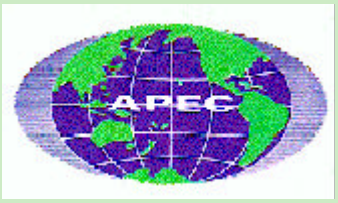
PASCN Philippine APEC Study Center Network

PASCN Discussion Paper No. 2001-07

Foreign Bank Entry, Bank Spreads and the Macroeconomic Policy Stance

George Manzano and Emilio Neri, Jr.



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Abstract

The Philippine banking industry was opened to (limited) foreign entry in 1994. The liberalization measure was justified on the basis of enhanced competition. While it was observed that foreign bank entry brought about a slight deconcentration in the banking industry, there appears to be no systematic reduction of bank spreads. On the contrary, bank spreads (using alternative measures) were observed to increase in the period 1994-97, indicating that the relative profitability of banks have improved in the midst of foreign bank entry. This paper offers an alternative explanation to the 'puzzle' of widening spreads. The high interest rate policy (due to sterilization) kept lending rates high. On the other hand, there was little incentive for banks to compete for deposits through higher deposit rates because they had ready access to cheaper funds overseas owing to policies of promoting pegged exchange rates. Towards the latter part of the 1990s, a narrowing of spreads was observed. Interestingly, the narrowing of spreads was accompanied by a reversal of the macroeconomic policy stance in the 1994-97 period. The paper thus argues that the prevailing macroeconomic incentives matter in the determining outcomes of liberalization measures.

Executive Summary

The authors point out that the difficulties of using traditional tools in analyzing the effects of the series of policies which allowed more foreign bank participation in the Philippine banking industry since 1994. The standard Structure, Conduct and Performance (SCP) approach to analyzing the effects of foreign bank entry into the Philippines provides little explanation, however, as to why bank spreads failed to narrow despite noticeable changes in the banking industry's structure. Indeed, it is a puzzle that remarkable drops in asset, loans and deposit concentration ratios arising from more intensified foreign and local competition are not accompanied by systematic decline in bank spreads.

It can be argued that high bank spreads persisted despite entry of new banks because the effects of competition are not felt immediately. It can also be argued that the liberalization measures as stipulated in RA 7721 may be too anemic to make a mark in the commercial banking industry. While these theories can partially explain the persistence of high relative bank spreads, the authors suggest that the missing piece of the puzzle lies in the effects of macroeconomic policies in the determination of bank spreads. In particular, the macroeconomic policy mix (monetary, exchange rate policies under an open capital account regime) that prevailed during the 1993 to mid-1997 capital inflow period masked the effects of competitive forces arising from more foreign bank entry.

During the net foreign currency inflow episode of 1994 to mid-1997, the policy was generally of sterilized foreign exchange intervention to meet both the Bangko Sentral ng Pilipinas (BSP)'s tight monetary and foreign exchange targets. Maintenance of both an International Monetary Fund (IMF)-sponsored monetary aggregate targeting program and an exchange rate peg, however, often led to high interest rates. These combined policies of a 1) de facto nominal peg of the peso and 2) high domestic interest rates (which, by coincidence also had a big role in causing the currency crisis), the authors argue, had potent effects on the conduct of the banking industry that simply could not be ignored.

Using stylized facts, the authors showed that in compartmentalizing the effects of macroeconomic policy on the two main components of bank spreads, namely 1) deposit and 2) lending rates, one can have an appreciation for the importance of macroeconomic factors on bank spreads. First, deposit rates did not fall during the period under study despite the entry of foreign banks. Under the de facto nominal peg of the peso against the U.S. dollar, it became cheaper for banks to generate foreign currency denominated loanable funds than to compete for peso denominated deposits of residents. Meanwhile, to maintain the de facto peg, the monetary authorities maintained a policy of high risk-free rates on government securities through sterilized intervention. Since benchmark rates typically pre-empt lending rates, the chosen policy mix had effectively defined a floor for lending rates as well. Combining the effects of the chosen macro policy mix on both deposit and lending rates, the authors were able to provide an explanation as to how they continued to enjoy fat spreads despite the opening up of the economy to more foreign banks.

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George N. Manzano and Emilio S. Neri Jr.

I. Introduction

Increasingly, the mantra of liberalization, deregulation and free markets is beginning to reverberate worldwide. This trend has not been lost on Philippine policymakers. Starting with the Aquino administration, and continued by the subsequent administrations, sweeping economic reforms in the areas of investments, telecommunications, trade, and infrastructure provision have been initiated. The banking sector, long thought to be "different" due to the role it plays in ensuring the smooth functioning of the payments systems, has also been subject to the liberalization drive.

In May 1994, a law liberalizing the entry and scope of operations of foreign banks in the Philippines was passed. This law allowed expanded market access to foreign banks (a maximum of 10 new banks) and accorded them national treatment though branching limitations on foreign banks are still enforced. The foreign bank community received the new charter positively. To illustrate, shortly after the passage of the new charter, ten new foreign banks entered the market.

Did the liberalized entry of foreign banks in 1994 bring out the desired outcome of more competition in the domestic banking sector?

We begin the discussion with a brief review of the merits and demerits of liberalizing the banking sector to foreign bank entry. This paper attempts to contribute to the debate over the effectiveness of the liberalization of foreign bank entry in developing economies by highlighting the role of the macroeconomic policy stance on the degree of competition in the banking sector. Specifically, it seeks to discuss the following query: What are the necessary and sufficient conditions, on the macroeconomic policy plane, for the entry of foreign banks to heighten the degree of competition in the banking system? We draw attention to the puzzle of persistent bank spreads in the two years after 1994 and the tapering off of the spreads towards 1999. We then provide an explanation for the aforementioned observation by discussing the interaction between macroeconomic incentives and bank pricing behavior. To conclude this part, we highlight the necessary macroeconomic conditions to effect competition in the process of liberalization.

II. The Pros and Cons of Foreign Bank Presence in Developing Markets

The theoretical case in favor of opening up markets to foreign banks rests on the traditional arguments of competition as well as on the arguments more specific to finance such as diversification benefits. The effect of foreign bank entry on competition in the domestic banking sector focuses on the expected improvements on the technical,

[1] Financial assistance from the Philippine APEC Study Center Network (PASCN) is gratefully acknowledged.

allocative, and dynamic efficiencies that competitive pressure can bring to bear on the local banking industry. The entry of foreign banks is expected to ameliorate the technical inefficiencies associated with protection and draw out the benefits of lower prices, i.e., lending rates, improvements in services, and more attractive deposit rates in the domestic banking industry. In addition, cross-border entry of foreign banks can help dilute collusive domestic equilibrium as many national banking markets have long been characterized by tacit or even explicit collusive agreements by national banks (Hoschka, 1993).

It is also recognized that the entry of foreign banks also produces benefits that go beyond the standard efficiency-enhancing effects of increased competition. One such benefit is the contribution of foreign banks in developing more robust and efficient domestic financial systems. For instance, foreign banks can spur improvements in the institutional infrastructure by exerting pressure for improved regulation and supervision (Claessens and Glassner, 1997), corporate governance practices, disclosure rules, and other international practices and standards. This development can be very important since banks, due to the nature of their maturity-transforming operations, are "special" and easily subjected to bouts of instability. In a similar vein, foreign banks can bring to the local market the financial strength of their parent institutions and "import" the regulatory and supervisory services of their home-country governments, including the lender-of-last-resort and deposit insurance functions (Gavin and Hausmann, 1996).

Dynamic benefits, on the other hand, are expected to come from the speedier diffusion of technical improvements and innovations in the delivery of financial services from abroad to the local industry that otherwise would have taken longer in the absence of foreign service providers. Such innovations include credit card facilities, derivatives and fund management, etc. Anecdotal evidence suggest that foreign financial services providers do introduce new financial products, enhance the quality of existing services and spur improvements in the quality of the institutional framework (Claessens and Glassner, 1997).

Goldberg, Dages, and Kinney (2000) state that foreign bank presence can boost the amount of funding available to domestic projects by facilitating capital inflows. To the extent that foreign banks have better access to cheaper funds from their home base or from the global capital markets, they would be able to provide financing at a lower cost. Furthermore, the presence of foreign banks could help diversify the capital and funding sources for local credit and help stabilize available credit especially during crisis periods.

Arguments against the entry of foreign banks mostly hinge on the assertion that banks are "special." The concept of "over competition" underlies many of these arguments. For instance, it is feared that a massive influx of foreign banks could result in overaggressive competition or overfragmentation of the financial system. Because it is expected that foreign banks tend to select the most lucrative segments or clients in the domestic markets, the domestic banks are left to service the more risky segments of the market (Goldberg, Dages and Kinney, 2000). Such competitive pressures could pull down the future earning capacities of domestic incumbent banks, thus diminishing their

"franchise values." Consequently, the difficulties could raise the incentive for bank managers to engage in more risky behavior to recoup losses, i.e., gambling for redemption.

Other reasons include infant-industry arguments on the grounds that the banking industry can be regarded as a strategic industry best left in the hands of nationals. For instance, directed lending by local banks have been employed as an instrument of industrial policy in a number of developing countries.

A number of empirical studies generally support the arguments for foreign bank entry in the domestic banking industries. For instance, Claessens, Dermiguc-Kunt, and Huizinga (1998) examines the effects of foreign entry on the domestic banking markets using a cross-section analysis of 80 countries. They provide empirical evidence that suggests that the entry of foreign banks improve the functioning of national banking markets, with positive welfare implications for the domestic economy. Country cases studies are reported in Abola (1998) for the Philippines; Jayaratne and Strahan (1997) for the US case of interstate banking liberalization; APEC (1998a) for the experience of Peru while APEC (1998b) for the related experience of Australia and Taipei. Denizer (1997) states that liberalizing the entry of banks—foreign and domestic alike—had significant effects on lowering lending rates in the Turkish banking industry in the 1980s. Goldberg, Dages and Kinney (2000) find that, in the Argentine and Mexican experiences, foreign banks generally have had higher loan growth rates than domestic banks with lower proportionate volatility of lending contributing to lower overall volatility of credit.

III. Impact of Foreign Bank Entry in the Philippines:
Concentration, Bank Spreads and Macroeconomic Policies

There are at least three approaches in analyzing the determinants of bank interest margins and other measures of spreads (Saunders and Schumacher, 2000). First, margins can be related to market structure of the banking industry. Under this approach, high spreads can be said to arise as a result of monopolistic behavior on the part of banks. Secondly, changes in regulations such as reserve requirements or taxes, can affect the spread. Thirdly, issues related to risk premia, such as the interest-rate volatility, could contribute to higher interest rate margins to provide some cover or insulation against unexpected risks.

Using stylized facts, this section discusses the spread behavior of Philippine banks shortly after the period of the surge of foreign bank entry. It offers an explanation that relates the persistence of relatively high spreads during the specific period to the macroeconomic policy stance rather than to the market structure nor to intermediation costs. The analysis presented, of course, is not mutually exclusive of the other approaches but offers another "window" in viewing the behavior of banks, especially during the period of market liberalization.

a. Stylized facts of spread behavior amidst the entry of foreign banks: The Structure-Conduct-Performance (SCP) Approach

A fairly standard way of assessing the impact of liberalization is the standard structure-conduct-performance approach (SCP). The rationale is that the market structure affects the firm's conduct, which, in turn, has a direct bearing on performance. Market structure is often measured by the extent of market concentration in the industry. Applying this to the banking sector, market structure is usually measured by the share of the largest banks in the total industry assets, loans or deposits. Conduct, on the other hand, dictates the degree of rivalry in the industry, which is usually reflected in the bank spread (the difference between the lending rate and the cost of funds). Performance refers to the rates of return of the banking industry compared to other industries or rates of return in other countries.

Often, high levels of market concentrations are associated with larger bank spreads and above-average returns. Recall that the case for allowing foreign bank entry rests on their impact on market deconcentration. Following standard industrial analysis, the entry of more players helps to deconcentrate the banking industry, making it more competitive. With more competition, bank spreads are expected to narrow while profitability in the industry fall to what are considered "normal" levels. Thus, under this paradigm, to achieve competitive outcomes, it is important that foreign banks have the incentive and ability to compete for the market share of the dominant players of the industry.

In applying the structure-conduct-performance analysis to the impact of foreign banks in the Philippines, it is useful to gain a historical perspective by reviewing how foreign banks were first allowed to operate in the Philippines. Prior to 1994, only four foreign banks were allowed to operate in the Philippines. These foreign banks were subject to more restrictive regulations: they could not operate as universal banks; nor engage in trust operations; nor open new branches. It is interesting to note that there remain to be just nine branches among the four "old" foreign banks, the same number they had since 1948.

In 1994, Republic Act No. 7721, which called for the establishment of a maximum of 10 new foreign banks, was passed. While not giving unrestricted branching privileges, the aforementioned law contained more generous provisions in setting up branches by foreign banks. However, to prevent foreign bank domination of the local banking industry, the law required that domestic majority-owned Filipino banks should hold 70% of total resources of the entire banking system. Due to the historical circumstances, it is important to distinguish the 10 new foreign banks from the four original foreign banks, in assessing the impact of the liberalization measure of 1994.

The response of the foreign banks to the new charter was quite positive, as mentioned earlier. In 1995, a year after the passage of the legislation, ten foreign banks entered the Philippine banking industry. The most common form of entry in 1995 was establishing full branches (see Table 1). To date, a total of 21 foreign banks operate in the Philippines, a sizeable increase from the original 4 banks.

Previous studies have used the structure-conduct-performance approach in analyzing the degree of competition of the commercial banking sector of the Philippines. For instance, Garcia (1992 and 1993) analyzed the structure, pricing and performance indicators of the local banking industry for 1982–91. He associated the widening spread between lending and deposit rates and the very high rates of return on equity of the local banking sector with the increase in market concentration ratio. Based on these findings, he recommended that the Philippines should liberalize the banking sector to foreign banks, a policy move that was actually implemented in 1994.

Using a similar framework, Abola (1998) analyzed the impact of the entry of the additional 10 foreign banks. He constructed several measures of concentration, indicators of bank spreads and calculations of rates of return over the period 1991 to 1997, in order to determine the impact of foreign bank entry in 1994 on competition in the local banking sector.

a. Stylized Fact: There was a slight deconcentration in the structure of the Philippine banking industry but there was no systematic reduction in bank spreads

The structure of the banking industry, as gleaned from the changes in concentration ratios in assets, loans and deposits, did not appear to be significantly altered by the entry of new foreign banks for the period after 1994 and prior to the financial crisis in Asia.

As reported in Table 2, the share of the top five banks to total banking assets (all domestic commercial banks) hovered between 43% and 47% in 1991–94, the period prior to the actual entry of additional foreign banks. In 1995, when all new foreign banks have already been authorized to operate, the concentration ratio in the total banking assets of the top five banks did not change significantly. The new foreign banks, originally accounting for less than 2% in 1995, slightly increased their share in total assets to close to 3% in 1996, the year before the crisis. It was only in 1997 that the share of the top five banks in total assets decreased by around 7.63%. The share of foreign banks (old and new alike) actually got bigger from around 13% in 1996 to close to 20% in 1997. By 1999, however, the share of the foreign banks in assets declined to less than 15%.

The movements in the concentration ratios in loans mirror that of the corresponding ratios in assets. Prior to the liberalization in 1994, the top five banks account for around 40–48% of all loans. No significant changes in the concentration ratios of loans were noted when the additional foreign banks went into operation. As a matter of fact, the share of the new foreign banks was less than 4% before the crisis. This modest expansion of loans came from these banks' capital base.

Similarly, the top five local banks account for close to half of total deposits from 1991 to 1996. The entry of foreign banks did not appear to make a dent in the concentration ratios for deposits during the pre-crisis era. The share of the new foreign banks, tellingly, is less than 1% of total deposits in 1996. It was only in 1997 that their

share rose significantly. The low share of foreign banks in total deposits is a natural consequence of the restrictions on branching.

If foreign banks were putting competitive pressure on local banks, then their entry in 1994 should have lead to a narrowing of bank spreads in subsequent years. However, bank spreads cannot simply be captured by the difference of the lending and deposit rates owing to several implicit costs (Sorsa, 1997 and Claessens and Glaessner, 1997). Thus, Abola (1998) used the difference between the nominal lending rate and the intermediation cost (which is a catch-all variable for all other opportunity costs associated with deposits such as reserve requirements, deposit insurance, taxes, etc.) as the bank spread. In order to scale the bank spreads with the general movements in interest rates, he constructed a ratio of the bank spread to nominal lending rate. See Box 2 for a discussion on the alternative measures of spreads.

As Figure 1 reports, intermediation costs have steadily declined from 1991 to 1997. The post liberalization analysis of the impact of foreign bank entry in the Philippines in the pre-crisis years of 1995 and 1996, showed only slight improvements in terms of deconcentration and reduction in profit rates in the commercial banking industry. Barring major structural change in the banking industry, bank spreads should have narrowed after the advent of foreign banks. Surprisingly, however, bank spreads started to climb in 1994–97, indicating that the relative profitability has gone up in the midst of the entry of foreign banks[2]. Abola's (1998) general analysis of using the structure-conduct-performance indicated that while the entry of foreign banks has injected some amount of competition into the commercial banking industry, this apparently has not been enough to bring down bank spreads to levels lower than the pre-liberalization period. In fact, spreads only began narrowing substantially in 1999, a time when concentration ratios saw a substantial rise. This observation appears as a puzzle.

b. The Effects of Macroeconomic Policies on Bank Spreads

It can be argued that high bank spreads persist despite entry of new banks because the effects of competition are not felt immediately. It can also be argued that the liberalization measures as stipulated in RA 7721 may be too anemic to make a mark in the commercial banking industry. While these theories can partially explain the persistence of high relative bank spreads, we suggest that macroeconomic policies play an important role in determining bank spreads.

Often, in considering the effects of liberalization on an industry, macroeconomic issues are set aside, and policy issues revolve around "fair" pricing and providing "level playing fields" to all industry participants by removing barriers to entry. Thus, in a

[2] A test to determine difference in the means of the spreads in the pre-foreign bank entry liberalization period (1991–94) with the post foreign bank entry liberalization period was carried out (1995-99). The spread was computed according to the accounting method (see Box 2). The test showed that there was no significant difference between the spreads in the two periods. A similar test carried out for the variable, accounting spread as a proportion of lending rate, showed that the mean values of this variable in the post liberalization actually increased in the post-liberalization period at the 5% degree of significance.

departure from the standard "microeconomic" analysis, (i.e. the structure-conduct-performance approach) we wish to emphasize the interaction of the macroeconomic environment and the pricing behavior of banks as central to understanding the puzzle of the persistent bank spread in the Philippine banking industry two years after limited liberalization of foreign bank entry and the subsequent drop of spreads in 1999.

Admittedly, the spread, after controlling for intermediation costs still contains the risk premium. Risk premium is linked with the degree of uncertainty in the system. Because highly volatile interest rates inject uncertainty, the variance of the interest rate is usually made an indicator of risk premium (Saunders and Schumacher, 2000). The connection between the entry of foreign banks and the degree of volatility of interest rates is not very clear, however[3]. Thus, it may be difficult to establish a systematic relationship between liberalization and risk premium as understood in a macroeconomic sense as volatility of interest rates.

It is true that higher risk premia calls for higher spreads. However, bank spreads could not go lower than the difference between the Treasury bill rates and the cost of funds (which are largely determined by the savings interest rate plus the intermediation costs). Thus the difference between the (risk-free) Treasury bill rates[4] and the cost of funds is effectively the minimum spread. The presence of risk premia could cause the spreads to widen. The fact that the difference between the Treasury bill rates and cost of funds has widened in the years during the liberalization implies that the minimum spread has also widened (see Figure 2).

c. Macroeconomic policies and deposit rates

What macroeconomic policies were in place following the liberalization measures that allowed banks to maintain high spreads? Judging by the observed movements in the peso-dollar exchange rate under its newly de-controlled foreign exchange market it is quite evident that, between 1994 to mid-1997, monetary authorities deliberately kept the movement of peso-dollar exchange within a very narrow band (see Figures 3 and 4)[5]. During the net foreign currency inflow episode of 1994 to mid-1997, the policy was generally of sterilized foreign exchange intervention to meet both the Bangko Sentral ng Pilipinas (BSP)'s tight monetary and foreign exchange targets (see Box 3). Maintenance of both an International Monetary Fund (IMF)-sponsored monetary aggregate targeting program and an exchange rate peg, however, often requires maintaining relatively high interest rates, similar to the effects of sterilized foreign exchange intervention would have on interest rates under a fixed exchange rate regime (World Bank 1996).

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[3] Saunders and Schumacher (2000) showed that spreads for a cross section of banking systems in developed countries vary with the volatility of interest rates (an indicator of risk).

[4] While indicators such as the PHIBOR can serve as alternative benchmark for lending rates, the authors chose the 91-day T-bill rate given its longer time series.

[5] Hernandez, Montiel (2001) and Calvo, Reinhart (2001) provide empirical evidence that during the pre-crisis period (1994 to 1997) the exchange rate regime of the Philippines was not a managed float, as declared by the Philippines to the IMF, but was more of a 'soft peg' owing to a fear of floating.

However, the crisis in mid-1997 led to the collapse of the de facto peg of the peso to the dollar. In 1998, the macro policy mix had to be adjusted substantially in view of the Asian currency crisis. While the peso-dollar rate was allowed to move within a wider band, interest rates were kept high by the BSP as a means to stabilize capital outflows. Monetary aggregate targeting was therefore abandoned in favor of defending the peso through tight monetary policy.

By 1999, however, the more stabilized currency markets in Asia allowed the local monetary authorities to shift to a different policy mix. With the easing of capital outflows and effects of contagious currency volatility virtually disappearing, the local monetary authorities were able to adopt a more flexible exchange rate regime and enabled them to revert to their previous monetary policy regime of monetary aggregate targeting.

How does this macroeconomic policy mix (sterilization) affect the pricing decisions of local banks on both lending and deposit rates? Recall that a bank spread is basically the difference between the lending rate and the cost of loanable funds, of which rates paid on deposits are an important component.

d. Combined Effects on Spreads

To assess the effects of the chosen policy mix we consider first their effects on deposit rates. For banks, a consistent effort of the monetary authorities to fix the level of the exchange rate fuels expectations that exchange rate will remain stable in the future. It also signals that there is very little risk in funding bank loans through foreign currencies, i.e., low foreign exchange risk. And since the interest rates on foreign debt-instruments—as depicted by the annual peso equivalent of the three-month LIBOR[6]—were typically lower than the marginal cost of raising peso deposits, banks were encouraged to fund a growing share of their assets through foreign currency denominated liabilities. The differentials were, in fact, even more pronounced during the liberalization period (see Figure 5). In addition, the regulatory structure[7] favored dollar rather than peso intermediation (Lim, Woodruff 1998). Thus, it is no surprise that in 1995 and 1996, the dollar denominated deposit liabilities of commercial banks expanded dramatically (see Figure 6).

This incentive to engage in more dollar-intermediation has implications on the deposit rates and indirectly on bank spreads. This policy and regulatory regime would tend to put less pressure on banks to compete for peso deposits. This is especially true when we consider the relatively higher costs of time deposits [8], which can be taken to be

[6] This is derived by simply adding the yield on the LIBOR and the rate of depreciation of the peso against the U.S. dollar. This, in effect, is the peso cost of generating foreign or dollar denominated funds.

[7] Another factor that foreign currency intermediation is the fact that banks are able to claim tax savings of 35% on deposit interest expense from Foreign Currency Deposit Units (FCDU) deposits while they only incur a 10% tax liability for lending in foreign currency loans to residents (IMF 1998). Another source of incentive for raising funds through more dollar deposit-liabilities is the fact that there is no reserve requirement on foreign currency deposits while the reserve requirement for peso deposits continued to be one of the highest in the region.

the marginal cost of generating funds for banks, compared to dollar deposits. The switch to the more attractive dollar intermediation implies that there would be little motivation to bid up the deposit rates in order to generate more deposits. In effect, the substitution of peso with dollar as sources of bank funds would tend to lower the cost of funds of local banks and lead to wider bank spreads.

Of course, the bidding up of deposit rates as the number of players (foreign and local banks alike) increase could be stymied by restrictions on establishing branches or by specific strategies pursued by the foreign banks. Since the granting of full licenses to operate in 1994, the new foreign banks did not embark on an aggressive strategy of branching.

This behavior implies that foreign banks prefer to concentrate on the loans market and using other sources, other than deposits, as loanable funds. Notwithstanding this behavior, the macroeconomic incentives, which affect both domestic and foreign banks on the deposit side, are not conducive to increasing deposit rates.

As expected, banks lost appetite for funding bank lending through dollar liabilities when the crisis struck in mid-1997 and the narrow peso-dollar rate band could no longer be maintained. This can be seen in the reversal of the rising trend of foreign currency borrowing and deposit-taking during the pre-crisis surge of foreign capital (see Figure 7). In fact, there was still very little interest among banks to borrow during the peso's appreciation in 1999.

e. Macroeconomic policies and lending rates

Looking now at the other side of the coin—the lending side—we argue that the same policy mix chosen by the monetary authorities were also key to keeping interest rates relatively high, which, in turn allow intermediation spreads to remain high.

How did the aforementioned macroeconomic policy-mix affect lending rates? The answer obviously depends on the rate setting mechanism of the local banks. It is very much affected by the 91-day Treasury-bill rate. Since the latter is generally considered the least-risky debt instrument in the country, how it moves affects lending rate behavior in two important ways. First, it serves as a benchmark[9] for bank loans. And since interest

[8] Take note that some of these foreign currency deposits were in fact US dollar Floating Rates Certificate of Deposits (FRCDs) brought in from offshore. Savings and demand deposits alone grew sluggishly. Special savings deposits, however, rather than regular savings deposits provided a good portion of the growth. Although classified on the balance sheet as savings deposits, special savings deposits actually earn rates only slightly lower than time deposits and are therefore significantly more expensive than the 2-3% paid on regular savings deposits.

[9] Some observers raised the issue about what the true benchmark is for bank lending rates. While the 91-day T-bill rate is generally recognized as the benchmark yield, it is often pointed out that the Philippine Interbank Offered rate (PHIBOR) had sometimes been a better basis for bank lending rates, particularly during the years 1998 and 1999. However, the fact that yields for the PHIBOR had often been higher than the 91-day T-bills, the argument that bank spreads did not decline due to the failure of benchmark rates to fall becomes even stronger.

on these instruments typically amount to the opportunity cost of bank lending to riskier private entities, its rate often preempts movements in the average lending rate.

It is not difficult to show that lending rates or the return on any peso-denominated debt instrument, for that matter, yielded very attractive returns. Since the returns on 91-day T-bills, in dollar-terms, consistently exceeded the returns on the LIBOR (ranging from 490 to more than 1,100 basis points!), implicitly, lending rates in the Philippines remained quite high (see Figure 8).

The gap between the high Treasury bill rates and the low interest rates overseas during the mid-1990s represents profitable arbitrage opportunities. Therefore, given functioning capital markets, this gap is expected to disappear quite quickly unless a large premium is required to motivate investors to hold onto Philippine financial assets. However, while structural or institutional factors are often suspected for the failure to remove the price differential, macroeconomic factors may explain the failure to eliminate such arbitrage opportunities (see Box 5).

IV. Summary and Conclusions

The combined effects of the chosen macro policy mix on deposit and lending rates are not inconsistent with the patterns of bank spreads. Bank spreads, given the macroeconomic incentive outlined earlier, remained high during the pre-crisis liberalization period simply because the reference rate of lending rates did not decline substantially with the entry of foreign banks. Also, since foreign currencies were much easier and much cheaper to tap, banks found no urgency in bidding up the deposit rates to generate peso-denominated deposits. Macroeconomic forces, thus, were critical in determining bank spreads during the capital inflow period.

During the capital outflow episode, the change in the policy mix did not immediately lead to a narrowing of spreads. Again, while the peso was allowed to move within a much wider band (which kept banks from aggressively sourcing their loanable funds from offshore channels, like they did before the inflow episode), spreads remained high mainly as a result of higher lending rates. However, when the currency volatility in Asia diminished in 1999, lending rates fell along with key policy interest rate. As a result spreads declined remarkably in 1999.

In the final analysis, did the entry of foreign banks inject competition in the local banking sector?

The fact that variations in intermediation spreads were explained by the government's chosen macroeconomic policy regime suggests that macroeconomic policies may mask the intended effects of foreign bank entry on competition in the local banking market. The macroeconomic incentive structure adopted during 1994–98 served to maintain relatively wide bank spreads than local banks would otherwise enjoy in the face of competition from foreign banks. A chance to fully implement a different exchange rate regime by 1999 led to a sharp narrowing of spreads, despite a slight

reversal of concentration ratios. It is interesting to note that banking sector spreads narrowed substantially at a time when the Treasury bill rates

In other words, controlling for the effects of the sterilization policies adopted in 1995–97, we would expect more, rather than less, competition in the commercial banking system as a result of foreign bank entry. Admittedly, such an assertion is not easy to prove. Nevertheless, it does highlight the important lesson that in order to have a "successful" liberalization program, the necessary condition of having the appropriate macroeconomic environment should be met. In the Philippine experience, the impact of the chosen macro policy regime on spreads has masked the competitive pressure that foreign banks would otherwise exert on the local banking system.

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Appendix

The Role of the Foreign Banks During Times of Crisis

Arguments for and against foreign banks during crisis period

Do foreign banks have a role in the financial markets during times of crisis? There are concerns that the internationalization of the finance sector could lead to more volatile capital flows, which will threaten the stability of domestic bank credit. It is also feared that, in the event of a crisis, the presence of foreign banks may provide an additional channel for capital flight. Furthermore, it is plausible that a foreign bank may withdraw abruptly from the market in response to a crisis thus exacerbating the local disturbance.

On the other hand, the arguments for foreign banks during times of crises simply mirror the arguments against foreign banks. For one, because foreign banks have diversified sources of capital, their credit behavior will be affected less by the presence of crises than domestic banks. Moreover, because foreign banks are usually characterized of having more solid financial positions arising from larger bases of capital, they can continue to extend loans. To the extent that they can divert resources that otherwise would have flown the local markets (capital flight) to overseas, then foreign banks could be said to have a stabilizing function during crises. Lastly, foreign banks are expected to adopt risk management measures according to standards of their home country industry. Again, to the extent that foreign banks may possess superior risk management practices than domestic banks, then foreign banks may be better hedged during times of crises.

Goldberg, Dages and Kinney (2000) find that foreign-owned banks have provided greater loan growth than observed among domestic-owned banks, while reducing the volatility of loan growth for the financial system as a whole for Argentina. They also observe that foreign banks show notable loan growth during the crisis period, suggesting that foreign banks may be important stabilizers of credit during such periods. In the Mexican case, the aforementioned authors find that domestic banks do tend to have more volatile lending patterns with respect to GDP. Furthermore, as in the case of Argentina, foreign banks in Mexico, which have low nonperforming loans, were more responsive to market forces and were important providers of credit during the crisis period. These results indicate that foreign banks in Mexico have a stabilizing impact on domestic financial system credit.

Profile of Foreign Bank Loan Portfolio

With the benefit of hindsight, the one sector that clearly suffered through the asset-price bubble burst during the Asian crisis was real estate. Now, one and a half years after the onset of the financial crisis, the portfolio of foreign banks in the Philippines are least skewed toward the real sector. Domestic commercial banks—expanded and non-expanded alike—have exposures to the real estate sector of around 15% and 20% respectively. Although there is no publicly available information on the sectoral

distribution of the outstanding loans of commercial banks prior to the crisis, it is not difficult to expect that the share of real estate loans to total loans among domestic banks would have been very high. The low exposure to the real estate sector by the foreign banks indicates that their credit risk assessments, ex post, have been more accurate.

Compared to domestic banks, foreign banks in the Philippines, as a group fared relatively well during the crisis. As of the end of 1999, the nonperforming (NPL) loans of the foreign banks are a little over 4% of their total loans. Domestic expanded and non-expanded commercial banks, on the other hand, have NPL ratios of around 13% and 16% respectively. A more striking statistic is the percentage of past due real estate loans to total real estate loans. In the case of the Philippines, close to 4% of the real estate loans of foreign banks are past due while the corresponding figures for expanded and non-expanded domestic commercial banks are around 17% and 19%. Finally, foreign banks tend to be more conservative in providing for loan loss reserves. As Table 4 reports, the percentage of loan loss reserves to NPLs for foreign banks is definitely higher at is close to 70%.

A summary survey of the relatively low NPLs of the foreign banks compared to the rest of the domestic commercial banking NPL figures, the sectoral distribution of their loans as well as their loan loss provisioning practices indicate that they, as a group, may have superior loan screening and risk management systems compared to the domestic commercial banks. By this measure, it can be said that foreign banks could have a role in stabilizing the economy during crises.

The lending behavior of foreign banks is considered a key issue on whether they do have a stabilizing effect during crisis. Of course, since demand for loans is linked closely to the general macroeconomic conditions, it is expected that general lending would be curtailed during the crisis. The influence of different bank classes (state-owned, private or foreign) could be evaluated on he basis of the relative degree of loan cutbacks during times of adversity. Table 5 details the quarterly loan growth rates for the different bank classes. The findings indicate that before the crisis (1995-97, second quarter), foreign banks exhibited the highest loan growth rates. Because of their low bases, the new foreign banks showed the highest loan growth rates. In contrast, state-owned banks showed the lowest (even negative) real loan growth rates in the period starting 1995 up to the onset of the Asian financial crisis.

More interestingly, during the crisis period (spanning the third quarter of 1997 up to the end of 1998) the foreign banks, among all classes of banks, cut back the least in lending in both weighted and unweighted real loan growth rates. Among the foreign banks, the "old" foreign banks reduced their lending to a larger extent than the "new" foreign banks. However immediately after the crisis, while the overall volume of lending was still negative (in terms of unweighted bank real loan growth rates), it was the private domestic banks that exhibited the least loan curtailment. In the weighted real loan growth rates, the private domestic banks showed the first loan growth rate recovery, with the foreign banks close behind.

Lending behavior, as proxied by the loan growth rates, are crude indicators of the stabilizing influence of different classes of banks during crises. The Philippine experience shows that during the Asian financial crisis, foreign banks, among the different bank classes, tend to cut back on loans the least, a finding similar to those found in Argentina (Goldberg, Dages, and Kinney, 2000).

Flight to Quality

The affected economies of East Asia suffered through a massive reversal in capital flows at the height of the financial crisis of 1998. This reversal stands in stark contrast with very strong capital inflows into the same region in the "Asian miracle" years prior to the crisis. For some observers (Sachs and Wing, 1999), the abrupt swing in capital flows, caused basically by a panic among international investors, which severely strained the financial systems in the affected economies is the main cause of the financial crisis in Asia.

The Philippines asset markets were not spared by the regional disturbance, though not in the same degree as Thailand's nor Indonesia's. Like the rest of the economies in the region, the peso had undergone a major devaluation and the stock market index plunged. Official records show that US 7.4 billion fled the country in the second half of 1997 and the whole of 1999. At the heart of capital flight is the lack of confidence in the economy, in general, and in the financial system, in particular. An interesting issue that arises is whether the foreign banks could have a beneficial or harmful role in a crisis situation where massive a capital flight usually occurs.

In this context, to the extent that the presence of foreign banks encourages depositors to keep their holdings within the country, then foreign banks can be said to have a stabilizing influence. It can be argued that foreign banks, by offering an alternative for depositors to place their assets domestically, help prop up confidence in the domestic financial system. The reassurance can come from the perceived more solid capital bases of foreign banks, their more sophisticated risk management systems, their ability of diversify their risks, etc. By offering another destination for the "flight to quality" money that is domestic, then the presence of foreign banks can be argued to have a stabilizing influence on the domestic financial system.

An indicator of the "flight to quality" phenomenon would be the changes in the deposit growth rates among different types of banks. If foreign banks are perceived to be more solid (and thus more resilient to financial turbulence) than domestic banks, then during times of crises, it is expected that a migration of deposits will flow from domestic to foreign banks. Of course, there are differences in the degree of financial standing among domestic banks. Table 6 reports the average real deposit growth rates among state-owned, private commercial, and foreign banks in the pre-, crisis, and post-crisis periods. Foreign banks were further classified to distinguish the new banks that were able to enter through the 1994 act and the old ones.

The data shows that private foreign banks enjoyed relatively higher deposit growth rates than both state-owned and domestic banks. However, the new banks account for much of the growth of the deposits. Considering that the new foreign banks started from a low deposit base, the very high growth rates in deposits registered prior to the crisis is not unusual. What is more striking is the comparison of the growth rates deposits of foreign banks and domestic banks during the crisis period. The foreign banks—old and new alike—exhibited higher growth rates in deposits than the private commercial banks. Because the growth rates of deposit in the new foreign banks may be influenced by their low starting base, the more important finding is that the old foreign banks experienced considerably higher growth in deposits indicating "flight to quality" from the state-owned banks.

An analysis of the comparative growth rates of deposits during the crisis period shows that some form of "flight to quality" ensued primarily from state-owned banks to the private foreign banks. Whether the volume of deposit migration was significant enough to exert a calming influence in the domestic banking system is not easy to resolve. Nevertheless, the facts show that the relation between "flight to quality" and the presence of foreign banks is not inconsistent with the stability argument.

Box 1. The Entry of Foreign Banks and Segmentation of the Loans Market

Standard economic analysis would predict that the as the number of firms in a market increases, the degree of rivalry gets keener, all things equal. It could also happen that the mere threat of entry of banks - either foreign or domestic – could influence incumbent banks to behave competitively[10]. While the entry of foreign banks is expected to introduce more competition in the banking sector, the competitive pressure is not likely to be felt across the board but could actually vary according to different market segments in the industry. The markets for loans in the Philippines, like elsewhere, are not homogenous. For instance, there are the so-called top-tier markets, which comprise the top 100 corporations as well as the multinationals, and the middle market, which is characterized to be more retail in nature. In view of this characteristic of the loans market, different banks employ different marketing strategies. Therefore in assessing the likely impact of foreign bank entry, it is instructive to identify the particular market segment that foreign banks target.

Anecdotal evidence gathered from interviews reveals that foreign banks, by and large, cater more to the top-tier market and multinational corporations (also called prime clients) than to the middle market. They do so for a number of reasons. First, foreign banks are more likely to engage a relatively limited number of clients in big volume transactions than to deal with many borrowers over a myriad of smaller loans. The interest rates in the top tier loan market is considered to be more competitively priced owing to the higher credit standings of the borrowers that make up this market. Hence, to the extent that foreign banks can tap the lower cost funds from global capital markets much more readily than domestic banks, they would be in a better position to offer cheaper funds at the wholesale banking level. Besides, given their limited branching networks, foreign banks have little physical presence in the regions and suburbs where most of the retail banking segments are located. Secondly, a good number of foreign banks cater to the financing needs of multinational companies from their home countries, though not exclusively. For instance, Dutch foreign banks are likely to serve the needs of Dutch multinational corporations in the Philippines. Thus, it is natural that multinationals form an important segment in the client base of foreign banks.

Due to the added competition that foreign banks exert, their entry can bring about a realignment in the banking sector. It has been said that one of the 'benefits' of foreign bank entry is that it induces domestic banks to cater to 'underserved' sector or market. This underserved sector comprise the second tier or middle markets, which, as anecdotal evidence shows, are inherently more risky than the top tier market. The relative paucity of credit in the second-tier markets may be due to the relatively higher cost of servicing and monitoring the loans as well as the risk of adverse selection arising from information asymmetry, or simply risk aversion on the part of large domestic banks. Under these circumstances, the renewed attention and the ensuing increase in supply of the banking sector to the middle market can be said to be a positive effect of the liberalization of foreign bank entry.

It should be noted that the observed trend of enhanced penetration of the middle market is not incompatible with the widening of overall bank spreads. The domestic banks naturally would like to be adequately compensated for the additional risk they take on when lending to the "second tier market" in the form of premiums on loan interest rates. It is interesting to investigate the extent to which the top tier markets of the domestic banks have been taken over by foreign banks, as a consequence of the liberalization of entry. There is, however, very little data available on the allocation of the loan portfolio of banks (according to classification of top tier of middle markets) to substantiate the segmentation hypothesis.

Given this analysis, overall spreads could widen as a result of the greater risk in dealing with the second-tier market on top of the effects of macroeconomic policies (discussed in the main text). The microeconomic angle introduced by the segmentation is not inconsistent with the macroeconomic view on the determination of bank spreads.

There are indications that since the onset of foreign bank entry, there has been an increase in the degree of rivalry in the top-tier or premium markets, although evidence is merely anecdotal. However, there is some support for the aforementioned observation. In a survey, Hapitan (2000) reports that the area of operation which domestic banks found the most significant competitive pressure from the foreign entry is wholesale banking. More interestingly, the aforementioned study mentioned that as a consequence of the competition exerted by the foreign bank entry, domestic banks have been 'forced' to look into other market niches. These other market niches comprise the middle or retail markets which can be easier served by local banks due to their more extensive branch network. From these observations, it appears that the movement to cater more extensively to the middle market by local banks is gradually happening.

[10] The three conditions for contestable markets – absence of entry barriers, absence of strategic response of incumbent firms to new entry and no barriers to entry – are quite restrictive. Hoschka (1993) points out that these conditions are not easily met in the European retail banking.

Box 2. Alternative Measurements of Intermediation Spreads

- Most of the arguments made in this paper are based on a particular methodology ("accounting method") of computing for intermediation spreads. This specific definition varies from the more popular method found in most of the earlier work (e.g. Abola 1999) done to explain the behaviour of bank spread mentioned in the literature review. Unfortunately, however, due to the rapid growth of foreign currency intermediation and the ever-widening range of services provided by commercial banks, the lending and deposit rates data series published by the Bangko Sentral have become less relevant. Among its many weaknesses is the fact that the data only covers peso-denominated loans and deposits. A thorough discussion on the need to have a wider definition of bank intermediation spread can be found in Brock and Suarez (2000) where the authors provided six different definitions of bank spreads. Of these six definitions, this paper provides only two and are defined below as 1) Average Spreads Method and 2) Accounting Spreads.

1. Average Spreads Method ("Average Yield on Earning Assets" minus "Average Cost of Funds")

Formula:

$$AS = \left[\frac{i_{EA}}{(EA_1 + EA_2)} - \frac{i_{IBL}}{(IBL_1 + IBL_2)} \right]$$

$$AS = \left[YEA - CF \right]$$

where:

AS = Average Spread
EA = Earning Assets or Interest Bearing Assets
IBL = Interest Bearing Liabilities
YEA = Yield on earning assets
i_{EA} = interest yield on earning assets
i_{IBL} = interest cost on interest bearing liabilities

- To compute for average spread, one simply has to get the difference between 1) the average interest yield that all commercial banks make from their interest earning assets.and 2) the average interest cost of all their interest bearing liabilities. Like most "macro" level indicators, it fails to capture the various implications of, for example, changes in the maturity structure of the various components of banking sector's balance sheet.
- Limitations: (Data limitations make it difficult to compute for yield-on-earning assets (YEA) across a broader definition. For instance, if the income report of the BSP had separated the different balance sheet and income statement items, it would have been much easier to measure the yield of banks in all earning assets. Data limitations only allowed us to measure interest earnings as a proportion to bank loans and investments making our figures slightly overstated.
- Strengths: The strength of this measurement is it is able to capture the effective interest earnings of a bank on its interest bearing assets. Unlike the accounting method of measuring intermediation spreads (to be discussed below), this measurement captures both dollar and peso-denominated liabilities and assets of the commercial banks. It is also able to capture the net effect of taxes and other administrative charges that come with each interest-bearing instrument.

2. Accounting Method (Lending rate less total (including intermediation) cost of generating deposits)

- Strengths: The main advantage of this measurement is that it allows one to see the itemized sources of changes in bank intermediation spreads through time. For instance, one will be able to trace the impact of changes in intermediation costs how it affects the industry spread. The ability to dissect the sources allows one to generate indicators that aid in policy decision-making.
- Limitations: The accounting method has several problems. For one, reported average lending rates of the banks are only applicable for peso-denominated assets and liabilities. The fact that banks were able to source a substantial amount of funds from abroad could make this figure less realistic, especially during the years 1994 to 1996. This approach is also vulnerable to underreporting of loan yields and padding of costs of funds.

Box 3. A Policy Bias for Tightening: The BSP-IMF Financial Programming Framework

While the Philippines was under an IMF-sponsored economic program between 1994 to 1997, the monetary and exchange rate policy mix that was in put in place was an agreed upon framework between the BSP and the IMF. It is the objective of this section to demonstrate how the "BSP-IMF" financial programming framework is biased towards tight monetary policy (or high interest rates). To understand this, we need to expound on how the reserve money-targeting framework works.

After the BSP submits its GDP growth target to the IMF, the IMF asks for an income elasticity of demand for money figure from the BSP. This figure will yield money supply growth target figure. Based on the IMF's financial programming framework, meeting this target will facilitate manageability of the country's balance of payments position keep the country's inflation rate at very manageable levels. The chosen intermediate target for the Philippines is a money supply target referred to as M3 or domestic liquidity, a bulk of which is peso-denominated deposit liabilities of commercial banks. However, because M3 data comes too infrequently, a proxy or operating target takes its place in the near term and an agreed upon growth target by the Philippine monetary authorities is the growth of reserve money. And since the programming framework assumes a steady money multiplier for RM and M3, RM becomes the operating target.

Take note, however, with a highly mobile capital account, an operating target such as RM is biased toward a tightening of the domestic currency money supply, whether there is a net inflow of capital or a net outflow of capital. During capital inflow episodes, a sharp increase in NFA will require an equally sharp reduction in NDA if the RM target commitment with the IMF is to be met. For instance, if the RM target is 15% and NFA grows by 25%, meeting the RM target means NDA will have to be reduced by 10%. This, more often than not, leads to higher interest rates on the home currency. Under this framework, if the policy bias of the BSP is to keep the peso very stable, capital inflow episodes are usually accompanied by sterilized foreign exchange intervention. Figure 8 clearly illustrates how this was practiced between 1994 to 1997.

Unfortunately during an outflow episode, the BSP could not do the reverse. Whenever there is a decline in NFA, the only way to meet the RM target is to expand NDA. For example, if the RM growth target is 15% and say, NFA decline by 10%, then NDA will have to expand by 25%. However, this is easier said than done. The fact is it is very difficult to expand NDA during a capital outflow episode (Bruno 1993). The simple reason is an expansion in NDA reduces the yields on home currency (or peso-denominated) assets and could exaggerate the capital outflow. Under this framework, if the policy bias of the BSP is to keep the peso very stable, capital outflow episodes are usually accompanied by unsterilized foreign exchange intervention.

The fact that the policy bias during a capital inflow episode is toward sterilized intervention and the policy bias during a capital outflow episode is towards unsterilized intervention means that the policy bias of the BSP during a pegged exchange rate regime is toward high domestic interest rates.♠

Box 4: (Notes for Figure 1 and Table 3) Intermediation Costs and Bank Spreads

Weighted deposit rate on savings and time deposits used to compute for the intermediation cost in December 1998 is October-November average.
The October 1998 figure is used as the net lending rate for December 1998.

Formulas:
Cost = (r1 - adj r2 - adj r3 - adj r4 + r5)/nld
Total Cost = Cost + .05(Lending Rate)
Intermediation Cost = Total Cost - r1
Bank Spread = Lending Rate - Total Cost

where:
r1 = weighted deposit rate on savings and time deposits

r2 = yield on banks' statutory deposits with the BSP (r2 = 4%) is adjusted for the fact that only 25% of the statutory reserves can earn at 4%, and are subjected to the 5% gross receipts tax (GRT)

adj r2 = 4%(0.25) * statutory reserve requirement * 0.95

r3 = BSP sold special T-bills at 50 bp below the 91-day T-bill rate (r3) is adjusted for the 20% withholding tax, 5% GRT, and the fact that liquidity reserves only earn this much

adj r3 = (91 T-bill rate - 0.5) * 0.80 * 0.95 * liquidity reserve requirement

r4 = 9% yield on uncomplied Agra component (r4) is adjusted for the assumption that out of the 10% of loanable funds allotted to it, only half is loaned out. The remaining amount earns 9%. Also subjected to withholding tax (20%) and GRT (5%).

adj r 4 = 9%(0.05) * 0.80 * 0.95

r5 = annual deposit insurance that banks pay to the Philippine Deposit Insurance Corporation (PDIC) equivalent to 1/12 of 1% until 2nd semester of 1992 and 1/5 of 1% thereafter.

nld = (net loanable % from deposits) total loanable amount adjusted for the reserve requirement and the unused Agra component

= (1-rr) - .05(1-rr)
where rr = reserve requirement

Box 5. How Did Arbitrage Opportunities Persist?

A key assumption behind our explanation on why bank spreads failed to narrow substantially between 1994 and the first semester of 1997 is the fact that arbitrage opportunities persisted between peso (91-day T-bill) and foreign currency denominated bonds (3-month LIBOR).

While such arbitrage opportunities are impossible in a first-best setting, real world imperfections (i.e., institutional impediments and structural factors) can cause price rigidities. There are two sets of imperfections that would have allowed banks to borrow abroad and lend them at much higher yields in the local economy. The first imperfection implied by the persistence of arbitrage opportunities is the fact that yields on local government bonds remained higher than their counterpart bonds abroad, despite the virtual peg of the nominal exchange rate. Theoretically, foreign capital should have found their way to Philippine bonds and immediately led to a parity of yields. The fact that this did not take place implies that local bonds were not fully accessible to foreign funds. Second, some form of bottleneck might explain why local companies continued to borrow from local banks despite their access to cheaper funds abroad. Theoretically, Philippine banks operating in an open capital account regime should not be able to price their loans higher than those available abroad.

While market efficiency has been shown (Gochoco-Bautista 1988) to exist for the Philippine T-bill market, little has been done to explain how institutional and structural factors could cause price rigidities to persist in the local market. Leonor (1999) however, did some pioneering work to demonstrate that the National Treasury (or the Bureau of the Treasury) has not been able to borrow at the least possible cost due to imperfections in the auction method for the Philippine T-bills market. (While no mention was made about the issue of arbitrage, it is implicit in her findings that an obstacle to an immediate alignment between peso and foreign bond prices existed.) The paper named several of these factors. It took note, for instance, of the fact that weekly volume awards are not allowed to exceed a pre-announced cap to the weekly offerings even if considerably low bid rates were being made. This, the paper cited, prevents the government from minimizing the cost of financing its cash flow requirements. The paper also demonstrated that an auction ruling which required that 40% of the weekly offering be granted to bids quoted as "non-competitive" have been a source of price rigidities in the market. It is claimed in the paper that bids would have been far lower if such a ruling did not exist. Other papers (Valdehuesa 1996) have been written implying the need for structural and institutional reforms to address imperfections in the weekly T-bill auctions. The absence of a secondary market for Government Securities may be another cause for price rigidities. While plans have been drawn up to put up a formal exchange for a secondary market for T-bills, actual trading has yet to commence.

As mentioned, other microeconomic reasons would have allowed banks to take advantage of the arbitrage. One line of inquiry is to identify, for instance, what factors prevent a majority of Philippines corporations from borrowing abroad. It would be a good empirical exercise since it would help policymakers remove the structural impediments that allowed arbitrage to take place. The absence of such studies, however, does not remove the fact that the macroeconomic (sterilized and unsterilized foreign exchange intervention) policy regimes that were consistent with the maintenance of an arbitrage[11] contributed substantially to the ability of banks to borrow abroad and allowed them to lend at a much higher price in the domestic economy. Apart from the fact that the BSP itself has admitted to undertaking sterilized foreign exchange intervention (1995) during capital inflow episodes, quite a number of studies have documented the existence of such an arbitrage in the Philippines, (See for example Chorng-Huey and Carranza (1998) and World Bank (1996). In fact, quite a number of theoretical and empirical studies have been done to show that sterilized intervention works for advanced country cases. See, for example, Isard's study (1995) providing empirical support for the branch of theories saying that "signaling" helps make sterilization effective or MacDonald (1996) which is founded on the "risk-premia" argument. Regardless of which of the two schools were correct, the fact that sterilized foreign exchange intervention worked for these countries means that there is less reason to think it cannot work for the Philippines.

[11] Sterilized foreign exchange intervention during inflow episodes is done to meet both foreign exchange and money supply targets and automatically implies tightening. A foreign exchange intervention during capital outflow episodes, however, is not sterilized and also leads to interest rate differentials. See Bruno (1993) to show how base money targeting has a natural bias for tight monetary policy.

Table 1. LIST OF FOREIGN BANK BRANCHES AND SUBSIDIARIES

(As of 31 December 2000)

Date of Ist entry in the Philippines		Foreign Bank Branch/Subsidiary	Bank Classification (Universal, commercial, etc.)	Mode Of Entry 1/	Number of Branches 2/	Capital (P Million) 3/
6/28/45		Citibank, N.A.	Commercial	Original 4	5	2,567
7/23/45		Standard Chartered Bank	Commercial	Original 4	5	900
8/6/45		Hongkong & Shanghai Banking Corp.	Universal	Original 4	4	1,350
4/15/47		Bank of America NT & SA	Commercial	Original 4	0	423
4/3/95		The Bank of Tokyo-Mitsubishi Ltd.	Commercial	c	0	720
6/1/95		Korea Exchange Bank	Commercial	c	0	257
6/30/95		The Fuji Bank Ltd.	Commercial	c	0	602
7/4/95		The International Commercial Bank of China	Commercial	c	2	389
7/10/95		ING Barings, Manila Branch	Universal	c	0	1,238
7/14/95		Deutsche Bank AG	Commercial	c	0	760
8/11/95		Bangkok Public Company Ltd.	Commercial	c	0	266
9/26/95		The Chase Manhattan Bank	Commercial	c	0	223
		(formerly Chemical Bank)				
9/26/95		Chinatrust (Phils.) Commercial Bank Corp.	Commercial	a	16	2,616
10/2/95		ANZ Banking Group, Ltd.	Commercial	c	0	250
1/8/96		Banco Santander Philipines, Inc.	Commercial	b	0	2,505
1/29/96		Dao Heng Bank, Inc.	Commercial	b	13	2,495
11/6/97		Maybank Phillippines, Inc.	Commercial	a	59	1,895
9/1/98		DBS Bank Philippines, Inc. 4/	Commercial	a	20	2,244
9/7/99		ABN-AMRO Savings Bank Corp.	Thrift	a	24	857
11/26/99		United Overseas Bank Philippines	Commercial	a	96	2,184
12/29/00		HSBC Savings Bank Phils, Inc.	Thrift	a	14	671

1/ Mode of Entry classified as follows:

a) by acquiring, purchasing or owning up to 60% of the voting stock of an existing bank;

b) by investing in up to 60% of the voting stock of a new banking subsidiary incorporated under Philippine laws; and

c) by establishing branches with full branching authority.

2/ As of December 2000, exclusive of main branches of foreign banks and head offices of foreign bank subsidiaries

3/ Based on published statements as of September 27, 2000 for universal/commercial banks and as of June 26, 2000 for thrift banks

4/ Formerly Bank of Southeast Asia, a locally incorporated bank which was acquired by Development Bank of Singapore (DBS). Accordingly, DBS gave up its full bank branching authority originally granted on 28 November 1995.

Source: Bangko Sentral Ng Pilipinas

Table 2: Concentration Ratios

Asset, Deposit, and Loan Concentration Ratios
1991 - 3q 2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
ASSETS										
Share of Top 5	43.55	44.34	44.1	46.96	45.71	44.04	36.43	37.95	42.69	49.58
Share of 'Old' FBs	13.75	11.56	12.09	10.01	9.03	9.8	12.92	8.72	9.44	10.38
Share of New 10 FBs					1.81	2.96	6.44	6.56	5.24	3.38
Share of Total FB's					10.83	12.77	19.36	15.37	14.68	15.8
DEPOSITS										
Share of Top 5	48.44	47.94	48.68	49.99	49.1	49.74	44.11	44.28	51.8	53.62
Share of 'Old' FBs	7.82	8.03	7.74	7.58	5.61	5.12	6.55	7.08	8.12	9.63
Share of New 10 FBs					0.53	0.77	2.49	2.79	3.03	3.23
Share of Total FB's					6.14	5.89	9.04	9.88	11.15	12.86
LOANS										
Share of Top 5	44.52	44.92	39.96	47.55	47.25	46.39	32.86	38.73	43.08	49.38
Share of 'Old' FBs	10.81	10.11	10.5	8.66	7.3	6.77	5.66	6.24	9.53	7.39
Share of New 10 FBs					1.31	3.7	4.81	5.31	4.48	5.3
Share of Total FB's					8.61	10.47	10.47	11.55	14.01	12.69

Source: Bangko Sentral ng Pilipinas

Table 1a includes only both expanded and non-expanded commercial banks whereas table 1b includes thrift banks

Table 3: Performance Indicators of Banking Sector

PERFORMANCE INDICATORS OF BANKING SECTOR (in percentage)[1/]

	Years over which averaged	Net Interest Margin / Total Assets	Overhead / Total Assets	Net Profit Total Assets
Hong Kong	1990-1995	1.9	1.5	1.7
Indonesia	1988-1995	3.5	2.9	0.9
South Korea	1991-1995	1.7	2.1	0.4
Malaysia	1988-1995	2.4	1.6	0.9
Philippines	1988-1995	4.2	4.4	2
Singapore	1991-1995	1.9	1.3	1.1
Thailand	1988-1995	3.1	2	1.1
India	1992-1995	3.3	1.4	2.3
Comparators				
Germany	1992-1995	1.9	2.1	0.4
Japan	1989-1995	1.4	1.1	0.2
U.S.	1988-1995	3.1	3.2	0.5

Source: Demirguc-Kunt and Huizinga (1997); as reported in Claessens and Glaessner (1997)

Note:
1/ Data presented are weighted averages of figures from all reporting banks, domestic, and foreign.

Table 4. Sector distribution of KB Outstanding Loans

as of Dec 1998 in percentage	Grand Total	Expanded Commercial Banks		Govt EKBs	Non-EKBs	Foreign Banks
		Total	Pvt. EKBs			
A. Classified as to Economic Activity						
Agriculture, Hunting & Forestry	3.84	3.84	3.13	7.93	3.35	4.27
Fishing	0.24	0.25	0.22	0.43	0.18	0.25
Mining and Quarrying	1.30	1.44	1.39	1.74	0.85	0.50
Manufacturing	23.28	23.41	25.32	12.37	19.60	25.55
Electricity, Gas and Water	3.07	3.16	2.69	5.87	1.83	3.37
Construction	3.54	3.60	3.85	2.15	4.92	1.76
Wholesale & Retail Trade, Repair of Motor Vehicles and Personal Household Goods	13.87	14.64	16.19	5.69	16.20	5.23
Transport, Storage & Communication	6.39	6.15	5.85	7.92	7.83	7.11
Financial Intermediation	8.77	8.81	5.86	25.81	4.74	12.11
Real, Estate, Renting & Bus. Activities	14.16	14.75	14.83	14.26	20.21	3.60
Public Adm & Defense	0.70	0.75	0.26	3.56	0.58	0.46
Education	0.32	0.35	0.32	0.56	0.36	0.00
Health & Social Work	0.17	0.15	0.11	0.35	0.54	0.02
Other Community, Social & Pers. Services	7.40	5.65	5.66	5.61	8.27	21.51
Private Households w/ Employed Persons	0.31	0.31	0.35	0.04	0.23	0.45
Extra Territorial Organization and Bodies	0.03	0.01	0.01	0.00	0.24	0.02
Hotels & Restaurants	0.57	0.61	0.56	0.88	0.85	0.03
Interbank Loans	12.04	12.14	13.41	4.82	9.23	13.76
Total Loan Portfolio	100.00	100.00	100.00	100.00	100.00	100.00
B. Classified as to Type of Accounts						
Interbank Loans Receivable	12.04	12.14	13.41	4.82	9.23	13.76
Loans and Discounts	72.59	71.93	71.19	76.20	74.47	76.50
Agra/Agri Credit Loans	2.67	2.62	1.89	6.85	3.45	2.41
Bills Purchased	2.18	2.33	2.22	3.00	1.33	1.61
Customer Liab - LC/TR	5.57	5.96	6.65	1.95	5.18	2.66
Customer Liab - Accep. O/S	0.70	0.64	0.72	0.18	0.93	0.99
Trading Account Securities	0.97	0.81	0.79	0.96	1.74	1.58
Underwriting Accounts	0.23	0.28	0.28	0.27	0.00	0.00
Restructured Loans	3.05	3.29	2.86	5.77	3.67	0.50
Total Loan Portfolio	100.00	100.00	100.00	100.00	100.00	100.00

Source of basic data: Bangko Sentral ng Pilipinas

Table 5. Total Loan Loss Provisioning			
as of Dec 31, 1999	Foreign Banks	Domestic Expanded Commercial	Non Expanded Commercial
NPL to Total Loans	4.12	12.98	16.44
Loan Loss Reserves to NPLs	68.13	40.54	19.63
Real Estate Loans to Total Loans	2.73	12.45	14.53
Past Due RE Loans to RE Loans	3.68	16.84	19.05
Past Due RE Loans to Total Loans	0.1	2.1	2.77

Source: Bangko Sentral ng Pilipinas

TABLE 6: Quarterly Loan Growth Rates				
Philippine Commercial Bank System				
(percentage)				
Panel A: Average Across Individual Banks (unweighted)				
Time Period	**All Banks**	**State-Owned Banks**	**Private Domestic Commercial Banks**	**Private Foreign Banks**
Pre-Crisis		-4.59	5.64	29.18
1989Q1-1997Q2				
Crisis		-10.24	-4.32	-1.03
1997Q3-1998Q4				
Post-Crisis		-11.74	-1.17	-1.82
1999Q1-2000Q1				
Panel B: Weighted Lending Growth Across Banks				
Pre-Crisis		-0.6	0.06	0.15
1989Q1-1997Q2				
Crisis		-1.5	-0.19	-0.092
1997Q3-1998Q4				

Post-Crisis		-1.72	0.14	-0.028
1999Q1-2000Q1				

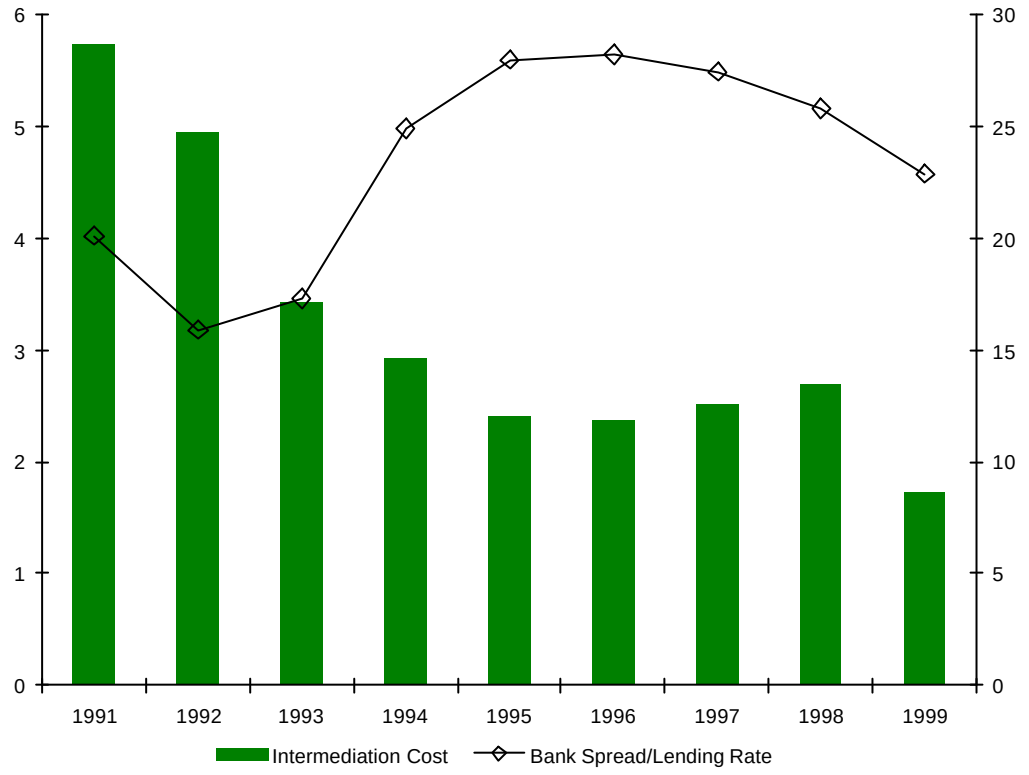
Source of basic data: Published Financial Statement Reports of Commercial Banks, Bangko Sentral ng Pilipinas
Note: For missing observations, loan growth was first computed by getting the average of the prior period growth rate and the following period growth rate. The weight used is the loan of an individual bank as a percentage to the total loan of the class of banks (state-owned, private local and foreign banks).

Table 7: Average Real Deposit Growth Rate (in percentage)

	State-Owned Banks	**Private Commercial Banks**	**Private Foreign Banks**	***Old* Foreign Banks**	***New* Foreign Banks**
Pre-Crisis 1996 Q1-1997 Q2	data not available	16.01	30.15	-4.58	42.78
Crisis 1997 Q3-1998 Q4	-7.73	2.34	60.07	8.19	77.37
Post-Crisis 1999 Q1-2000 Q2	-0.03	-1.49	0.13	4.74	-1.41

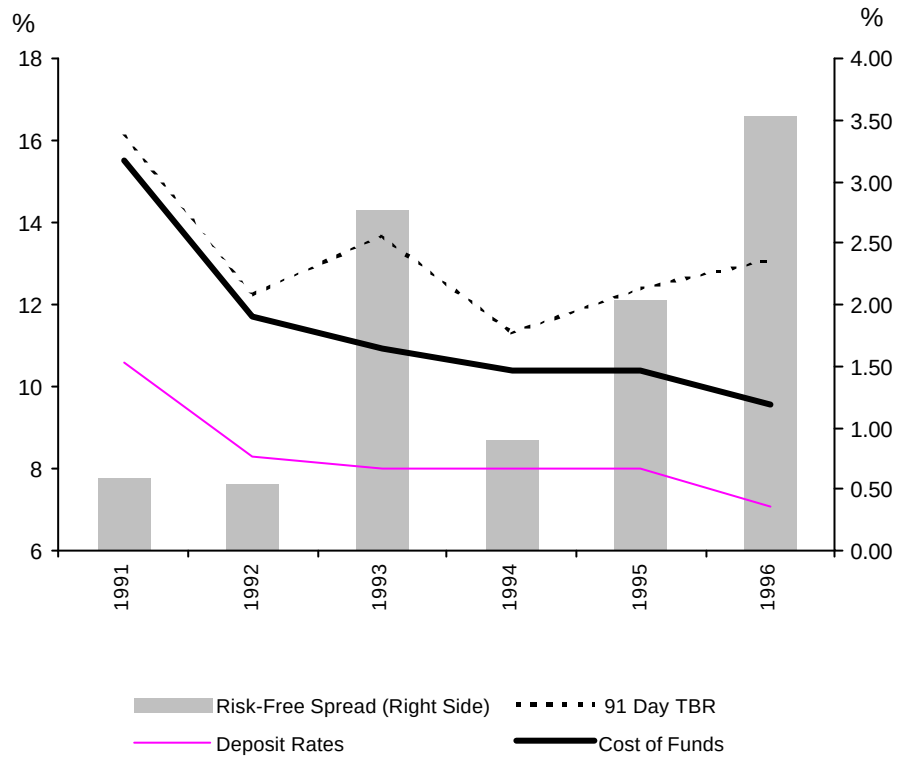
Source: Published Statement Reports of Banks, Bangko Sentral ng Pilipinas.
Notes: Old Foreign Banks - Bank of America, Citibank, HSBC and Standard Chartered
New Foreign Banks - all others
For missing observations of deposits, deposit growth was first computed by getting the average of the prior period growth rate and the following period growth rate. Computed growth rates were used to get the corresponding values of deposits.

Figure 1. Intermediation Cost and Bank Spreads



Source of Basic Data: Bangko Sentral ng Pilipinas

Figure 2. Difference Between Risk Free T-Bill Rate And Cost of Funds (deposit rates plus other intermediation costs): "Risk Free" Spreads Fail To Narrow

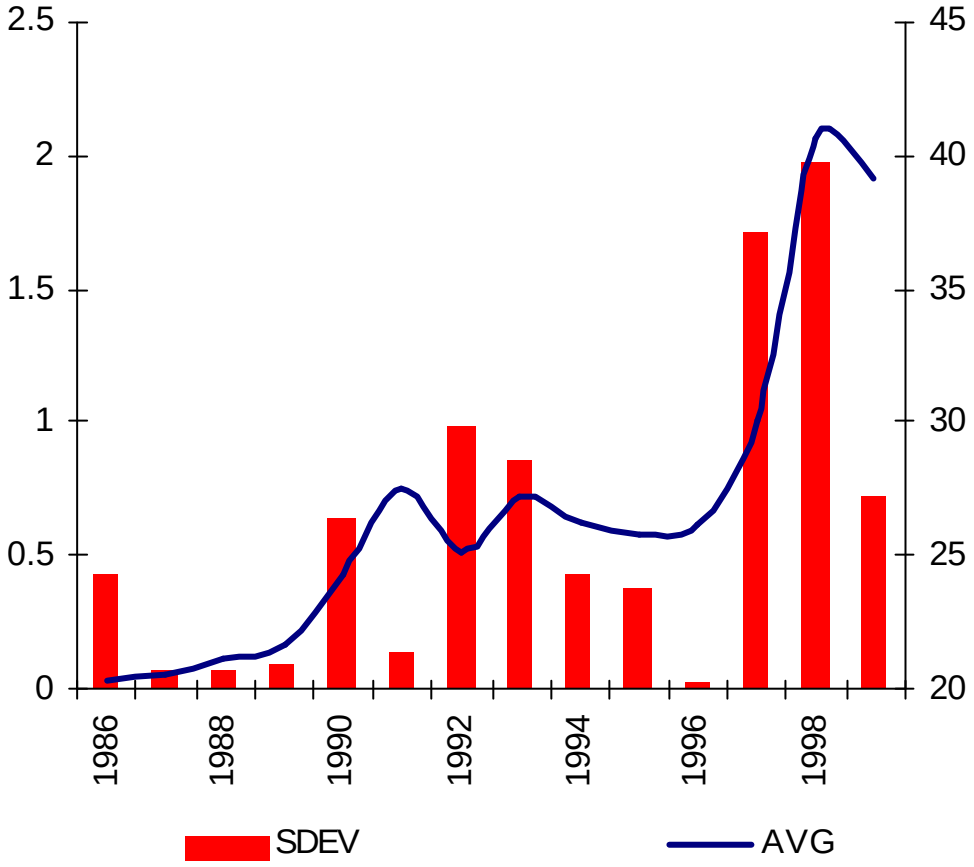


Source: Bangko Sentral ng Pilipinas

Figure 3. Open Capital Account Policy Was Mixed With Virtual Currency Peg

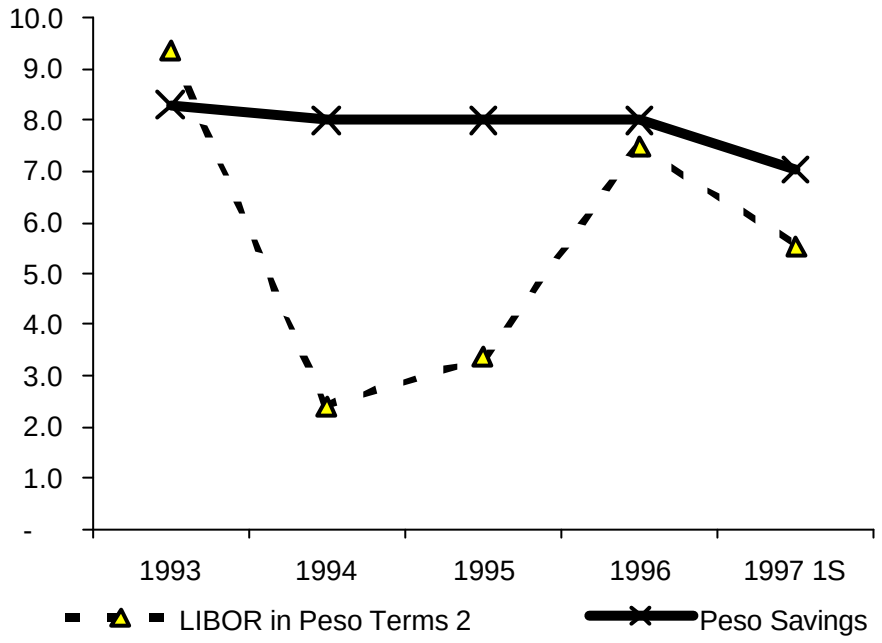
Source: Bangko Sentral ng Pilipinas

Figure 4. Peg Did Not Hold For Long



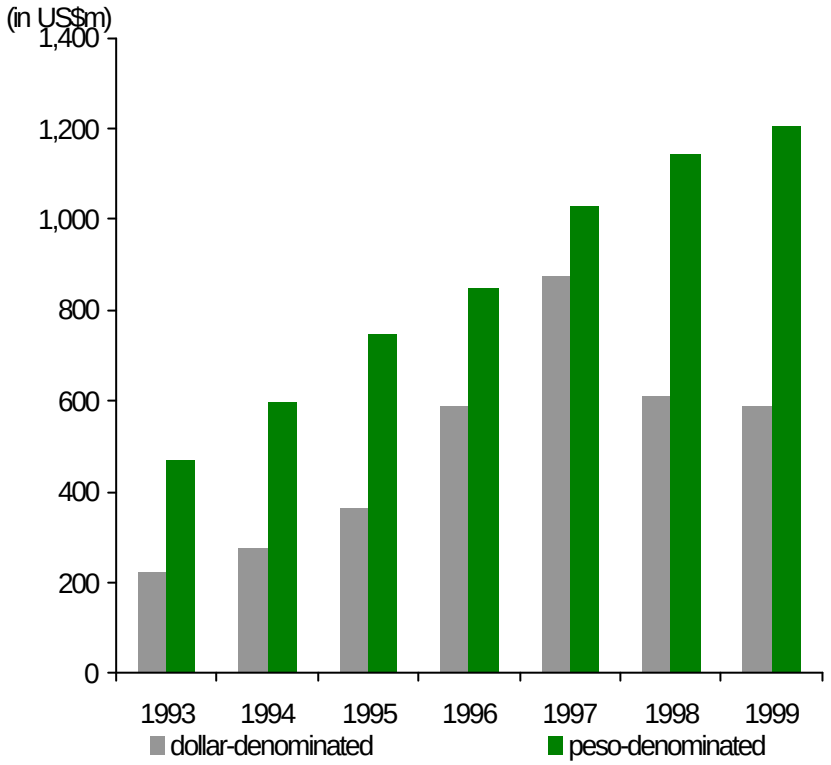
Source: Bangko Sentral ng Pilipinas
SDEV (Right Scale) = standard deviation of the first difference of the monthly average spot rate
AVG (Left Scale) = average monthly spot rate of P/$ rate

Figure 5. Incentive to Fund Loans From Abroad



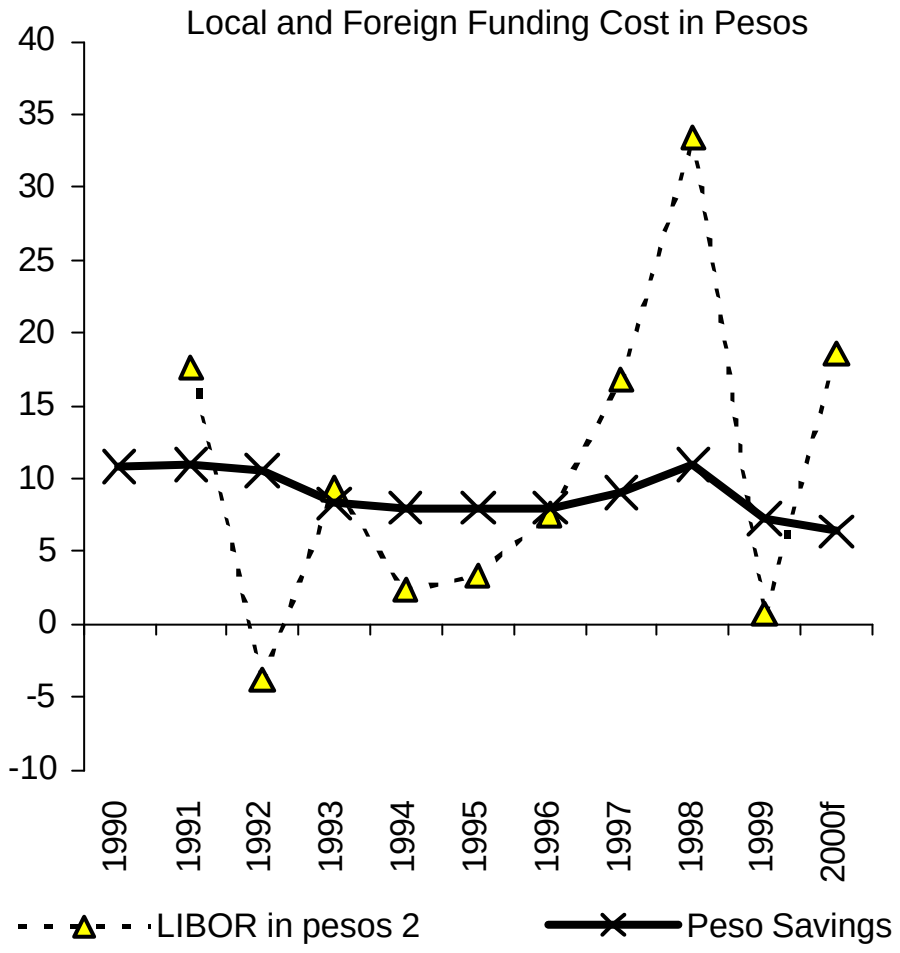
Source: Bangko Sentral ng Pilipinas

Figure 6. Peso's Float Eased Foreign Borrowing



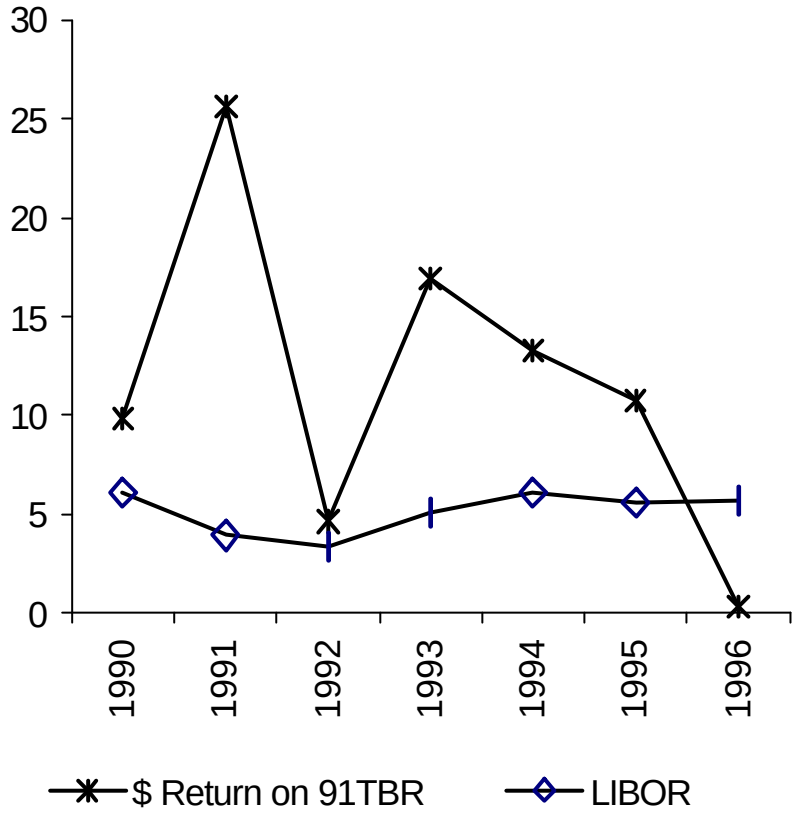
Source: Bangko Sentral ng Pilipinas

Figure 7. Changing Liability Structure of KBs



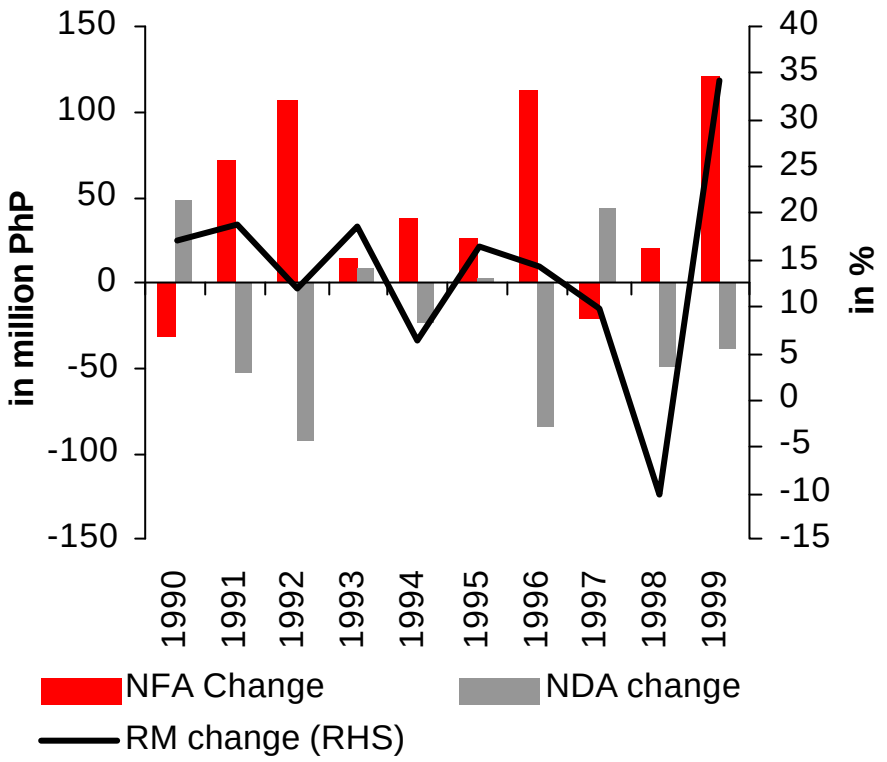
Source: Bangko Sentral ng Pilipinas

Figure 8. Macro Policy Mix and Financial Market Imperfections Led to Persistent Arbitrage



Source: Bangko Sentral ng Pilipinas

Figure 9. Monetary Targets Met Through Sterilization



Source: Bangko Sentral ng Pilipinas (BSP)

RM = reserve money
NDA = net domestic assets
NFA = net foreign assets