Implications of the Globalization of the Banking Sector: The Latin American Experience

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Not since the Great Depression has so much of the world faced widespread banking problems, with 112 episodes of systemic banking crises in 93 countries since the late 1970s (Caprio and Klingebiel 1999). These crises have imposed significant economic and fiscal costs on the countries involved; Honohan and Klingebiel (2000) find the average direct costs of banking collapses to be equal to 12.8 percent of GDP, with many countries' direct costs substantially exceeding this percentage.

Problems in the banking sector extend well beyond the fiscal cost to taxpayers, for a number of reasons. First, many firms do not have significant access to nonbank sources of external finance. Second, most firms have relied on financing from domestic banks, with bank relationships being highly valued and frequently including cross-shareholding or inclusion of bank representatives on the firm's board of directors. Third, most domestic banks in a given country have had similar portfolio exposures, so that banking problems have tended to affect the entire banking sector, rather than being idiosyncratic and affecting only a few individual banks. Thus, a major domestic shock can impair the solvency of a country's entire banking industry, leaving a country with no (or few) healthy major banks.

Such a sharp deterioration in the health of a country's banking sector forces the government to make a stark choice. On the one hand, bank

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regulators can undertake strict enforcement of bank regulations that will result in the widespread closure of insolvent banks. This can ensure the safety and soundness of the banks that do survive, but bank closures can be quite expensive for taxpayers, and the cost of the ensuing credit crunch can be substantial for individual firms and for the overall performance of the macroeconomy. While the early closure of insolvent banks can stop the flow of red ink and contain the cost to the government of recapitalizing the banking system, at least in the short run, the increased macroeconomic costs associated with lost GDP have the potential to more than offset any cost savings, as weakened and failed firms cut production and employment. This path becomes even more problematic for policymakers if it leads to destabilization of the economy and political unrest. The alternative for bank regulators is to follow a policy of forbearance, allowing insolvent banks (and firms) to continue operating. Such a policy may limit the severity of any credit crunch, but it may also increase the ultimate cost to the government of recapitalizing the banking system. This will be particularly true if the moral hazard problem leads insolvent banks to take risky bets in a gamble for resurrection.

Bank regulators in many countries in Asia and Latin America have been focused on triage for their banking sector, and many banking reforms have, by necessity, been a pragmatic reaction to evolving domestic economic problems. Some countries have initiated major reforms, such as enhanced disclosure in financial statements, measures to improve transparency, and enhanced regulatory oversight. However, the sequence of measures taken has frequently had a pattern of two steps forward and one step back, as bank regulators have sometimes retreated from their initial supervisory and regulatory reforms in an attempt to satisfy political constraints and placate a populace resentful of squandered funds and the huge potential tax liabilities caused by banking problems.

In response to the difficulties associated with reforming domestic bank supervision during a banking crisis, a number of countries have, in effect, imported their bank supervision by encouraging greater penetration of domestic markets by foreign banks. While foreign banks are subject to supervision by the host country, they also are supervised by their home country supervisor, which frequently provides more oversight and requires greater disclosure than traditionally has been the case in many emerging markets.

A decision to open up domestic banking markets to foreign competition can provide important potential benefits for the host country, but it is not without significant risks. Among the benefits of opening domestic markets to foreign bank entry are the importation of new management and information technologies to improve banking services, the provision of a new source of funds to recapitalize a troubled banking sector, the provision of an alternative "safe haven" within the country that can

reduce the volume of domestic funds that flow offshore during a financial crisis, and the presence of deep-pocket, well-capitalized (foreign) banks that can continue lending following a major adverse shock that substantially weakens the domestic banking sector. Arguments against allowing the entry of foreign banks into domestic markets usually include concerns that the competition from foreign firms will weaken domestic banks, that local regulatory and monetary authorities will have a diminished ability to alter bank behavior, that adverse shocks to foreign banks that are external to the host country may be destabilizing insofar as they adversely affect the banks' behavior in the host country, and that foreign banks will not serve as a stabilizing influence by providing additional credit during a crisis in the host country.

Of course, many firms still have access to credit from foreign banks, even if those banks do not have a local presence. Much cross-border lending occurs through offices in a bank's home country (or even one of its subsidiaries located in a third country), with no subsidiary (or even branch presence) located in the country in which the borrowing firm is headquartered. While retail banking requires brick and mortar points of contact with customers, wholesale banking requires a much smaller investment. For example, banks with no physical presence in a country can lend substantial volumes of funds to firms and governmental entities of that country through project finance and loan participations. However, the composition of borrowers will differ, depending on whether a foreign bank has a physical presence in a country or makes all of its loans from offshore. For example, offshore lending would tend to benefit multinational firms and the larger, more well-established firms in a country. On the other hand, a local retail-banking network would rely in part on funding from local depositors and also typically make credit available to small and mid-sized firms, as well as individual consumers. Thus, the distribution of the potential benefits across economic agents in a country that can arise from the provision of intermediary services by foreign banks will differ, depending on whether the banks have a physical presence in that country and on the nature of their operations.

A key question that has important implications for the extent and nature of any benefits or costs of foreign bank activity is how foreign banks behave during a banking crisis. Will foreign banks fill the void left by weakened domestic banks whose lending capacity is reduced by a large domestic shock, or will foreign banks retreat in the face of emerging problems in the host economy? Will strong foreign banks with a local presence serve as a safe haven for domestic depositors that is a viable alternative to moving their deposits offshore? In that case, a flight to quality by depositors associated with a crisis (or the threat of a crisis) will not produce as severe a drain of funds from the country's banking system. Furthermore, if foreign banks do expand market share, how do they choose to expand? Do they increase offshore lending from offices in

the home country, expand lending from their branches or subsidiaries located in the host country, or make acquisitions of existing banks in the host country?

This paper focuses on the Latin American experience with foreign bank penetration, the response of foreign banks during a crisis, and the implications for bank supervision of having globally active banks with significant stakes in the domestic banking sector of emerging economies. Focusing on Latin America has several advantages. First, individual Latin American countries have adopted different strategies toward foreign banks. Argentina has become particularly open to foreign banks and Mexico is beginning to be more open, while countries such as Brazil and Ecuador have been somewhat reluctant to open their banking markets. Second, the series of shocks that buffeted Latin America during the 1990s provides an opportunity to examine how foreign banks respond to both banking and currency crises that potentially have significant effects on the domestic economy.

We first examine different measures of foreign bank penetration. We find that common measures of foreign bank penetration used in many previous studies substantially understate penetration, because they ignore offshore lending, or they may overstate the increases in penetration, because they focus only on the growth of foreign subsidiaries. We also find that calculating foreign bank penetration using only Bank for International Settlements (BIS) cross-border claims data will understate foreign bank activity in some countries, since foreign subsidiaries from BIS-nonreporting countries have been increasing. Furthermore, we find that foreign bank penetration does not always tend to decrease after a crisis. For many of the countries studied, all measures of foreign bank penetration rose after crises, with some instances reflecting acquisitions by foreign banks and others reflecting internal growth of lending by existing foreign bank operations relative to their domestic competitors. The rise in bank penetration has primarily been the result of expanded lending by foreign subsidiaries, with some evidence that offshore lending does decrease after a crisis. This implies that host countries interested in longer-term lending relationships may prefer to have the brick and mortar investment of foreign bank subsidiaries rather than the offshore lending that tends to flee during a crisis.

The first section of the paper elaborates on the costs and benefits of opening the domestic banking sector to foreign competition and briefly provides some background on the legal and economic conditions that have affected foreign bank penetration in three major Latin American countries. The second section describes the data, a combination from a variety of international banking sources. The third section describes how foreign banks have reacted to recent crises affecting Latin American countries. The fourth section draws out international supervisory impli-

cations of the Latin American experience with foreign banks and provides some conclusions.

Costs and Benefits of Foreign Bank Competition

Opening the banking sector to foreign entry has been a highly sensitive issue. Many East Asian countries have allowed only isolated acquisitions of domestic banks by foreign banks. While several countries in Latin America have encouraged foreign bank entry, it remains a sensitive issue in some of the biggest markets. This has been particularly true in Brazil, where the proposed sale of Banespa (Banco do Estado de Sao Paolo), a large government-owned bank with an extensive branch network, has resulted in much criticism. Furthermore, the Brazilian government has announced that foreign banks would not be allowed to open new branches or acquire smaller banks unless they purchased one of the troubled government-owned banks. However, the willingness of the Brazilian government to continue to open its banking markets despite political opposition reflects its recognition of the significant potential benefits of an increased foreign bank presence.

A more open banking market that allows well-capitalized, internationally diversified banks to enter has several substantial potential benefits. First, such firms are likely to be able to provide bank financing to creditworthy borrowers, even in the presence or aftermath of a significant, adverse domestic shock. While local banks with only (or primarily) domestic operations may be severely impaired by domestic shocks, a large global bank with operations in many countries (and with the host country representing a small share of its exposure) is much less likely to be affected. This is particularly true because the impacts of recent international shocks have been localized. The recent problems in both East Asia and Latin America did little to dampen the European and American economies, enabling banks headquartered in those countries to be well positioned should good lending opportunities arise.

Second, global banks are often an important source of new capital for a devastated banking sector following a crisis. Foreign banks have been a major source of funding in the aftermath of the banking crises in Argentina, Mexico, and Brazil, and these crises have been one of the major catalysts for allowing foreign bank entry. A severe banking crisis rarely leaves domestic banks well capitalized, and recapitalizing banks with private sector funding frequently requires finding investors who have not been heavily exposed to the domestic shock. Allowing foreign banks to enter a previously closed market or substantially increasing the foreign bank presence in the market can provide additional sources of private sector funding for bank recapitalization plans, thus reducing the costs to the government relative to the costs incurred if only domestic investors can bid for the good assets of failed banks. In addition, the

presence of international banks may encourage other foreign (nonbank) firms to consider investing in the host country, in much the same way that banks have been shown to follow their customers abroad (Seth and Nolle 1996).

Third, global banks bring to the host country practices consistent with the financial and regulatory reporting requirements of their home country. For example, for U.S. banks, Securities and Exchange Commission (SEC) requirements for reporting material events and even stock exchange listing requirements frequently provide significant improvements in disclosure compared to those in an emerging market host country. Similarly, the reporting of host country activities to the home country regulator often requires information systems and details that may not be standard in the host country. These improvements in financial reporting are likely to have positive spillover effects, as personnel switch to domestic competitors and as regulators, investors, and depositors become aware of differences between the operations of domestic and foreign banks.

Fourth, many of the globally active banks are among the most efficient in their home country, and they are likely to introduce improved management and information technologies to the host banking market (Focarelli and Pozzolo 2000). Entry of foreign banks is one way to quickly transfer the best practices currently in use in more developed banking markets (Levine 1996), thus improving the efficiency and range of intermediation services in the host country.

Finally, the presence of well-capitalized foreign banks may lessen the severity of domestic shocks by mitigating the extent to which the funds of worried domestic savers and investors flee the country when an adverse shock is anticipated. Foreign banks frequently provide a safe haven for depositors who might otherwise choose to remove their funds from the country rather than risk leaving funds in a failing domestic bank. Such a flight to quality would cause further pressures on foreign exchange rates and liquidity, draining the country of hard currency at the time it is most needed. In addition, in countries that allow foreign currency deposits, depositors may be more comfortable placing such deposits in foreign banks that have more ready access to foreign currency during a banking crisis, with the lender of last resort for the bank being the central bank in the bank's home country rather than that of the host country.

Despite the many advantages to allowing foreign banks to enter domestic banking markets, significant resistance remains. Even with the severe financial problems of many domestic banks in East Asia, the extent of sales of troubled banks to foreigners has remained relatively limited. And notwithstanding several large bank failures and nationalizations of banks in Japan, Long-Term Credit Bank, to date, is the only major Japanese bank to be sold to non-Japanese investors. Instead, the government has preferred to sell troubled banks to other troubled banks (such as

allowing Chuo Trust to acquire the Honshu branches of Hokkaido Tokashuko) or to commercial firms (Softbank, an internet software company, has been chosen as the acquirer of Nippon Credit Bank), or to have mergers among domestic banks. Similar resistance to accepting foreign direct investment in their domestic banking market has been the case in other Asian countries.

Perhaps most often voiced is the concern that foreign banks will not have an attachment to domestic borrowers. Obviously, a multinational bank faced with a binding capital constraint can choose where to shrink assets, and evidence from the Japanese banking crisis indicates that banks do sometimes choose to shrink their host country operations more than those at home when they have home country problems (Peek and Rosengren 1997; 2000). However, recent case studies have indicated that multinational banks will expand operations when faced with host country problems (Goldberg, Dages, and Kinney 2000). Of course, if the home and host country problems are correlated, domestic borrowers may be forced to seek alternatives at a time when they are least available, to the extent that multinational banks have a weaker attachment to the borrowers in the host country compared to those in their home country.

A second concern is that regulatory and monetary authorities may have less control if the banking sector has a sizable foreign bank presence. In many countries, the banking system is an instrument for government credit allocation schemes, with lending directed to sectors viewed as key by the government. This can be done directly, through government-controlled lending agencies or mandates to domestic banks, or indirectly, by encouraging lending to preferred sectors through the tax code or subsidies, such as low-cost loans from the central bank. Furthermore, the regulator's ability to engage in moral suasion may be lessened when dealing with an entity more focused on the expected financial returns from a transaction and less sensitive to domestic goals promulgated by the government.

The third concern is that bank supervisors could lose control of decisions that may have an impact on the economy. Foreign banks may be more responsive to changes in capital requirements or disclosure requirements of the home country regulator, whose regulations may be the binding constraint on their behavior, and such changes have the potential to adversely affect the willingness of these foreign banks to lend in the host country. Furthermore, decisions to acquire or merge with other banks or to become involved in nontraditional banking activities that may indirectly affect the willingness of the foreign bank to lend in the host country may be strongly affected by the home country regulator.

The fourth concern is that the domestically owned banks may be unable to compete globally, having operated with a lack of up-to-date technology and services and in a protected environment that did not penalize inefficiency. Then, entry by efficient, globally competitive firms

may cause further financial distress in a sector that is often already deeply troubled and may contribute to a further weakening and additional failures of domestically owned banks. In fact, several studies have found that foreign entry results in lower interest margins and a reduction in profitability of domestic banks (Clarke, Cull, D'Amato, and Molinari 1999; Claessens, Demirguc-Kunt, and Huizinga 1998). Furthermore, multinational banks may draw the most creditworthy borrowers that desire greater access to knowledge and services for international operations, leaving only the riskiest firms as loan customers for the domestically owned banks.

The final concern is political rather than economic. Fears that foreign banks will not be responsive to domestic credit needs often fuel populist reactions. In addition, the point is sometimes raised that local deposits will be used to fund projects outside the host country. Thus, relaxation of restrictions on foreign bank entry has tended to occur most often as a consequence of adverse shocks that cause a severe deterioration in the health of domestic banks or as the result of a move to privatize publicly owned banks.

Brazil

Brazil's banking market is the largest in Latin America, and it has undergone substantial changes over the past decade. Prior to 1994, Brazil had a relatively small foreign subsidiary presence, with the number of foreign banks frozen at its 1988 level, although foreign banks were subject to the same regulations as Brazilian-owned banks. Problems in the macroeconomy associated with hyperinflation diminished the ability of the Brazilian banking sector to provide standard intermediation services and made the banking market less attractive for aggressive foreign entry. Domestic banks, faced with challenging domestic economic conditions, specialized in managing the float, which enabled them to profit despite rapid inflation.

With the adoption of the Real plan in 1994, the Brazilian government committed to returning to a low-inflation environment. This commitment implied significant changes in the economic environment for banks, as they were now expected to be profitable from extending credit, and both banks and firms could no longer expect to generate profits through managing the inflation float. The restructuring of the economy and the banking system resulted in many banks having negative net worth. In response, the government adopted deposit insurance, creating the Credit Guaranty Fund, and added a program of incentives for the restructuring and strengthening of the financial system, as well as a program of incentives for the reduction of the role of the state public sector in banking activities. Foreign bank entry was approved on a case-by-case basis, to recapitalize troubled banks or to encourage development in

particular sectors of the economy. The laws also gave the central bank more supervisory powers and enhanced its ability to close and sell troubled banks.

The combination of government interest in selling off troubled banking assets and a macroeconomic environment more conducive to banking services normally provided by foreign banks resulted in a significant increase in foreign bank penetration. Foreign banks increased their share of the net worth of the banking system from 7.3 percent in 1993 to 15.8 percent in 1998 (Banco Central do Brasil 1998).

Brazil is continuing the process of privatizing government-controlled banks. One of the largest state banks, Banespa, is particularly attractive because of its large retail operations, and the government is currently soliciting bids, which could possibly attract several foreign bidders. The rising foreign bank presence in Brazil and the continued sale of state-controlled banks has also increased political discussion concerning the optimal level of foreign bank penetration.

Mexico

In the wake of the 1982 debt crisis, Mexico nationalized all banks except one foreign bank, Citibank, and one union-owned bank, Obrero. The banks remained under government control until Mexico decided to privatize the state-owned banks, a process that was completed in 1992. The privatization program limited foreign participation to a 30 percent stake, with a 5 percent cap on individual foreign bidders. Beginning in 1994, new bank regulations and the adoption of NAFTA allowed new entry by foreign banks. They began to establish subsidiaries in Mexico, with much of their focus on wholesale rather than retail banking.

Following the Tequila crisis of 1994 and the failure of many of the previously privatized domestic banks, the Mexican government further relaxed restrictions on foreign acquisitions, in order to help recapitalize domestic banks that had encountered financial difficulties. Starting in 1995, foreign banks were allowed to hold a controlling stake in domestic banks, as long as the bank accounted for less than 6 percent of the domestic banking system. For the largest banks, Grupo Fianciero Bancomer, Grupo Financiero Banamex, and Grupo Financiero Serfin, foreign ownership was capped at 20 percent. In 1999, the restrictions on foreign ownership of the largest banks were eliminated, allowing even the largest banks to be foreign controlled.

The gradual relaxation of restrictions on foreign bank entry into Mexico has resulted in foreign bank stakes increasing from less than 1 percent of loans in 1994 to 15 percent in 1998. However, the three largest banks control roughly 60 percent of the Mexican banking market, and any substantial change in foreign penetration would require ownership changes among the three. And indeed, current changes may dramatically

alter the landscape of Mexican banking. The largest bank, Financiero Banamex, made an unsolicited offer for Grupo Financiero Bancomer after the latter had agreed to be acquired by a Spanish bank, BBVA, although BBVA did win the bidding. The third largest bank, Grupo Financiero Serfin, required government intervention and was sold to Banco Santander, a Spanish bank, which outbid the other major bidder, HSBC, a British bank. While the situation remains fluid, by the end of 2000, foreign banks will account for a substantial share of the Mexican market.

Argentina

As in Brazil, the banking system in Argentina was significantly altered by the country's macroeconomic policies of the late 1980s, which culminated in several years of hyperinflation. The combination of hyperinflation and a freezing of bank deposits resulted in a dramatic shrinking of inside money, so that the ratio of M3 to GDP was only 5 percent as of 1990 (Calomiris and Powell 2000). In 1991, the Argentine government adopted a currency board, as well as a series of bank reform measures. The existence of a currency board prevented the central bank of Argentina from lending money to governmental or financial institutions, but the reforms gave the central bank considerable independent authority to supervise and regulate financial institutions. The foreign bank presence in Argentina at the time was relatively small, with roughly 15 percent of the financial institutions being foreign owned, a reflection of the turbulent macroeconomic environment.

Foreign bank penetration was influenced by three events, the investment law, the Tequila crisis, and the ongoing privatization program. First, the investment law required that foreign capital be treated the same as domestic capital. This encouraged foreign direct investment into Argentina, including investments into the private sector. Second, the Tequila crisis substantially weakened a number of Argentine banks, with 12 banks liquidated, 39 merged, and two suspended and eventually merged (Calomiris and Powell 2000). The Tequila crisis also resulted in a substantial outflow of bank deposits, with a 17 percent decline after December 1994 (Moody's 1995). The serious financial stress on the banking system caused the central bank to lower reserve requirements and the government to introduce deposit insurance. The bank privatization program was accelerated. While only three institutions were privatized between 1992 and 1994, 15 institutions with assets of over 4 trillion pesos were privatized between 1995 and 1999. While privatized banks mostly attracted domestic capital, privatization also provided greater entry points for foreign banks to purchase existing banks and, by 1999, foreign banks accounted for approximately 40 percent of all deposits.

Argentina has been a market leader in adopting open banking markets with substantial regulatory oversight. Foreign bank penetration

occurred earlier there and has been more significant than in most other Latin American countries. In addition to encouraging foreign investment in the banking system, the central bank has adopted a number of supervisory innovations. Banks are required to hold minimum risk-based capital of 11.5 percent, well above the minimum BIS standards. In addition, capital requirements are adjusted according to a bank's CAMEL rating issued by bank supervisors; banks are required to provide regular financial reports according to standards that are similar to U.S. Generally Accepted Accounting Principles; banks are required to issue subordinated debt, and banks are required to obtain regular credit ratings from authorized rating agencies. Thus, while the existence of a currency board has prevented Argentina's central bank from assuming the traditional lender of last resort role, providing less flexibility in addressing financial crises, it has encouraged the central bank to be more innovative in preventing future banking crises, including allowing for more significant foreign bank penetration than has occurred in most other Latin American countries.

Foreign Lending to Argentina, Mexico, and Brazil

Because of the recent financial history in many of the countries, consistent time series for Latin American bank data over an extended period of time are impossible to develop. Mexican banks were not privatized until the early 1990s, and Argentine and Brazilian banks and banking data are so different during the hyperinflation period that the data prior to the adoption of the Real plan in Brazil and the currency convertibility in Argentina are not comparable to those for more recent periods. Thus, our sample for all three countries begins in 1994.

Because of the large offshore lending operations to many Latin American countries, it is important to focus on total cross-border commercial bank credit provided to a country, rather than limiting the analysis to commercial bank credit provided by domestically owned banks and domestic subsidiaries of foreign banks located in that country. Banks that are interested only in providing financing to large multinational firms with operations in a specific country, or even to the largest, most creditworthy domestic firms in that country, may not find it necessary to open a bank subsidiary in that country, a process that would require a substantial investment in brick and mortar and personnel, and compliance with local regulatory requirements. Rather, the lending can occur from offices in a bank's home country or other offshore offices that have already been established. Banks with clients that are primarily multinational firms are likely to have contacts with a firm in a number of countries, and the array of international financial services desired by the firm may not require a significant in-country presence, since the banks'

financial experts, the financial markets, and the funding sources will be located outside the country in which the operations to be funded reside. However, if a bank wants to cater to smaller firms in a country or is interested in a retail banking operation in that country, it will be important to maintain local points of contact with the customers, requiring investment in a bank subsidiary located in the host country.

To capture financing made from the home country rather than from within the host country, we utilize data collected by the BIS. The BIS provides semiannual reports on cross-border exposures of banks from 18 major industrialized countries (reporting countries).[1] Banks headquartered in the reporting countries are asked to provide their entire exposure to customers in a borrowing country. This includes all cross-border exposures of their bank offices worldwide, including local claims of foreign affiliates of the bank. To avoid double-counting, the BIS data exclude positions between different offices of the same bank, as well as claims on other banks from the reporting countries. The claims of the banks include items such as deposits and balances with other banks, loans and advances to banks and nonbanks, holdings of securities, and loan participations and syndications. The data are also disaggregated by the maturity of the claim and by whether the borrowing entity is in the public sector, private sector, or banking sector. However, the detailed data by source country are confidential.

The BIS data are structured to focus on foreign currency exposures. To obtain the total foreign claims by banks on entities within a country, regardless of the currency of the claim, the consolidated cross-border claims in all currencies and local claims in non-local currencies must be combined with the local currency claims of reporting affiliates with local residence in the host country. Furthermore, double-counting can occur if a foreign bank has a claim on another foreign bank that then lends to local firms. To avoid this double-counting, the claims on banks with head offices outside the country of residence must be subtracted from the total cross-border claims. Figure 1 shows total foreign claims in constant 1995 dollars (deflated by the wholesale price index) on Argentina. Despite the variety of shocks that have buffeted the Argentine economy, foreign claims on Argentina have been growing. Total claims continued to grow after the Tequila crisis in December 1994, rose sharply during the second half of 1997 during the initial stage of the East Asian problems, and then increased through the January 1999 Brazilian devaluation.

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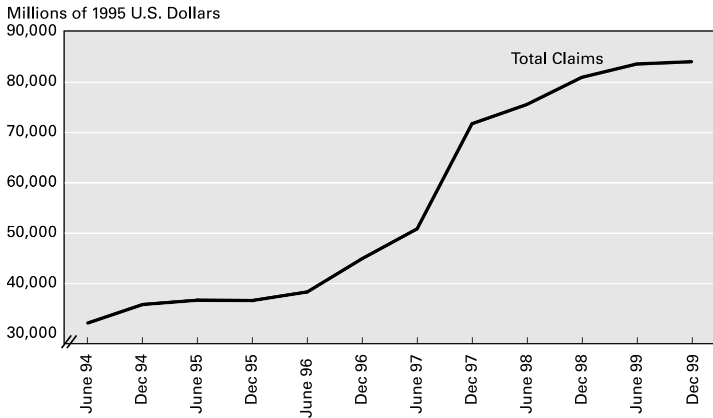
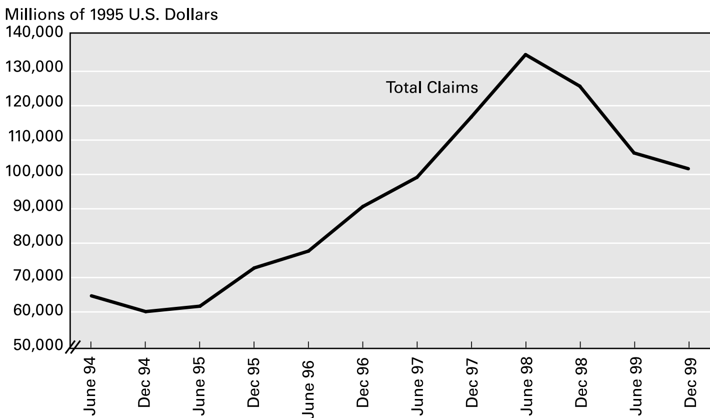
[1] Our data include only 16 of the 18 reporting countries. Switzerland and Luxembourg are omitted because they provide data only on a confidential basis. The BIS also has a quarterly series, although it does not include coverage on a worldwide consolidated basis, and an interbank series, which provides bank claims on related offices of the same institution and those on unrelated banks.

Figure 1
Constant-Dollar Claims of BIS-Reporting Countries on Argentina



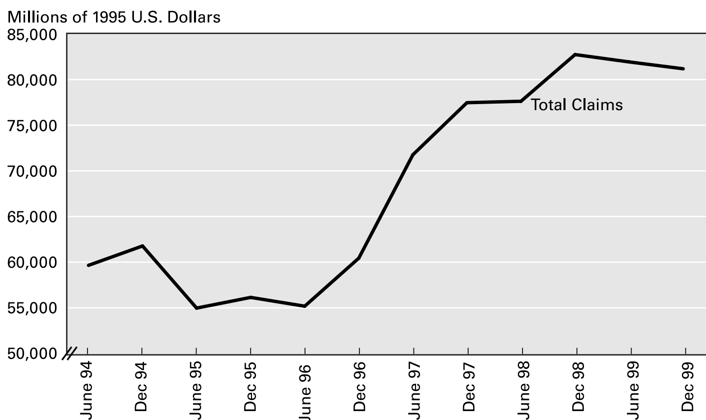
Note: End-of-period data.
Source: Bank for International Settlements.

Figure 2
Constant-Dollar Claims of BIS-Reporting Countries on Brazil



Note: End-of-period data.
Source: Bank for International Settlements.

Figure 3
Constant-Dollar Claims of BIS-Reporting Countries on Mexico



Note: End-of-period data.
Source: Bank for International Settlements.

Figure 2 shows foreign claims on Brazil. Foreign claims did decline during the second half of 1994 leading up to the Tequila crisis, but then rose continuously until June 1998. Following the peak, claims declined rather abruptly, with the decline continuing through year-end 1999. Figure 3 shows the same series for Mexico. Immediately following the Mexican devaluation in December 1994, foreign claims measured in dollars began to decline. Total claims began to increase in the second half of 1996 and continued to rise strongly through the end of 1997. The series then paused during the first half of 1998 as the East Asian crisis continued before resuming growth in the second half of the year. Total claims peaked in December 1998 and then declined somewhat in 1999.

Overall, foreign claims in Argentina have continued to grow despite the problems in its domestic economy, providing no evidence that foreign borrowers will abandon markets when problems become apparent. On the other hand, claims (measured in dollars) on Mexico and Brazil show some evidence of declines following crises, although comparisons with domestically owned banks are needed to clarify whether the behavior of foreign banks differed from that of domestically owned banks.

Foreign Bank Penetration

In order to compute the degree of foreign bank penetration, equivalent information for the domestic banking market of each country is

required. Balance sheet and income data on individual banks located in each of the three countries were obtained from the Fitch IBCA database. IBCA covers domestically owned banks as well as foreign bank subsidiaries, but generally does not provide coverage of branches of foreign banks. The IBCA coverage of banks has been incomplete until recently, and semiannual data are available only for 1997, 1998, and 1999. The banks were divided into two groups: those that are foreign-owned and those with domestic ownership. We classify a bank as foreign-owned if foreign ownership exceeds a 50 percent ownership stake. According to correspondence with the BIS, the decision whether to include a bank's affiliates that are only partly owned and not located in its home country is left up to the reporting bank. However, in most cases these foreign subsidiaries are included in the consolidated reporting of the parent bank only if the parent has a majority ownership stake, in which case 100 percent of the subsidiary's claims are attributed to the reporting (parent) bank.[2] The sources for ownership stakes are the *Bankers Almanac*, Salomon Smith Barney, various government sources, searches on Bloomberg, and individual bank web sites.

IBCA data for individual banks are used to calculate aggregated bank data series equivalent to those based on BIS data for the set of subsidiaries of foreign banks and for the set of domestically owned banks in each country. These aggregated measures are constructed from the individual bank data by subtracting nonearning assets, equity investments, and fixed assets from the sum of total assets and loan loss reserves. We then calculate four measures of foreign bank penetration by combining BIS and IBCA data.

For the first measure, we calculate total cross-border claims as total BIS claims plus claims of nonreporting foreign subsidiaries (broad claims measure), using the 50 percent ownership threshold to classify bank subsidiaries as foreign-owned. The only cross-border claims that are missing are those by banks from nonreporting countries booked by the parent bank rather than through a subsidiary located in the host country. This sum is divided by the sum of total BIS claims, claims of nonreporting foreign subsidiaries, and claims of all domestically owned commercial banks.

[2] It can be difficult to obtain precise foreign ownership stakes because banks often have tiered ownership. A 50 percent ownership stake should generally provide control, but because of the various classes of shares and the tiering of shareholding, foreign control is not a straightforward calculation. Frequently, alternative sources indicate different foreign ownership stakes for a given bank at a given time. Where possible, we have used government sources or bank web sites when sources disagreed. However, this highlights the difficulty in calculating penetration using a single source for foreign ownership stakes. Note that a bank with less than 100 percent ownership of a subsidiary, but a greater than 50 percent ownership stake, includes 100 percent of the claims of the bank subsidiary in its cross-border claims reported to the BIS.

Many of the recent studies of foreign bank penetration have focused only on the banks that operate within a country's borders (Clarke, Cull, D'Amato, and Molinari 1999; Claessens, Demirguc-Kunt, and Huizinga 1998; Goldberg, Dages, and Kinney 2000; Focarelli and Pozzolo 2000). However, such an analysis excludes an important source of credit from banks that are operating offshore. For many countries, the volume of credit provided by foreign banking organizations from offshore, including that provided through branches located in the host country, is much larger than the credit provided through the foreign bank subsidiaries that have been established in the host country. In fact, until the end of 1997, for Argentina, Mexico, and Brazil, cross-border claims not attributable to foreign subsidiaries of banks located in BIS-reporting countries exceeded the sum of claims of all their foreign subsidiaries in each of the countries.

The second measure of bank penetration (the narrow claims measure) ignores cross-border lending other than that done through foreign subsidiaries within the country. It is calculated as claims of foreign subsidiaries (from both BIS-reporting and nonreporting countries) divided by the sum of claims of foreign subsidiaries and claims of domestically owned commercial banks. The next two measures of bank penetration focus on bank liabilities rather than bank assets. We use a limited measure of deposits that includes demand deposits, savings deposits, and time deposits (narrow deposit measure), as well as a more expansive measure that also includes interbank deposits, open market funding, and other short-term borrowing (broad deposit measure). For both measures, we compute the penetration share as the ratio of deposits in all foreign subsidiaries to the sum of deposits in foreign subsidiaries and from domestically owned banks. Deposit penetration focuses on foreign operations at the retail level, while measures of credit that include offshore loans may capture the foreign penetration into wholesale bank operations as well. Furthermore, deposit penetration may be particularly responsive to crises, rising to the extent that host country depositors engage in a flight to quality.

Table 1 provides the four measures of foreign bank penetration for Argentina, Mexico, and Brazil. It is clear from the table that both the magnitude and the pattern of foreign penetration can differ greatly across countries and over time, depending on the measure used. For Argentina, where foreign penetration had been greater in 1994 by all measures than for the other two countries, the variation is particularly striking. The broad claims measure of penetration, which includes offshore loans and claims of foreign subsidiaries not from BIS-reporting countries, was 46.3 percent in December 1994, more than twice the penetration level of the other three bank penetration measures, which are based only on data for banks located in the host country. However, the broad claims measure of foreign penetration has been increasing more slowly than the other measures of bank penetration, rising about 11 percentage points from

Table 1
Measures of Foreign Penetration
Percent

	Argentina							
	Annual				Semiannual			
Measure	Dec. 1994	Dec. 1995	Dec. 1996	Dec. 1997	June 1998	Dec. 1998	June 1999	Dec. 1999
Broad Claims	46.3	45.1	50.2	56.1	55.5	55.7	56.7	57.5
Narrow Claims	13.0	18.5	27.7	39.6	47.5	40.7	45.1	42.9
Broad Deposit	15.1	20.4	28.7	40.1	47.4	44.6	45.3	46.9
Narrow Deposit	16.9	21.2	27.4	35.5	39.4	39.5	40.9	42.0
	Brazil							
	Annual				Semiannual			
Measure	Dec. 1994	Dec. 1995	Dec. 1996	Dec. 1997	June 1998	Dec. 1998	June 1999	Dec. 1999
Broad Claims	18.0	21.0	23.5	29.8	32.3	31.6	36.1	36.1
Narrow Claims	6.5	6.4	11.0	19.1	21.5	21.4	23.2	25.2
Broad Deposit	6.1	5.8	10.1	16.5	19.9	19.3	21.4	23.3
Narrow Deposit	5.8	5.4	5.6	9.6	14.0	14.2	14.9	15.6
	Mexico							
	Annual				Semiannual			
Measure	Dec. 1994	Dec. 1995	Dec. 1996	Dec. 1997	June 1998	Dec. 1998	June 1999	Dec. 1999
Broad Claims	31.3	33.0	35.6	41.3	45.9	46.4	47.2	45.8
Narrow Claims	1.0	2.4	16.8	17.5	20.5	20.3	23.0	22.7
Broad Deposit	.9	2.0	17.5	17.2	20.7	21.2	22.6	22.8
Narrow Deposit	.7	1.7	17.3	16.8	20.8	21.5	23.3	24.1

Source: Bank for International Settlements and Fitch IBCA.

December 1994 to December 1999. In contrast, the increase in the penetration by foreign bank subsidiaries shown in the narrow claims measure is dramatic, rising from 13.0 percent at the end of 1994 to 42.9 percent by the end of 1999. Thus, an increasing share of total foreign claims on Argentina can be attributed to foreign bank subsidiaries located in Argentina, rather than to offshore lending.

Bank penetration measures also vary substantially for Brazil and Mexico. The broad claims measure of foreign bank penetration in December 1994 was 18.0 percent for Brazil, again more than twice the penetration calculated by the other three measures that are based only on banks located in Brazil. For Mexico, with its more severe restrictions on foreign ownership of banks, the broad claims measure was 31.3 percent in December 1994, while the other three measures were no greater than 1

percent. In Brazil, the broad claims measure doubled, rising from 18.0 percent to 36.1 percent. In Mexico, the broad claims measure was 31.3 percent in December 1994 and 45.8 percent in December 1999. Thus, the broad claims measure of penetration that includes offshore lending has grown a little less than 20 percentage points in Brazil, roughly in line with the percentage point increases of its other penetration measures. On the other hand, the broad claims measure in Mexico increased less than 15 percentage points, while each of the other three measures of penetration increased by more than 20 percentage points

For all three countries, the narrow claims measure of foreign bank penetration moves in the same way as the broad deposit measure of foreign bank penetration. This likely reflects the close link between the lending by entities located within the host country and the local availability of funding by banks. The narrow deposit measure of foreign bank penetration tends to mirror the broad deposit measure, with a slightly higher penetration for the broad measure in Argentina since December 1996 and in Brazil for the entire sample period, but Mexico only until December 1997.

The narrow and broad claims measures of bank penetration seem to be converging in Argentina, in part because of aggressive privatization of government-owned banks. As foreign banks get established with brick and mortar operations, an increasing share of the lending moves from offshore to onshore. However, in Brazil and Mexico, with more resistance to opening up banking markets, the narrow claims and both deposit measures of penetration have remained well below those in Argentina. While all of the measures in Brazil have tended to increase by similar amounts, the recent increases in foreign bank subsidiaries' claims in Mexico have caused the gap between the degree of penetration for broad claims and those for the other three measures to narrow, so that by December 1999 the percentage-point gap was less than one-half of its December 1994 value.

The penetration numbers do not indicate withdrawals of foreign bank participation following a financial crisis. Following the Tequila crisis, each of the four measures of foreign bank penetration rose in Mexico. In Argentina, only the broad claims measure declined in December 1995, while in Brazil, the narrow claims, broad deposit, and narrow deposit measures showed a slight decline. Despite the turmoil created by the East Asian crisis and the Brazilian devaluation, comparing all measures of foreign bank penetration on December 1997 to those on December 1999 indicates an across-the-board increase in all three countries.

Total Claims and Broad Deposit Shares by Bank Category

Table 2 shows amounts of total claims and broad deposits by bank categories for Argentina. The banks are partitioned into five categories:

Table 2
Total Claims by Category of Commercial Bank in Argentina
Millions of Pesos

	Annual				Semiannual			
Total Claims	Dec. 1994	Dec. 1995	Dec. 1996	Dec. 1997	June 1998	Dec. 1998	June 1999	Dec. 1999
Foreign Subs BIS-Reporting	6,258	10,557	16,396	35,818	54,004	41,950	51,331	46,449
Foreign Subs BIS-Nonreporting	122	170	2,971	4,183	4,081	3,856	3,890	3,630
Foreign Nonsubs BIS-Reporting	30,545	28,225	31,600	37,725	22,074	38,033	32,765	40,029
Domestically Owned State Banks	21,403	21,825	22,105	37,478	39,558	43,229	44,272	44,975
Domestically Owned Private Banks	21,398	25,573	28,453	23,420	24,769	23,497	23,006	21,613

	Annual				Semiannual			
Broad Deposits	Dec. 1994	Dec. 1995	Dec. 1996	Dec. 1997	June 1998	Dec. 1998	June 1999	Dec. 1999
Foreign Subs BIS-Reporting	5,855	10,165	15,602	34,412	51,126	43,956	46,903	48,007
Foreign Subs BIS-Nonreporting	96	115	2,232	3,371	3,272	3,192	3,218	3,057
Domestically Owned State Banks	15,142	15,934	17,063	33,839	36,888	37,745	38,594	38,512
Domestically Owned Private Banks	18,212	24,068	27,270	22,657	23,469	20,847	21,875	19,391

Note: Foreign ownership defined as greater than 50 percent foreign control.
Source: Bank for International Settlements and Fitch IBCA.

foreign bank subsidiaries from BIS-reporting countries, foreign bank subsidiaries from nonreporting countries, foreign non-subsidiary claims from reporting countries (offshore lending from BIS-reporting countries), government-owned domestic banks, and privately owned domestic banks.[3] Foreign bank subsidiaries from BIS-reporting countries have been consistently increasing their claims in Argentina, with much of this increase reflecting the aggressive acquisition of domestic, privately owned, and state-owned banks by European and U.S. banks. The share of

[3] The government-owned bank category includes banks that are intentionally owned by the government and does not include bridge banks that are temporarily controlled by the government because a private bank fails. Bridge banks are assumed to retain their previous status while the government is searching for a buyer. Generally, these would be privately owned domestic banks that are temporarily controlled by the government until a foreign or domestic acquirer is found.

total claims attributable to foreign bank subsidiaries from reporting countries grew from 7.9 percent in December 1994 to 29.6 percent in December 1999, slightly exceeding the share attributable to state-owned banks and more than double the share for domestically owned, privately held commercial banks. Foreign bank subsidiaries from BIS-nonreporting countries have also been increasing their share of total claims, from 0.2 percent in December 1994 to 2.3 percent in December 1999. Studies of foreign bank penetration that rely on BIS data to calculate the degree of penetration would understate it, since foreign subsidiaries from BIS-nonreporting countries are excluded (Weller and Scher 1999). Similarly, studies that consider only foreign bank subsidiary activity and ignore the offshore cross-border lending that originates directly from the headquarters or branches of foreign banks (which is included in the BIS data) would substantially understate the extent of foreign bank penetration in a country's credit markets.

For Argentina, this offshore lending by banks headquartered in BIS-reporting countries (foreign nonsubsidiaries reporting) accounts for a significant share of total claims.[4] While this lending has been generally increasing over the past five years, it has not grown as rapidly as total claims, with its share shrinking from 38.3 percent to 25.6 percent by December 1999. Thus, it appears that a major shift in the composition of foreign bank lending has occurred, as foreign banks have increased their claims through existing and newly acquired onshore bank subsidiaries in Argentina rather than through offshore operations. Finally, the increased share of total claims attributable to foreign banks has come at the expense of domestically owned, private banks rather than the state-owned banking sector. While state-owned banks have increased their share of total claims slightly, the share of domestic privately owned banks has been halved.

The pattern during crisis periods is also interesting. During 1995, immediately following the Tequila crisis at the end of 1994, loans at foreign subsidiaries increased, while the share of claims from offshore decreased, with the total foreign bank share declining just over 1 percentage point. On the domestic side, privately owned banks absorbed an increased share, with state-owned banks shrinking their share. Similarly, during the period that includes the East Asian problems and the Brazilian devaluation, foreign bank subsidiary claims rose from 25.8 percent in December 1997 to 29.6 percent in December 1999, while the offshore share of claims fell slightly, from 27.2 percent to 25.6 percent. However, in this case the total share of foreign banks, including those

[4] Foreign nonsubsidiary claims are calculated as total BIS claims minus claims of foreign bank subsidiaries (defined as those with at least a 50 percent foreign ownership stake).

from nonreporting countries, rose slightly, from 56.1 percent to 57.5 percent. The growth came at the expense of privately owned banks, with share of state-owned banks increasing.

Similar patterns emerge in the domestic deposit market. For the broad deposits measure shown in the bottom panel of Table 2, foreign bank subsidiaries increased their deposit share steadily from December 1994 through June 1998. After declining somewhat, the share was again near its June 1998 peak by December 1999. Most of this growth came at the expense of domestic privately owned banks, which by December 1999 held a deposit share that was only about 40 percent of its 1994-95 value. At the same time, state-owned banks also experienced a reduced share of the domestic deposit market.

Table 3 provides the same total claims and broad deposit information for Brazil. The share of total claims attributable to foreign bank subsidiaries has increased fairly steadily since 1994. The share of claims at foreign subsidiaries from reporting countries grew from 5.1 percent in December 1994 to 19.2 percent in December 1999. The share of claims at foreign subsidiaries from nonreporting countries also increased, with the share rising from 0.6 percent to 2.3 percent, although it did reach a peak of 3.2 percent in December 1997. The offshore share of claims also grew, although at a much slower pace than that of the foreign bank subsidiaries, rising from 12.3 percent to 14.6 percent. Because many of the offshore loans are denominated in U.S. dollars, the Brazilian devaluation made the value in reais of these offshore credits increase dramatically. However, as Figure 2 shows, BIS total claims in dollar terms have been decreasing since the peak in June 1998.

The Tequila crisis did not have a large impact on Brazilian lending. The share of total claims attributable to foreign bank subsidiaries declined slightly between December 1994 and December 1995, for both reporting and nonreporting countries. On the other hand, the foreign offshore share of claims increased from 12.3 percent to 15.6 percent. On the domestic side, privately owned banks increased their share by almost 3 percentage points, while state-owned banks lost nearly 5 percentage points of their share. During the series of problems later in our sample that included the East Asian crisis and the Brazilian devaluation, the share of claims attributable to foreign bank subsidiaries continued to increase. The share of offshore claims also rose. However, one can observe a temporary decline in the second half of 1998 prior to the devaluation and a decline in the second half of 1999 following the upward spike in the share associated with the effect of the devaluation on the dollar-denominated credits. During this period, the shares of both state-owned and privately owned domestic banks declined, with the percentage-point decline at state-owned banks roughly double that for privately owned banks. Thus, while the Tequila crisis had little impact on foreign lending,

Table 3
Total Claims by Category of Commercial Bank in Brazil
Millions of Reais

	Annual				Semiannual			
Total Claims	Dec. 1994	Dec. 1995	Dec. 1996	Dec. 1997	June 1998	Dec. 1998	June 1999	Dec. 1999
Foreign Subs BIS-Reporting	14,764	17,294	36,884	66,208	81,441	84,079	95,837	105,508
Foreign Subs BIS-Nonreporting	1,511	1,374	3,874	15,726	16,894	8,980	9,662	12,815
Foreign Nonsubs BIS-Reporting	35,348	54,429	60,370	65,683	73,510	64,516	92,084	80,571
Domestically Owned State Banks	141,316	154,754	170,262	161,093	163,944	162,031	159,142	154,774
Domestically Owned Private Banks	94,086	120,292	158,598	186,739	196,000	179,835	190,348	196,647

	Annual				Semiannual			
Broad Deposits	Dec. 1994	Dec. 1995	Dec. 1996	Dec. 1997	June 1998	Dec. 1998	June 1999	Dec. 1999
Foreign Subs BIS-Reporting	11,722	14,137	30,097	53,109	63,686	62,288	70,021	77,574
Foreign Subs BIS-Nonreporting	1,234	1,081	3,032	13,995	14,524	8,890	9,430	12,269
Domestically Owned State Banks	121,996	141,661	155,836	173,404	140,296	138,599	133,479	129,443
Domestically Owned Private Banks	78,989	104,925	140,770	166,562	174,024	159,267	158,524	166,393

Note: Foreign ownership defined as greater than 50 percent foreign control.
Source: Bank for International Settlements and Fitch IBCA.

it does appear that offshore lending was more sensitive to the problems associated with the Brazilian devaluation.

Foreign bank subsidiaries from reporting countries increased their share of broad deposits steadily throughout the period from December 1994 to December 1999, from 5.5 percent to 20.1 percent. Those from nonreporting countries increased their share from 0.6 to 3.2 percent, peaking in June 1998 at 3.7 percent. During this period, the share held by state-owned banks eroded steadily, except for a temporary increase in the second half of 1998 just prior to the devaluation, declining from 57.0 percent to only 33.6 percent. At the same time, privately owned banks increased their share from 36.9 percent to 43.1 percent.

Table 4
Total Claims by Category of Commercial Bank in Mexico
Millions of Pesos

	Annual				Semiannual			
Total Claims	Dec. 1994	Dec. 1995	Dec. 1996	Dec. 1997	June 1998	Dec. 1998	June 1999	Dec. 1999
Foreign Subs BIS-Reporting	7,033	20,994	140,216	148,432	169,500	193,756	217,546	198,546
Foreign Nonsubs BIS-Reporting	314,728	412,983	352,690	486,721	530,266	612,333	565,178	594,873
Domestically Owned Private Banks	706,311	881,084	935,745	900,880	863,569	970,163	871,946	852,754

	Annual				Semiannual			
Broad Deposits	Dec. 1994	Dec. 1995	Dec. 1996	Dec. 1997	June 1998	Dec. 1998	June 1999	Dec. 1999
Foreign Subs BIS-Reporting	6,068	16,470	133,443	140,437	179,122	206,193	236,292	226,498
Domestically Owned Private Banks	643,379	798,837	843,653	871,582	870,979	948,326	944,097	923,410

Note: Foreign ownership defined as greater than 50 percent foreign control.
Source: Bank for International Settlements and Fitch IBCA.

Table 4 shows the shares of total claims and broad deposits by category of bank for Mexico. Unlike Argentina and Brazil, Mexico does not have foreign subsidiaries from BIS-nonreporting countries and, since our sample period follows the reprivatization of Mexican banks, does not have state-owned commercial banks during our sample period. Foreign bank subsidiaries have increased their share of total claims in Mexico dramatically, from 0.7 percent in December 1994 to 15.9 percent in December 1999, with most of the increase occurring during 1996. Although the share of claims attributable to offshore operations of foreign banks fluctuated, its value of 29.9 percent in December 1999 is little changed from its 30.6 percent value in December 1994. Thus, the increase in the share attributable to foreign bank subsidiaries came at the expense of privately owned domestic banks, as their share decreased from 68.7 percent to 54.2 percent. This decline occurred steadily over the sample period, although the share did rise somewhat in the second half of 1999. Finally, the rise in the share of broad deposits of foreign bank subsidiaries is even larger than that for total claims, coming totally at the expense of domestically owned private sector banks.

The three tables showing the changing shares of total claims and broad deposits across categories of banks indicate several trends. First, foreign bank subsidiaries from BIS-nonreporting countries have increased their shares in Argentina and Brazil. Thus, BIS data focused only

on foreign lending exposures from reporting countries will understate the increase in foreign bank penetration in these two (and likely other) Latin American countries, as these countries become more integrated. Second, the growth in the shares attributable to foreign bank subsidiaries has increased steadily and substantially in each of the three countries. Furthermore, the evidence does not indicate any great reluctance on the part of foreign bank subsidiaries to expand operations when the host country is suffering from a crisis. Third, offshore lending appears to be somewhat more sensitive to economic instability in the host country than is the case for onshore operations.

Conclusion

Foreign entry into domestic banking markets remains a contentious issue. Whether privatizing a state bank in Brazil or selling a failed bank in Japan, the proposed sale of a large domestic financial institution, possibly to a foreign acquirer, frequently results in a major controversy. Many Asian countries have yet to experience major foreign penetration of domestic banking markets, while Latin American countries have privatized many of their banks and have encouraged foreign banks to enter their domestic markets. Because many Latin American countries opened their markets during the 1990s, and because they have experienced exchange rate and banking crises as well as severe fluctuations in their macroeconomies over this period, Latin American countries provide a good laboratory for understanding the effects of foreign bank penetration.

An examination of Argentina, Brazil, and Mexico indicates that the growth of foreign bank subsidiaries has continued unabated, despite the economic problems buffeting these countries. Foreign bank subsidiaries did not pull back in response to economic problems in the host country; rather, they viewed the economic problems as providing opportunities to expand, either by acquisition or by internal growth of existing subsidiaries. The same is not true for offshore lending. Offshore lending does sometimes retrench during difficult economic times. Thus, if a country is concerned about the stability of foreign lending, it should encourage cross-border lending through brick and mortar subsidiary operations rather than through offshore lending. Furthermore, such lending has advantages from a supervisory standpoint, since subsidiaries are likely to behave more like domestic banks, while offshore lending is more difficult for the host country supervisor to monitor or influence.

Understanding the financial condition and motivations of foreign bank operations represents another important supervisory issue. In Argentina, with more than half the banking system under foreign control, it will become increasingly important to understand the intentions of foreign bank management and foreign bank supervisors. While coordination of international bank supervision has improved, the movement

toward greater supervisory coordination needs to accelerate. Major changes by bank supervisors or bank management could result in a significant shrinkage of the financial system in a host country and reverberate through the local economy. In addition, diversification in the nationalities of foreign banks lending to a host country is advisable, so that banking problems in any one home country do not pose significant hardships in the host country.

The Bank for International Settlements has improved our understanding of international banking flows and helped coordinate bank supervision internationally. However, more needs to be done. The focus of BIS data on flows from reporting countries will become less relevant as banks from nonreporting countries increase their foreign presence and countries in a given geographical region become more integrated. This is particularly true in Latin America, where banks from nonreporting countries have been establishing sizable foreign subsidiaries in neighboring countries.

The importance of having good banking data that are comparable across countries will only increase. Academic studies that have used data on foreign bank penetration should be cautious in interpreting results and drawing conclusions. Foreign bank penetration data vary substantially depending on the measure used. Studies of the depth of banking markets and the effects of foreign bank penetration have often focused only on foreign bank subsidiaries located in the host country, ignoring the important role of offshore lending or, if they do focus on BIS cross-border claims data, not supplementing those data with information for foreign bank operations from nonreporting countries. These factors can affect the measured magnitude of foreign bank penetration as well as its trend, which should cause researchers to be particularly cautious in interpreting their results. The banking data are further complicated by the difficulty in obtaining reliable structural information on domestic banking systems. The BIS and other international organizations could play an important role in encouraging more consistent reporting of banking data, both balance sheet and income data and structural changes in banking markets, in order to help improve analysis of emerging markets.

The presence of foreign bank subsidiaries potentially can provide large benefits to the host country. Foreign banks may introduce new technology and management, accelerating financial development. Foreign banks are also more diversified and are less likely to be forced to shrink because of local economic problems. In fact, we find evidence that foreign subsidiaries expanded during such troubled times in the host country. Being better diversified against local banking problems should ameliorate credit crunches and provide a more competitive banking market for borrowers and depositors in host countries.

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