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BANKING RISKS, FINANCIAL CRISES, AND BANK REGULATION IN THE PHILIPPINES

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1. Introduction

Banks, as financial intermediaries, promote economic growth and development, a notion that has long been recognized (see, e.g., Goldsmith, 1958; Gurley and Shaw, 1960). By channeling savings to profitable investments, banks contribute to economic growth. However, when they fail in this basic task, society incurs huge costs. Bank failures may be traced to excessive risk taking, which can trigger bank runs. Massive bank runs can degenerate into a financial crisis, a situation where the payments system breaks down and financial intermediation founders. Production and consumption activities of firms and households are disrupted forcing an economy-wide contraction and massive layoffs.

A financial crisis of this sort occurred in the Philippines in the early '80s. Bank failures in 1983 propagated a contraction that lasted over the period 1984-85, the first in the postwar economic history of the country. The bank failures, together with the financial crisis that was spawned, prodded government

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officials and private bankers to press for an acceleration of banking reforms. Much progress has been made in this endeavor but the process is by no means complete at this stage.

In the second half of 1997, majority of the countries in East and Southeast Asia fell victims to collapsing currencies and got engulfed by financial instabilities. Today, worries about banking failures stalk the region since many of the commercial banks that failed to assess properly the default risks of corporate borrowers still have to be re-capitalized in a prodigious way.

Philippine banks have not been hit as badly as their counterparts in Thailand, Indonesia, Malaysia, and South Korea. Still, quite a few of the local banks that lent in US dollars to highly leveraged domestic corporations are in a precarious state. Many enterprise-borrowers had taken advantage of the relatively low interest rates on dollar-denominated loans, a move that was viewed as a fair gamble amid risk of a peso depreciation. The collapse of the exchange rate in the magnitude that actually took place was unexpected. After the peso depreciated by about 40 percent over a three-month period beginning on July 11, 1997, many leveraged corporate borrowers encountered cash-flow problems and found it difficult to service their debts, resulting in significant increases in non-performing loans (NPL). As banks increased their loan-loss provisions, their capital-to-asset ratios deteriorated and funds to support potentially profitable projects dwindled. Financial intermediation slowed down, causing economy-wide contraction in domestic output and a rise in the unemployment rate. In view of these unwanted consequences, further regulatory reforms to strengthen the banking system have become pressing.

The purpose of this paper is to review some aspects of banking risks in an environment with globally integrated financial markets, and to describe some recent developments in financial markets that lead to excessive risk taking by banks and borrowers. In the interest of the public, such excess must be dampened through government regulation and banking supervision. To be able to strengthen the existing regulatory framework, the sources of excessive risk taking must be well understood.

Banks confront risks in undertaking their fundamental task of matching savers and borrowers. This task involves creating demand deposits on the liability side, and writing loan

contracts backed by deposits and equity capital, on the asset side. Banks generally stand ready to provide liquidity upon demand from their depositors. But their loans and other investments tend to be illiquid and risky. Borrowers differ in their credit risks that if not properly managed could lead to bank insolvency. In view of the difference in the liquidity and maturity profiles of deposits and loans, banks are vulnerable to a run, a case whereby depositors rush in herd to withdraw their funds.

With globally integrated financial markets, banks confront new risk situations in managing both sides of their balance sheets. For example, the liberalization of the banking industry has raised the cost of attracting deposits and reduced lending rates. The narrower interest-rate spread reduces bank profits, thereby diminishing the market value of a bank franchise. This makes it difficult for banks to raise equity capital. At the same time, banks may have to settle for lower quality borrowers since with the integration of financial markets on a global scale, non-financial corporations can issue commercial papers and corporate bonds in money markets here and abroad at interest rates lower than bank lending rates.

Recent global developments in financial markets have also permitted greater ease in the trading of loan assets. Today, banks are able to meet liquidity demand more easily than before with growing securitization, for example, of government and corporate debts. These new developments have provided protection against liquidity demand shocks and permitted banks to provide risk capital increasingly to private enterprises, although they tend to encourage banks to take on excessive lending risks. Moreover, these innovations have given rise to market-valuation risks. The market's valuation of a bank's holdings of securities may be far below the bank's own valuation. If the demand for liquidity arrives at a point of extremely divergent valuation, forcing the bank into premature liquidation, then the bank loses a great deal of money.

In assessing banking risks, the paper starts with a review of the risks involved if free banking were the norm. It has long been maintained that unregulated banking is prone to excessive risk taking. In a world of uncertainty, banks may sometimes be caught in a frenzy of lending to a sector perceived to have immense growth potentials, say, real-estate development. If at

some point, expectations of low earnings in that sector are generated, uninsured depositors may be swept by a wave of pessimism, igniting bank runs.

The bank failures in the US during the depression of the '30s and the role of these failures in extending the duration of the depression, as shown in Bernanke (1983), provided much of the impetus, from a historical perspective, for bank regulation and supervision. The thinking that such regulation and supervision are indispensable has not gone unchallenged though. Fama (1980), for instance, has argued for free banking. Fama argues that the introduction of banking regulation has not prevented the occurrence of bank runs and bankruptcies, while pointing out the efficiency gains from unregulated banking.

In any event, it is widely accepted that limited and asymmetrically distributed information, along with absent deposit insurance markets encourages excessive risk taking. Meanwhile, banks do not fully internalize the potential adverse effects on the depositing public of their actions. Furthermore, in a situation where market values of both financial and non-financial enterprises may differ from their fundamental values and where arbitrage is not adequate enough to bring about a convergence of values in the short run, excessive risk taking may be induced. Failures of some banks and securities companies engaged in the trading of junk bonds or unsecured debt papers are illustrative. The non-financial firms, meanwhile, contributed to these problems by opting for a highly leveraged capital structure, i.e., a high debt-equity ratio. The problems of banks and other financial intermediaries are thus linked intimately with risk taking by non-financial corporate borrowers.

Competitive markets do not provide a monetary system. In the Philippines, the government established a central bank that issues fiat money, which is used as a medium of exchange and a store of value. A central bank influences financial-market developments through its conduct of monetary and exchange rate policies. Some of the shocks to the banking system sometimes emanate from these policies. Inflationary monetary policy, for instance, weakens the local currency. A profound currency depreciation raises debt-service payments of enterprises, putting banks in a stress situation. It should be recognized then that while the central bank can be a force for securing efficient financial intermediation and stability in the

banking system, it may in some cases be the source of the problem.

The experience of the Philippine banking industry after the first wave of financial market liberalization in the '80s provides a useful historical perspective for drawing lessons about the sources of bank failures and propagation of financial crises. The bank failures in 1983 and the current difficulties that banks confront amid the Asian currency instability and tightness of financial lending in global markets are put up as case studies of banking risks and financial crises. The lessons from these studies help direct authorities to the route that bank regulation ought to take in the future.

Bank failures that degenerate into financial crises are a cause for concern. Although it is acknowledged that agents who engage in excessive risk taking must face the consequences of their actions, government policy makers are generally mindful of the welfare of innocent depositors and small businesses that a financial crisis could ruin. The public interest thus argues for government intervention through regulation and supervision of banks. In addition, deposit insurance systems run by the government are deemed necessary to dampen the probability of bank runs.

The paper is organized as follows: Section 2 presents a framework that organizes some thoughts about the role of banks in financially intermediated competitive markets, the intermediation failures that seem inherent in such setting, and the bank regulation indicated by these failures. Section 3 examines the risks to banking when a government establishes a central bank with monopoly over money creation. Section 4 revisits episodes in the '80s of bank failures and looks at some of the impacts on banks of the recent Asian currency and financial turmoil. Section 5 describes the existing regulatory environment for banks in the Philippines. Section 6 concludes by describing the regulatory responses taken by the Bangko Sentral ng Pilipinas (BSP) and suggesting some new directions for regulatory reforms.

2. Banks and Financially Intermediated Markets: A Framework

In any market-oriented economy, individuals, households, and firms with surplus funds, the savers, coexist with other agents experiencing fund shortage, the borrowers. The latter's demand for liquidity can be met provided savers are compensated for giving up some liquidity in the current period. Matching savers and borrowers is costly and risky, and in this environment, institutions called banks emerge, whose fundamental task is to minimize the costs and diversify the risks when mediating between savers and borrowers.

Banks' basic function of matching savers and borrowers has remained the same over the years. In other words, banks perform financial intermediation. In doing so, they are able to shift resources across time and space, and in so far that they also function as insurers, say, against foreign-exchange risks, they are able to shift resources across states of nature. Savers choose from a portfolio of available assets in allocating their surplus funds. This portfolio may include non-interest-bearing money and interest-bearing financial instruments like bank deposits. On the other side of the market, there are borrowers who are illiquid or short of funds; they tap bank loans to finance part of their consumption or investment plans. In the presence of banks, the timing of income receipts and purchases can diverge for borrowers.

Decision-making by both savers and borrowers involves uncertainty and the passage of time. Savers value liquidity to support their preferred commodity bundles across time. They want liquidity upon demand, and bank deposits have an advantage over other assets in this regard: they are immediately redeemIn an unregulated environment, banks meet depositors' demand for liquidity in at least two ways. One, they maintain reserves in their vaults. Two, banks experiencing unusually large withdrawals may borrow from other banks at the going interest rate in the inter-bank market. Alternatively, the banks' shareholders may infuse additional capital.

On the asset side, banks lend so that they can earn and service interest payments due on deposits. In lending, banks face uncertainty about the quality of potential borrowers. Some borrowers have high default risk, while others have low. Banks

undertake credit investigations to obtain information about borrowers' quality. They may charge heterogeneous borrowers different interest rates, with low-risk types having to pay a lower interest rate than the high risk. This is seen for example in the case of borrowers like the government whose default-free Treasury bills are charged an interest rate lower than even the prime rate levied on select corporate clients.

In some cases, it may be very costly to differentiate borrowers by default risk. They may have the same observed characteristics like income, but they could differ in unobserved traits like drive in the labor market and motivation to repay loans. In this setting, banks impose a uniform interest rate but they ration credit, denying loans to borrowers perceived to be high risk. In other words, banks do not adjust the interest rate to clear demand for and supply of credit, but resort, instead, to quantitative rationing (see, e.g., Stiglitz and Weiss, 1981). This is observed, for instance, in consumer banking.

It is clear that loans have varying degrees of riskiness and liquidity. Government debts like Treasury bills are default free and are marketable. In contrast, loans issued to private borrowers carry risks of default and are not readily tradable due to limited and asymmetric information. Normally, a bank cannot extract all the information about borrower quality, and whatever information it has about its client tends to be monopolized. As a result, when the loan goes sour, other banks cannot readily step in to provide liquidity, say, by assuming some of the defaulting company's debts because of absent information.

If information disclosure is valued, credit-rating agencies emerge in competitive markets. Banks are willing to pay a price to signal to potential buyers the value of their tradable assets and gain access to liquidity that other banks can provide when an unexpected surge in demand for liquidity from depositors occurs. For a fee, some agents are willing to supply the service, giving rise to a market for credit-rating services.

At entry level, banks try to mitigate credit risks by demanding collateral. Collateral is a real asset or security that the banks may take over and dispose for cash if a borrower defaults. Commercial bank loans are generally secured. It is often asserted that with limited information, borrowers try to reveal themselves as low risk by pledging collateral. Moreover,

collateral is an incentive for the borrower to repay, since bank valuation of the collateral of a defaulting borrower tends to be lower than the borrower's own valuation (see Barro, 1976). The view, however, that secured loans are less risky does not necessarily mean that the corresponding projects are also less risky. Loan and project risks must always be sorted. The banks' credit investigators and the regulatory agency's examiners must not relax their standards for secured loans. It may well happen that borrowers with riskier projects are the ones who pledge collateral.

Banks' financial intermediation leads to some balance in the goods and credit markets whereby consumer-savers are able to satisfy their inter-temporal demand for commodity bundles and enterprise-borrowers realize normal profits. Prices for goods and interest rates for loans and other bank assets and liabilities are established permitting mutually beneficial commodity exchange and efficient financial intermediation to take place. In general-equilibrium parlance, financial intermediation arises endogenously from preferences of consumers and production technologies of firms and banks placed in a dynamic stochastic setting (see, e.g., Townsend, 1983).

Bank runs

The equilibrium situation in financially intermediated markets may be disturbed by various factors. These are rooted in excessive risk taking by banks that can lead to depositor panic and bank runs. But enterprise borrowers may be guilty of the same excess. Some enterprises worried about management control prefer loans to equity capital. This tends to raise the debt-equity ratio of firms. A highly leveraged firm, however, is vulnerable to shocks, such as those that stem from unanticipated monetary policy. The effects are a surge in inflation and interest rates. When these materialize, some firms are likely to default on their loans if their debt interest payments relative to earnings go up significantly. When some corporate borrowers default, depositor confidence gets eroded, prompting withdrawals.

Depositors are also consumers who have preferences over commodity bundles over time and across states of nature. They choose their most preferred commodity bundles subject to income and time constraints. Normally, they want smooth

consumption patterns, subject to the usual substitution possibilities warranted by pair-wise changes in relative-price ratios. To implement these inter-temporal consumption plans, they carry money as a medium of exchange. And to store value, buyers open interest-bearing bank deposits, a contract that obligates banks to convert deposits into liquid cash upon demand.

However, deposit contracts that promise to provide liquidity upon demand, have risks of being breached. Banks' production technology is risky, but this is not fully revealed to the public. When banks lend to firms, for instance, they assess as a prior step the credit and project risks of potential borrowers, and proceed to monopolize the information they generate. If the information is not disclosed to the public and some big corporate clients go bankrupt, the situation is likely to trigger rumors that some bank failures are imminent. Fear of bank failures leads all depositors to withdraw their deposits and convert them into liquid cash, a garden-variety bank run.

A decentralized private insurance market lacks incentives to provide protection against bank runs on account of limited information. For one, the risks are not verifiable, ex ante, and hence, it is difficult to levy an actuarially fair premium. If a uniform premium is levied, the low risk end up subsidizing the high risk. Because of this, the low risk will shun the market, leaving only the high risk to avail of insurance. This is a case of adverse selection, which by reducing the expected profits of the insurer, results in no insurance contract being written.

For another, it is costly to determine, ex post, whether a bank run is a genuine accident or is due to deliberate and excessive risk-taking on the bank's part. An insurance contract, once contracted, dampens incentives to be careful, a situation referred to as moral hazard. The risk of a bank run is inherent in financially intermediated competitive markets with imperfect and asymmetrically distributed information. Hence, to improve existing deposit contracts, some form of collective action is needed.

Diamond and Dybvig (1983), for instance, have analyzed how suspension of convertibility and deposit insurance are able to improve on these bank contracts. Banks encountering runs can suspend conversion of deposits into cash. In other words, they can declare a bank holiday. Such holiday, however,

cannot go on forever. It must be lifted at some point so that financial intermediation can resume. But a reputation problem arises if a bank declares a holiday. Once it lifts the convertibility suspension, its existing depositors will rush to convert their deposits into cash. It cannot attract new depositors and, therefore, its liquidity problem will persist. Again, some collective action to defuse the problem is indicated.

A deposit-insurance system is helpful in building depositor confidence in the banking system. Private insurers will not provide this system in view of imperfect information. An entity like the government that has comparative advantage in addressing the adverse-selection and moral-hazard problems can step in to provide the needed correction. Such a system reduces risks of bank runs by guaranteeing that in case a bank fails, depositors are sure to get a part of their deposits equal to the deposit insurance cover.

Bank risk taking and financial innovations

Recent global developments have improved the marketability of bank loans. In an unregulated banking market, this is to be expected; competition fosters financial innovations. Banks generally hold both government and corporate bonds. Though government bonds are default-free and tradable at a discount, collapsing exchange rates and rising interest rates can impair their market values.

Corporate bonds are likewise subject to market-valuation risks in an environment with limited and asymmetric information. Some information about borrowers' quality may be available but it is often distributed unequally between the banks and the public. A bank undertakes credit investigation to obtain some ideas about the value of its borrower's assets and expected profits. The information is not disclosed to the public because such information generates some rent for the bank. If the bank encounters a sudden increase in liquidity demand, it can sell its loan assets to other banks.

But the sale and resale of bank loans are impeded by the absence of public information about the quality of the debt papers, about which other banks possess only rough information sets (see, e.g., Santomero and Trester, 1998, for a formal treatment of these ideas). Both potential buyers and sellers of

debt papers have an incentive to improve the supply of information. If the potential seller experiences liquidity problems, it would like to liquidate its debt papers at a price comparable to the value it assigned to them when it investigated the credit risks of the borrower. The potential buyer, meanwhile, would like to pay a price that the market would support. In this situation, as pointed out earlier, a market for credit rating emerges. The bank encountering liquidity problems will pay a price to the credit-rating agency so that it can signal to other banks the value of the loan assets that it wants to liquidate. However, it has to give up some rent derived from its monopoly over information gathered from its credit investigation.

There are efficiency gains from improved disclosure of information and marketability of loan assets. Banks' vulnerability to liquidity demand shocks is reduced. Moreover, the access of enterprises to risk capital significantly improves. There is a downside, though. Given the ease, with which loan assets can be traded, banks are encouraged to engage in riskier lending. Real-world examples include banks that support margin trading in stock markets, lend to hedge funds, and provide financing to leveraged buyouts (LBO). In an LBO, the company that takes over another company borrows funds to finance the takeover. In effect, debts replace equity. One motivation for LBO is management control. The downside is the increase in financial risks that a higher debt-equity ratio entails (see Modigliani and Miller, 1958).

In competitive markets complete with financial intermediaries, the cost of bank funds tends to be higher than in a regulated market with a small number of banks, particularly if interest rates on deposits are controlled or the few banks in the industry are able to collude. As deposit rates go up as a result of competition, lending rates, in contrast, slide down. This reduces the interest-rate spread of banks. As bank profits go down, the market value of a bank franchise also decreases, thereby impeding the ability of banks to raise capital in the equity market. Furthermore, if large corporations are able to float commercial papers in money markets at lower interest rates, then bank loans are crowded out. As banks lose some corporate clients, they are constrained to lend to borrowers with relatively high default risks. Overall, the capacity of banks to raise their risk-adjusted capital adequacy ratios is weakened.

3. Central Banking and Balance of Payments Crises

Decentralized markets do not provide a centralized monetary system. In the Philippines, the government established a central bank in 1949. The central bank has monopoly power over money creation. It issues fiat money. Pesos are liabilities of the central bank that need not be backed by real assets or by future budget surpluses of the government. The central bank also holds reserves of deposit-taking banks and quasi-banks over which it has regulatory powers. Currency in circulation plus these reserves constitute the money base. On the asset side, the central bank lends to the public and private sectors, as well as to eligible private financial institutions, and holds gold and other foreign assets.

Banks are creators of money through their power to create deposits and credit. When a firm borrows from a bank, the latter issues a checkable demand deposit in the account of the firm. Money is released when the firm makes payments to, say, workers and owners of capital. Currency and checkable demand deposits constitute the narrow definition, M1, of money. If savings deposits are added to M1, a broader definition of money, M2, is derived. Moreover, if deposit substitutes are added to M2, the definition of moneHouseholds and firms demand money for various purposes, but mainly as a medium of exchange and store of value. In equilibrium, money demand equals supply. If they do not, that is, if agents do not willingly hold all the money the central bank creates, the general price level rises, giving rise to inflation. One major cause of excessive liquidity is a national government that resorts to chronic deficit financing. At first, the budget deficits of the government are financed through borrowing from the financial market. Since the government is usually a big borrower in the local financial market, nominal interest rates tend to rise. If interest rates continue to rise, the central bank is frequently forced by political factors to accommodate the deficits. Once the central bank finances the budget deficit of the national government, the money supply increases.

In a small open economy that is integrated with the rest of the world through trade in commodities, securities, and national monies, exchange and interest rates are established. The central bank holds international foreign reserve assets to

ensure that transactions with the rest of the world proceed in a smooth fashion.

Under a fixed exchange-rate system, excessive money creation poses risks to banking. If the money supply exceeds demand, the domestic inflation rate rises. This makes imports attractive whose relative prices decline. To pay for imports, foreign currencies must be obtained. Under a fixed exchange-rate system, the central bank stands ready to buy and sell foreign exchange at the fixed rate. Excess demand for foreign currencies leads to erosion of the central bank's foreign reserves. Speculation that the peg will not hold leads to an attack on the central bank's foreign reserves, hastening the decline. Eventually, the central bank runs out of foreign reserves, forcing it to abandon the fixed exchange rate. This is often described as a balance-of-payments (BOP) crisis since transactions with the rest of the world break down in the absence of foreign reserves (see Canlas, 1994, for an account of BOP crises in the Philippines).

Banks are at risk during speculative attacks on the central bank's international reserves. Deposits are withdrawn and exchanged for foreign currency. People who hold balances of the local currency are effectively taxed by the inflation rate stemming from the currency devaluation. It is to their interest to withdraw bank deposits and seek shelter in appreciating currencies. If the withdrawals reach a critical mass, bank failures result.

If the exchange-rate system is a flexible one, the risks emanate from internationally mobile capital whose monetary implications due to limited information may not be well understood. If the central bank accommodates all the capital flows, its money supply targets may be compromised. If it doesn't, output targets may suffer. Thus a balancing act and a careful assessment of the money-supply implications of capital flows are essential. Shifts in peso demand tend to be more pronounced in an open than in a closed economy. If there is a loss of investor confidence, for instance, peso holdings are dumped in favor of the US dollar. Capital then flows out, causing the peso to weaken and domestic interest rates to rise.

If banks create unhedged loans, that is, they extend foreign-currency denominated loans to domestic firms that

earn no foreign exchange, they are likely to experience an increase in the share of their non-performing loans in the event money demand shocks intervene. Their borrowers will find it hard to service their loans denominated in dollars. If information about banks' difficulties with unhedged loans gets relayed to the depositing public, bank runs may be ignited. Some depositors want to be first in the line in converting their deposits into cash. Meanwhile, as the non-performing loans and loan-loss provision increase, banks end up undercapitalized, weakening their capacity to create new loans.

In an open economy with internationally mobile capital and flexible exchange rates, traditional responses like raising interest rates to stem currency depreciation tend to be ineffective. If the currency is depreciating, the central bank normally raises interest rates to make domestic assets attractive to investors. However, if investors are forward looking, they will expect low output growth and decreases in corporate earnings in the future. Fixed-income assets like government bonds and Treasury bills whose yields have risen will not be held. They will be regarded as imperfect substitutes for foreign bonds from economies expected to remain strong well into the future. Equity traders, for example, have been observed to behave like this. High interest rates fuel inflationary expectations. Equity holdings are unloaded. Instead of shifting to domestic fixed-income assets whose yields have gone up, inflationary expectations prod fund managers to exchange their pesos for dollars, causing further weakening of the peso.

With internationally mobile capital, the conduct of fiscal and monetary policy should be based on maintaining price stability and a predictable environment for the private sector. Budget deficits must be temporary and should not be designed as counter-cyclical measures to an expected downturn. Monetary policy must ensure a low inflation rate. Interest rates and exchange rates must be flexible and should be used along with other real factors like the trade balance in extracting signals about the extent of liquidity and appropriateness of the observed nominal exchange rate. It is clear, however, that the fight against inflation cannot be won solely with monetary and fiscal instruments. Inflation may be ignited by relative price shocks, particularly food prices. To dampen these types of shocks, foreign trade policies based on import liberaliIn regulating

banks, the central bank addresses both the risks that banks face in managing deposits and loans. The regulation may be viewed as a fair price to pay for the access to liquidity that the central bank provides. As protection against sudden increase in depositors' demand for liquidity, the central bank imposes minimum reserve requirements on deposits of varying maturities. To encourage banks to maintain these reserves, the central bank pays interest on a portion of these reserves. Furthermore, the central bank imposes risk-adjusted minimum capital adequacy ratios on banks based on some established international standards for them to better withstand sudden and large withdrawals. Concerning credit risks and potential insolvency, the central bank limits the eligible assets that banks can hold. Rules on loan-loss provisioning are also standard. In exchange for this regulation, the central bank maintains a discount and rediscount window that provides cash advances to banks surprised by an upsurge in deposit withdrawals.

The central bank also regulates bank entry. This practice stems from the concern that competition leads to excessive risk taking in deposit and loan creation. Competition, according to this notion, may lead some banks to offer above-normal interest rates to depositors, and to maintain profitability, they are forced to lend to high-risk, high-return projects. This lowers expected bank profits, which can only diminish depositor confidence. Getting the desired number of entrants is facilitated by capital adequacy requirements. If the central bank, for instance, raises the required bank capital, mergers among existing banks are encouraged.

4. Bank Failures and Financial Crises in the Philippines

In the past two decades, there is only one episode of bank failures that turned into a financial crisis. In 1983, five commercial banks failed, followed by the closure of the then largest thrift bank in 1984 (see Remolona and Lamberte, 1986). Five commercial banks failed on account of their fast and loose assessments of the default risks of borrowers. One reason was the projects were associated with the directors, officials and related interests of the failed banks, in violation of existing DOSRI rules. The average share of the non-performing loans of these banks reached more than 20 percent.

The collapse of these banks was hastened by a balance-of-payments crisis in 1983, the year the government declared a moratorium on repayments of its foreign debts. The government had engaged in counter-cyclical fiscal and monetary policies following the oil-price shocks in the 1970s. These moves led to large and persistent deficits in the national government budget, the financing of which led to excess liquidity. At that time, the exchange-rate system in place was to a great extent fixed. The central bank ran out of official foreign reserve assets and had to turn to the International Monetary Fund for standby drawing rights (SDR). To get the needed liquidity, the government submitted to the policy conditionalities imposed by the IMF on client countries with serious balance-of-payments problems. These included a sharp devaluation of the peso against the US dollar. The devaluation made it more difficult for the banks to service their foreign loans. Loaned up to domestic projects that were also bankrupt, the banks became insolvent and had to be taken over by the central bank. Prior to central-bank takeover, the deposit bases of these banks had been impaired from massive withdrawals.

The 1983 financial crisis was largely the offshoot of inconsistent fiscal, monetary and exchange-rate policies. Inflationary fiscal and monetary polices under a fixed exchange-rate regime created incentives for excessive risk taking. Viewed against a setting where banks were undercapitalized and loans were in the nature of behest loans to bank owners and managers, the bank failures and the financial crisis that was generated seemed inevitable.

In contrast, the problem of the banks in the wake of the 1997 Asian currency and financial turmoil is qualitatively and quantitatively different from the crisis of the '80s. Some banks had lent to domestic enterprises with no US dollar earnings. Loans denominated in US dollars had appealed to borrowers because of the low interest rate compared to peso-denominated loans. Liberalized capital flows, meanwhile, made it easier for banks to access foreign loans, and attract trust and investment placements. Ignoring that interest-rate differentials are indicative of an overvaluation of the peso, some firms took on dollar denominated loans, viewing their borrowing in the face of exchange-rate risks as a fair gamble. When the depreciation of the peso against the US dollar materialized, the commercial

banks with unhedged loans saw the share of their non-performing loans rise, averaging as of September 1998 at about 11 percent. One commercial bank failed, although its troubles were rooted mainly in excessive lending to owners, directors, and officials whose projects were in real estate development, projects that lied at the core of the asset-price bubble.

The shocks, however, proved unbearable for several thrift and rural banks, as well as savings and loans associations. With a relatively low capital adequacy ratio, a rise in the share of thrift banks' non-performing loans impaired their capacity to make additional loans and attract new deposits, causing inevitable failures. Those that failed also had heavy exposure to the real-estate sector. As of November 1998, 23 banks had failed. Only one was a commercial bank; the rest were thrifts or rural banks. However, since these failed banks accounted for only a minuscule portion of total bank resources, the failures did not pose serious risks to the financial system.

The 1983 financial crisis inspired banking reforms involving phased compliance with international prudential banking standards. Competition got enhanced with liberalization of foreign bank entry in 1995. The regulatory framework that has evolved so far is described in the next section.

5. Bank Regulation

Central banking

Up until 1993, the Central Bank (CB) of the Philippines was the government institution assigned to regulate deposit-taking banks and financial intermediaries engaged in quasi-banking functions. It opened for business in 1949. As the monetary authority, it guarantees the peso's convertibility into other currencies. As the highest policy making body on banking and credit, the CB held reserve deposits of banks and quasi-banks, which along with currency in circulation, constituted its liabilities. The CB's assets consisted of net foreign and domestic assets, the latter composed largely of loans to the national government.

In 1993, a new central bank called the Bangko Sentral ng Pilipinas (BSP) was established by the government through Republic Act No. 7653, which also vested in the BSP powers over the conduct of money, bank, and credit policies. The old

central bank had accumulated several billion pesos in liabilities, which arose from excessive peso creation, largely in accommodation of chronic government budget deficits, over a period of several decades under a fixed exchange rate system. Periodic collapse of the fixed or managed exchange rate raised the peso value of the CB's foreign loans and other liabilities. Since the sound conduct of monetary policy could not proceed unless the CB was relieved of its huge liabilities, RA No. 7653 had to be enacted. Under both the original and new central bank acts, the regulatory framework governing banks and quasi-banks is essentially the same. The BSP maintains supervisory functions over banks and quasi-banks and reserves the right to examine their book of accounts. Banks revealed to be encountering liquidity problems may be placed under receivership or liquidation. The BSP also places limits on the amount of loans that a regulated bank can extend to its directors, officers, stockholders, and related interests (DOSRI). It can impose administrative sanctions against violators of its existing DOSRI rules and regulations.

Furthermore, the BSP imposes minimum reserve requirements on deposits and deposit substitutes. Normally it does not pay interest on these reserves which are deposited with the BSP, but the monetary board may choose to do so as a matter of policy. Banks are fined if caught with reserve deficiencies. The BSP operates a discount and rediscount window for banks under its supervision. The eligible assets that can be discounted are determined by the BSP. Under extraordinary circumstances, the BSP can extend advances to banks encountering liquidity problems.

The BSP also imposes minimum risk-adjusted capital adequacy ratios. This is the proportion of bank capital to total loan assets net of default-free debt instruments like government-guaranteed Treasury bills, bonds and securities, and almost risk-free private loans, such as those backed by assignment of deposits within the bank. The BSP also imposes limits on specific lending activities, say, on equity investments in allied banking or non-banking activities; the limits are designed to prevent excessive risk taking by banks.

The BSP likewise seeks to ensure a smooth functioning of the payments system. In this regard, it serves as a clearinghouse for large inter-bank settlements, providing finality to all check

payments in local and foreign currencies. Reserve deposits of banks with the BSP back the inter-bank settlement system, with the monetary board prescribing the sanctions against overdraft payments.

General Banking

The unified regulatory framework for banking is contained in the General Banking Act (GBA) or Republic Act No. 337 as amended. The three types of banks regulated by the BSP are (1) commercial banks; (2) thrift banks; and (3) rural banks. These categories are typically distinguished by their subscribed and paid-up capital and allowable loan and investment functions. A compilation of various banking laws in the Philippines is in Nolledo (1998).

Commercial banks

Commercial banks represent the standard notion of a commercial bank, accepting deposits, subject to check payments, from the public and extending consumer and investment loans. The monetary board screens the qualifications of directors and owners before it issues authorization to the Securities and Exchange Commission for the registration of a commercial bank as a corporation. The GBA mandates the BSP to set a floor on the capitalization of a commercial bank and limits the voting-stock participation of foreign nationals to at most 30 percent.

This foreign equity limit has to some extent been relaxed with the enactment of RA 7721, the act that allowed the entry of foreign banks using one of three eligible modes. As stated in the Implementing Rules and Regulations of RA 7721, a foreign bank approved by the BSP to enter the industry can operate in the Philippines under any of the following modes: (1) by acquiring, purchasing, or owning up to 60 percent of an existing domestic bank (including banks under receivership or liquidation provided no final court liquidation order has been issued); (2) by investing in up to 60 percent of the voting stock of a new banking subsidiary incorporated under Philippine laws; and (3) by establishing branches with full banking authority.

Some commercial banks are allowed to engaged in universal banking functions, such as offshore banking, which involves deposit taking and loan creation in foreign currencies

in and out of the Philippines. Presidential Decree No. 1034 provides the legal framework for offshore banking in the Philippines and defines an offshore banking unit as "a branch, subsidiary or affiliate of a foreign banking corporation" authorized by the BSP to operate in the Philippines. Filipino-owned commercial banks can be authorized by the BSP to engage in offshore banking under the universal-banking concept.

Thrift banks

Thrift banks are of three kinds, namely, (1) savings and mortgage banks; (2) stock savings and loan associations; and (3) private development banks. A savings and mortgage bank is any corporation organized to accept savings of depositors and invest such in readily marketable bonds and securities, to name a few assets. The BSP requires each of these banks to maintain capital that is at least 10 percent of their respective risk assets. They are allowed to make equity investments in allied undertaking like leasing and warehousing, but upper limits are imposed on these types of investment to preclude excessive risk taking. They are also permitted to issue mortgage and chattel mortgage certificates.

The legal framework governing the setting up of private development banks emanated from RA No. 4093 as amended. A private development bank under this RA assumed the powers and responsibilities of a savings and mortgage bank described in the GBA. It was organized as a stock corporation, and classified as A, B, or C depending on the capital invested in it. Philippine ownership was at least 70 percent though this limit could be reduced by the BSP to 60 percent. The government-owned Development Bank of the Philippines (DBP) could invest in a private development bank if directors and officials of the private bank and the DBP's Board of Governors approved of the transaction. The participation of the DBP came with a price: at least 75 percent of the par value of the preferred shares of DBP in the private development bank must be invested in "medium- and long-term loans for economic development purposes." The law had other provisions, say, tapping a ten-year DBP loan that made the DBP some sort of a big brother to private development banks.

In 1995, a unified law for thrift bank, RA No. 7906, was enacted. It essentially integrated the provisions of RA

3779 for SLAs, RA 4093 for private development banks, and chapter 5 of RA 337, all of which it repealed. Today, thrift banks enjoy expanded investment functions, putting them on par with commercial banks; however, the former are accorded preferential treatment on minimum reserve requirements in relation to the latter. Filipino ownership of voting stocks has been reduced to 40 percent, consistent with the liberalization of foreign-bank entry. In addition, thrift banks under this new law are entitled to some tax privileges. Thrift banks are exempted from payment of "all taxes, fees, and charges of whatever nature and description, except the corporate income taxes, fees and local taxes, fees and charges for a period of five years..." The specific provision on DBP's role described above and spelled out in RA 4093 has been deleted. DBP is just enumerated in section 10f of RA 7906 as one of the banks that can rediscount papers of thrift banks together with the Philippine National Bank (PNB), the Land Bank of the Philippines (LBP), and other government-owned and controlled corporations.

Government-owned banks

Only two wholly owned government banks remain today, namely, the DBP and the LBP. More than 50 percent of PNB shares have been disposed to private entities. The government, however, still retains control of PNB. Both the DBP and LBP have commercial banking functions and can engage in universal banking provided they meet the BSP requirements for the purpose. The LBP has evolved from its original charter, which is to provide loans supportive of the agrarian reform program. Likewise, the DBP has gone past its original mission of extending medium- and long-term loans to industrial projects that have government endorsement. The DBP and the PNB, which were practically bankrupt by so-called behest loans, were overhauled after 1986.

6. Regulatory Reforms and New Directions

Regulatory reforms

The BSP has responded to the problem of the banks brought about by the recent Asian currency and financial turmoil in several ways. This has included raising bank capital, loan-

loss provisions, liquidity cover for foreign exchange loans, reduced limits on loans to the real-estate sector, redefinition of past-due loans, and enhanced information disclosure and accountability (see Singson, 1998). These regulatory adjustments are designed to strengthen the banking system in general.

Raising bank capital

The first question to be raised in light of the Asian currency and financial turmoil is the adequacy of bank capital, especially for thrift banks. The rise in non-performing loans had caused capital-to-asset ratios to decline, thereby raising fears of grave financial disintermediation. Banks use capital, along with deposits, to purchase earning assets whose net benefits are captured by shareholders. Unlike deposits, however, bank capital has no term to maturity and is not subject to minimum reserve requirements, and hence, facilitates the acquisition of large loans even during a tight monetary policy regime (see Taggart and Greenbaum, 1978). Moreover, bank capital effectively serves as an insurance fund for depositors against decline in the value of bank assets. In principle, bank capital represents "the maximum that the value of the bank assets can fall before depositors incur losses (see Peltzman, 1965)." By absorbing the fall in asset values, bank capital helps reduce the probability of bank runs.

Conscious of the important role capital plays in maintaining stability and growth of the banking system, the BSP instructed commercial, thrift, and rural banks to raise their capital. For thrift banks, in particular, the following applies: (a) with head office within Metro Manila, P250 million on or before Dec. 24, 1998; P325 million on or before Dec. 31, 1999; P400 million on or before Dec. 31, 2000; and (b) with head office outside Metro Manila, P52 million on or before Dec. 31, 1999; P64 million on or before Dec. 31, 2000. A previous BSP circular signed on Dec. 24, 1996 had raised the capital of thrift banks with head office located in Metro Manila to P250 million by Feb. 22, 1998, and for those with head office outside Metro Manila, to P40 million by Feb. 21, 1997.

The 1998 BSP circular on capital build-up can be met through direct capital infusion by shareholders or by merger and consolidation among existing thrift banks. The BSP has revealed its preference for merger and consolidation, having

provided incentives for such approach, such as revaluation of bank premises, improvements and equipment of the banking institution, and rediscount ceiling of 150 percent of adjusted capital accounts for a period of one year (see BSP Circular no. 172, Series of 1998).

It seems clear why the BSP encourages merger and consolidation for its recently issued capital build-up program for banks. The advantages of raising bank capital have been mentioned above. But in addition to those benefits, mergers and consolidation, by reducing the number of thrift banks, lower monitoring costs. The other components of the BSP circular designed to strengthen the banking system, such as increased loan-loss provisioning and limits to investments in real estate and other types of risky assets are information intensive, in need of close and periodic examinations. Scarce time of BSP personnel in charge of supervision and examination can be freed for monitoring big commercial banks. Alternatively, the BSP may make mandatory on thrift banks submission to an independent credit-rating agency, whose assessments would be publicly disclosed. This requirement would be in exchange for a higher rediscounting privilege and preferential treatment on minimum reserve requirements (effectively a tax reduction on asset returns).

The question being raised about horizontal mergers and consolidations is whether they diminish competition and lead to undue concentration and cartelistic powers in the thrift bank sector. It can be argued that these industrial arrangements are pursued not to acquire cartelistic powers. Given the average capital size of thrift banks, any rent from colluding via mergers is going to be dissipated by the costs of forging coalitions, which tend to collapse anyway. Instead, mergers have efficiency arguments going for them. They shift assets from declining to rising banks and as result, they are a preferred alternative to bankruptcy and liquidations, which are costly arrangements (see Manne, 1965). The long-term benefit from a merger arises from its role as a disciplining device on bank managers. Management efficiency correlates with bank profitability and if potential takeovers and mergers are part of the rules of the game, management has an incentive to act in the best interest of the bank and its shareholders and exert efforts aimed at continuous improvements in bank profits.

Reservations about mergers generally stem from question of management control. Even the bank to be acquired whose asset values are in decline would like to exercise some management control. Compensation and other benefits that accrue to managers provide sufficient motivation to wrest such control. In any case, the issue is internal to the merging or consolidating banks, and the corresponding internal adjustment is facilitated provided the BSP provides a wider scope for effecting mergers and consolidations within the existing anti-trust or related statutes.

Redefinition of past-due loans and other adjustments

In response to the Asian currency and financial crisis, the BSP further tightened bank regulation by redefining past-due loans and increasing loan-loss provisions. On Oct. 1, 1997, the BSP reduced the number of installments in arrears from six to three months for monthly installments and from two to one quarter for quarterly installments. At the same time, it required banks to maintain general loan-loss provisions equal to 2 percent of the gross loan portfolio. Banks were given up to Oct. 1, 1999 to comply with the general loan-loss provisions. On Mar. 12, 1998, the BSP required banks to set aside additional specific reserves equal to 25 percent of the secured portion of substandard loans by Apr. 15, 1999.

There is an advantage to recognizing past-due loans and making loan-loss provisions early enough along the redefined criteria set by the BSP. It prevents further risk taking by the banks, arrests further decline of asset values, and reduces the likelihood of bank runs and bank failures. Financial disclosure of this sort reduces the inefficiencies arising from asymmetric information, such as those that impede marketability of loan assets, especially those contracted by bankrupt companies.

Higher minimum reserve requirements

On October 2, 1998, the BSP raised minimum reserve requirements (MRR) on deposit and deposit substitutes to 10 percent from 8 percent. The move took the banking industry by surprise since the MRR of 8 percent took effect only on May 29, 1998. The MRR is effectively a tax on bank earnings, part of which the banks can shift to borrowers and depositors. It also lowers bank profits though.

The raising of the MRR, however, seems to have been impelled by monetary policy aimed at mopping up excess pesos in circulation. The Bureau of Treasury at that time had been rejecting bids that would raise nominal interest rates, resulting in missed money-supply targets. At the very least, this indicates the need for coordination between fiscal and monetary policies.

In any event, reduced financial intermediation arising from a higher MRR creates inefficiencies through a slowdown in the growth of national output and employment. It is thus reasonable to reduce the MRR to 8 percent as soon as the BSP has restored money supply back to its desired growth path.

New directions

The government, through the BSP, will continue to regulate banks amid the increasing integration of financial markets worldwide. A major focus of attention of the regulators is on how best to diversify the risks that arise from financial innovations. To make loan assets more tradable, the limited information problem must be addressed. Efforts to reform existing bank secrecy laws are, therefore, in the right direction.

The observance of international standards on risk-adjusted minimum capital adequacy ratio is key. Mergers occur in response to the dictates of cost cutting and right-sizing. The market then determines the appropriate size distribution of banks. Banks that can stay on the least-cost envelope of a sequence of average cost curves grow and thrive over the long run.

In this connection, it is necessary to continue liberalizing the banking industry. This ensures the presence of competition among banks and can be trusted to produce financial innovations in managing the risks on both sides of banks' balance sheets.

The central bank should start unifying the regulatory framework for various types of banking, whether universal or not. The lines that artificially segregate banks by capital size or functions—e.g., engaged in universal banking or not—are being blurred by global developments. In the presence of arbitrage, hedging, and other forms of risk-spreading techniques using internationally traded financial instruments, the current

regulatory rules put some local banks restricted to a few functions at a disadvantage.

Minimum reserve requirements (MRR) will have to be kept at a very low level in line with some stochastic processes that describe bank-withdrawal patterns. These MRRs represent an indirect tax on financial intermediation, the burden of which is partly shifted to depositors. The burden imposed on banks is the reduction in their profits, which diminishes the value of a bank franchise. This makes it more difficult to raise capital.

In this regard, current limit on foreign equity participation also impedes efforts to raise bank capital. Domestic savings cannot be relied on for the needed increments to bank capital. In line with global developments, liberalization of foreign equity participation will result in further international competition and innovations, all of which benefit households that prefer bank deposits and firms that rely on bank credit for working capital.

Will a competition-oriented regulatory environment drive thrift banks and savings and loans associations out of the market? No, if they are efficient. The central bank, however, will have to exercise careful supervision and monitoring in exchange for which, access to liquidity should be guaranteed. In other words, the central bank can act as an insurer of small banks and it must mimic private insurance contracts that hinge on co-insurance, deductibles, and graduated adjustment in risk premium to blunt the edge of the incentive problems posed by adverse selection and moral hazard. Given the high cost of supervision, free entry is not feasible. But the tradability of thrift-bank franchises must be eased so that inefficient owners and managers are disciplined by potential takeovers. This means that foreign equity ownership in thrift banks must likewise be relaxed, the banking equivalent of opening up retail trade.

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