Nevertheless, as the recent currency and financial turmoil in the region brings out, it is important to exercise greater vigilance in prudential regulation, monitoring and supervision. In addition, the capacity of the regulatory institutions needs to be improved, foreign exchange regulations may have to be reviewed, and greater contestability in the financial sector should be encouraged. Specifically, the following are recommended:

1. *Strengthening prudential regulation and supervision.* This involves the implementation of comprehensive risk-based assessment and supervision, instead of focusing primarily on credit risk. Banks have increasingly offered other financial products, notably both on-balance sheet activities and off-balance sheet activities, which have different risk configurations. Hence, bank supervision would have to move towards a more comprehensive risk-based assessment. In addition, there is a need for more stringent information disclosure requirements, adequate

accounting and auditing standards, as well as clearer rules and greater transparency in asset classification and provisioning.

2. *Strengthening regulatory institutions.* This would require modifications in the General Banking Act in order to give the Central Bank clearer and stronger bank regulation and supervision authority as well as strengthening an off-site office that complements on-site inspection in risk-based supervision. There is also a need to improve the Central Bank's analytic capacity in understanding the transmission channels of monetary policy and the interactions between the financial sector and the rest of the economy.

3. *Review the policy on capital accounts and foreign borrowing.* The recent experience in Southeast Asia suggests that large capital flows are difficult to manage in emerging financial markets without significant adverse macroeconomic effects or worsening credit risks. During the transition when the institutional capacities are still being strengthened in line with the more comprehensive risk-based supervision, it may be useful to look into the Chilean policy for possible adoption or adaptation in the country. Specifically, in the case of Chile, this entailed stricter rules on domestic firms borrowing directly abroad (e.g., minimum credit rating rule), the imposition of reserves on short-term foreign currency deposits by nonresidents and other short portfolio flows, and a one-year residency requirement on foreign direct investment. The implicit policy bias towards equity and long-term funds and against foreign borrowing and short-term funds appears more consistent with sustainable growth and more prudent banking risk management.

4. *Greater contestability in the financial market.* Here the difference between Chile and the Southeast Asian countries is relevant. In Southeast Asia, there is limited entry into the domestic financial market by foreign institutions but a relatively free cross-border flow of capital. In contrast, Chile imposed some controls on cross-border capital flows but allowed more liberal entry by foreign institutions into the Chilean financial market (Claessens and Gaessner 1997b). Greater entry of foreign financial institutions into the domestic market would induce greater contestability in the

market, contribute to the deepening of the financial system, improve the efficiency of the provision of financial services, encourage financial innovation, and strengthen the economic linkage of the country with the rest of the world. The performance of domestic banks in recent years in the face of the entry of foreign banks suggests that the former, some after mergers or partnership with foreign banks, can compete well with foreign banks. What may be the operational issue is the pace and mode of the further liberalization of entry of foreign banks into the country's financial sector.

REFERENCES

Bangko Sentral ng Pilipinas. *Implications for Monetary Policy of Bank Exposure to the Real Estate Sector.* 1996. Mimeographed.

Bautista, E. "A Study on Philippine Monetary and Banking Policies." *Working Paper Series No. 92-11,* Philippine Institute for Development Studies, August 1992.

Berthelemy, J. C., and A. Varoudakis. *Financial Development Policy and Growth.* OECD Development Centre, Paris, 1996.

Caprio, G. "Safe and Sound Banking in Developing Countries: We're Not in Kansas Anymore." *Policy Research Working Paper 1739,* World Bank, Washington D. C., 1997.

Claessens, S., and T. Glaessner. "Internationalization of Financial Services in East Asia." Draft report scheduled for presentation at the *Conference on Investment Liberalization and Financial Reform in the Asia-Pacific Region,* Sydney, August 1997a.

_______ . *Are Financial Sector Weaknesses Undermining the East Asian Miracle?* World Bank, Washington D. C., 1997b.

Dietrich, J. K. *Financial Services and Financial Institutions: Value Creation in Theory and Practice.* New Jersey: Prentice Hall, 1996.

Douglas, H. "Financial Reform in Chile: Lessons in Regulation and Deregulation." In *Financial Regulation: Changing the Rules of the Game,* edited by D. Vitas. World Bank, 1992.

Fischer, B., and H. Reisen. "Towards Capital Convertibility." *Policy Brief No. 4,* OECD Development Centre, Paris, 1992.

_______ . *Liberalising Capital Flows in Developing Countries: Pitfalls, Prerequisites and Perspectives.* OECD Development Centre, Paris, 1993.

Fitzgerald, T. et al. "Regulatory Barriers to Innovative Lending Practices: Traditional Approaches to Bank Supervision." *Working Paper No. 4, report submitted to the National Credit Council,* Department of Finance, December, 1997.

Folkerts-Landau, D. et al. "Effect of Capital Flows on the Domestic Financial Sectors in APEC Developing Countries." In 'Capital Flows in the APEC Region,' *IMF Occasional Paper 122,* edited by M. Khan and C. Reinhart. Washington, D. C., 1995.

Goldstein, M., D. Folkerts-Landau et al. "International Capital Markets: Developments, Prospects, and Policy Issues." *World Economic and Financial Surveys.* International Monetary Fund, 1992.

Intal, P. "Integrative Report on the Agroindustrial Restructuring and Competitiveness Program." Report submitted to the National Economic and Development Authority, March, 1996.

_______ , and F. Pante. "Can the Philippines Grow Out of Debt? (Managing External Balances: The Philippine Case)." In *The Future of Asia-Pacific Economies,* edited by F. Lo and N. Akrasanee. Asian and Pacific Development Centre, New Delhi, 1989.

_______ , and L. Basilio. "The International Economic Environment and the Philippine Economy." Draft report submitted to the Philippine Institute for Development Studies, October, 1997.

Lamberte, M. "Assessment of Financial Market Reforms in the Philippines, 1980-1992." *Journal of Philippine Development* XX (1993): 231-59.

_______ , and G. Llanto. "A Study of Financial Sector Policies: The Philippine Case." Paper presented at the Conference on Financial Sector Development in Asia, Manila, September 1993.

_______ . "A Study of Financial Sector Policies: The Philippine Case." In *Financial Sector Development in Asia: Country Study,* edited by S.N. Zahid. Asian Development Bank, Manila, 1995.

Le Fort, G., and C. Budnevich. "Capital-Account Regulations and Macroeconomic Policy: Two Latin American Experiences." In *International Monetary and Financial Issues for the 1990s,* Vol. III, UNCTAD United Nations, Geneva, 1997.

Milo, M. "The Impact of Financial Sector Reforms on the Conduct of Monetary Policy." Draft report submitted to the Philippine Institute for Development Studies, October, 1997.

Nascimento, J. C. "Crisis in the Financial Sector and the Authorities' Reaction: The Philippines." In *Banking Crises: Causes and Issues,* edited by V. Sundararajan and T. Baliño. International Monetary Fund, 1991.

Okuda, H. "The Development of Production Technology in the Liberalized Banking Industry: A Case Study of the Philippine Domestic Banks, 1988-1995." *Staff Paper Series 97-3*, Research Institute for International Investment and Development, The Export-Import Bank of Japan, Tokyo, 1997.

Paderanga, C. "Philippine Financial Developments: 1980-1995." In *Financial Sector Issues in the Philippines*, edited by R. Fabella and K. Ito. Institute of Developing Economies, Tokyo, 1996.

Polizatto, V. "Prudential Regulation and Banking Supervision." *Policy, Planning and Research Working Papers No. 340*, World Bank, January, 1990.

Stiglitz, J. "Financial Markets and Development." *Oxford Review of Economic Policy* 5 (1989): 59-68.

Tan, E. "Bank Concentration and the Structure of Interest." *Discussion Paper Series No. 89-15*, University of the Philippines, October, 1989.

Vaez-Zadeh, R. "Implications and Remedies of Central Bank Losses." In International Monetary Fund, *The Evolving Role of Central Banks*, Washington D. C., 1991.

Vitas, D. "Introduction and Overview." In *Financial Regulation: Changing the Rules of the Game*, edited by D. Vitas. World Bank, 1992.

White, L. "An Analytical Framework." In *Financial Sector Development in Asia*, edited by S. Zahid. New York: Oxford University Press, 1995a.

_______ . "Structure of Finance in Selected Asian Economies." In *Financial Sector Development in Asia*, edited by S. Zahid. New York: Oxford University Press, 1995b.

World Bank. "Philippines Financial Sector Study." *Report No. 7177-PH*, Vol. I (August, 1988).

_______. "Managing Capital Flows in East Asia." *Development in Practice Series*, Washington D.C., 1996.

Yap, J. "Central Bank Policies and the Behavior of the Money Market: The Case Study of the Philippines." *Working Paper Series 90-24*, Philippine Institute for Development Studies, 1990.