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# Financial Crises: Lessons from the Past, Preparation for the Future

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## Postcrisis Challenges and Risks in East Asia and Latin America

*Where Do They Go from Here?*

Beginning in the mid-1990s, Latin America and East Asia were rocked by a series of financial sector and currency crises. The Mexican crisis began in late 1994 and then spread quickly to Argentina, where damage was limited by sound policy and efforts to strengthen the financial system.<sup>1</sup> Jamaica also suffered a severe crisis in the mid-1990s, following a poorly managed financial liberalization. In 1997 crises unexpectedly hit Asia. The “miracle” countries—Indonesia, Korea, Malaysia, and Thailand—were hit hardest, the Philippines was less affected. China, which continued to grow rapidly, is not considered a crisis country and is not treated extensively in this chapter; its substantial effects on world growth and finance are discussed in Goldstein’s contribution to this volume (chapter 5). In 1998 Brazil was hit by a crisis, following the Russian crisis. Soon after, banking crises of varying severity began in Colombia, Ecuador, and Peru, among other Latin American countries, as international lending dried up and premiums on high-risk debt rose in industrial-country markets. Chile managed

The author thanks Jerry Caprio and Patrick Honohan for comments and Ying Lin and Roman Didenko for their excellent assistance.

1. The dating of the crises in this paragraph refers to when each crisis became open. In some cases, this was very close to the end of the year. In most cases, GDP growth only declined after the year of the crisis.

to avoid a crisis, but its growth slowed noticeably.<sup>2</sup> In late 2001 Argentina's excessive domestic and international debt and high international rates finally turned into a full-fledged, old-fashioned debt crisis; Uruguay was hit immediately by contagion to its banking system. Beginning in late 2001, Brazil came under currency and debt rollover pressure but survived without a default. In 2003 a major financial crisis hit the Dominican Republic.

Various explanations have been offered for the crises, and different mixtures of the explanations apply to each country. Krugman's first-generation model of crises focuses on the current account and seems inappropriate for the most recent round of crises.<sup>3</sup> Another type of explanation relates to excess debt, "sudden stops" in capital inflows, and liquidity and insolvency problems, in particular, in the case of Argentina but also for countries that had relatively high ratios of debt to GDP. The question remains why countries that were able to borrow so much in international markets were suddenly cut off. Contagion and multiple equilibria are possible explanations. However, these theories neglect the financial sector element of the crisis. Some critics have argued that financial markets are prone to overshooting and bubbles, which must eventually lead to crashes.<sup>4</sup> A more recent perspective emphasizes the role of liability holders' subjective estimates of net worth: when a government's contingent liabilities suddenly appear more likely to become actual liabilities, its subjective net worth falls sharply, and domestic and foreign asset holders respond by attempting to liquidate their holdings in the country quickly.<sup>5</sup> Finally, many of the crises reflected massive underlying problems in the banking systems related to the lending of public and private banks to "well-connected parties" for activities that proved unproductive. These problems eventually led to runs on the banks and the currency, because of political as well as economic factors.<sup>6</sup>

This chapter discusses the policies with which East Asian and Latin American governments dealt with their crises and how the crises may affect their financial systems into the twenty-first century, the different rates at which growth resumed in the countries after the crises and other macroeconomic developments, developments in international debt and reserves

2. In 1998, to reduce the risks of contagion from Asia and encourage capital inflows, Chile eliminated the special reserve requirements that had been used to deter short-term inflows (Edwards 1999).

3. Krugman (1979).

4. Kindleberger (2000); Minsky (1992).

5. Dooley (2000).

6. World Bank (2000, 2005a).

after the crises, and the current situation in the financial systems of East Asia and Latin America, including the risks and challenges they face. It also discusses particular risks, such as the resurgence of public sector banking in developing countries, the recent reduction in interest of well-known international banks in expanding into developing countries, the issues related to cross-border expansion of regional banks, and the possibilities for reducing risk through regulation and supervision, market discipline, and improvements in the legal framework, issues discussed in more detail elsewhere in this volume, notably in chapter 7 by Gerard Caprio and Patrick Honohan. The last section offers a brief summary.

## Policy Response to the Crises and Financial Sector Overhang

All the crises in East Asia and Latin America included currency crises; the new element was how many of these crises involved, if not originated in, banking and financial sector crises. This pattern contrasts with most of the crises of the early 1980s, which largely reflected the inability of governments to roll over the external debt of the public sector.<sup>7</sup> In many of the recent cases, the banking and financial crises preceded the currency crises.<sup>8</sup>

In the crises of the 1990s, banks were hit by withdrawals of deposits and cuts in external credit lines. Initially, central banks typically responded with lender-of-last-resort support for weak institutions; in some cases, monetary policy was loosened to deal with sectoral problems.<sup>9</sup> Although a standard policy response, lender-of-last-resort support was fraught with the well-known difficulties of distinguishing between illiquid and insolvent banks. Another issue was the possibility that well-connected insiders attempted to loot their banks or take funds out in response to increasing political risks, and lender-of-last-resort support allowed them to do so. In some cases,

7. The Chilean crisis of 1982 is an exception.

8. Kaminsky and Reinhart (1999).

9. A significant literature exists on whether credit crunch existed in East Asia during the crisis; see the works cited in Coe and Kim (2002), for example. As discussed below, some evidence suggests that central banks were increasing their domestic credit fairly rapidly, interest rate policy was not particularly tight, and funds were flowing out of the countries rapidly. See World Bank (2000); Kenward (2002), and various papers in Coe and Kim (2002). Moreover, a lot of credit continued to exist; it just went bad. However, cutbacks in foreign credit and closure of banks and other intermediaries probably did reduce the availability of credit to some borrowers.

notably Indonesia and the Dominican Republic, lender-of-last-resort support far exceeded the precrisis capital of banks.

The 1990s runs on the banks and the support for the financial sector typically turned into runs on the currency and the loss of international reserves. The runs on banks reflected depositor and creditor pressure to reduce their holdings and obtain foreign assets, not just switch banks.<sup>10</sup> East Asia was one obvious set of cases—massive amounts of new central bank domestic credit were roughly matched by losses of reserves, producing a complete change in the composition of central bank assets but not much change in the money base.<sup>11</sup> The lender-of-last-resort support tended to increase the supply of domestic assets, the demand for which was falling, and so translated into additional pressure on the exchange rate. In addition, central bank support may have generated concerns about the state of the financial system and the government's targets and policies (for example, Thailand's fixed exchange rate), further increasing the demand for foreign assets. This process may explain why financial crises often precede currency crises.<sup>12</sup> In open economies facing bank runs and capital flight, the central bank must decide whether to maintain the exchange rate by selling reserves, allow depreciation, or tighten money generally to offset the liquidity support given to a few intermediaries, which puts pressure on borrowers indebted in local currency and their lenders. Typically, central banks in the 1990s did a bit of all three, allowing some depreciation, but limiting it by using reserves and by tightening money from time to time.

A second, more lasting, impact of the crises on the financial system was the massive increase in government debt in domestic banking systems. As shown in figure 2-1, government debt rose in almost all the banking systems that suffered crises, in most cases substantially.<sup>13</sup> Governments typically bailed out depositors in weak banks with deposit guarantees—few depositors lost much in local currency terms. The bailout process typically involved transferring bad loans from weak banks to an asset management or recovery company. The asset management company, in turn, put new debt into the banks,

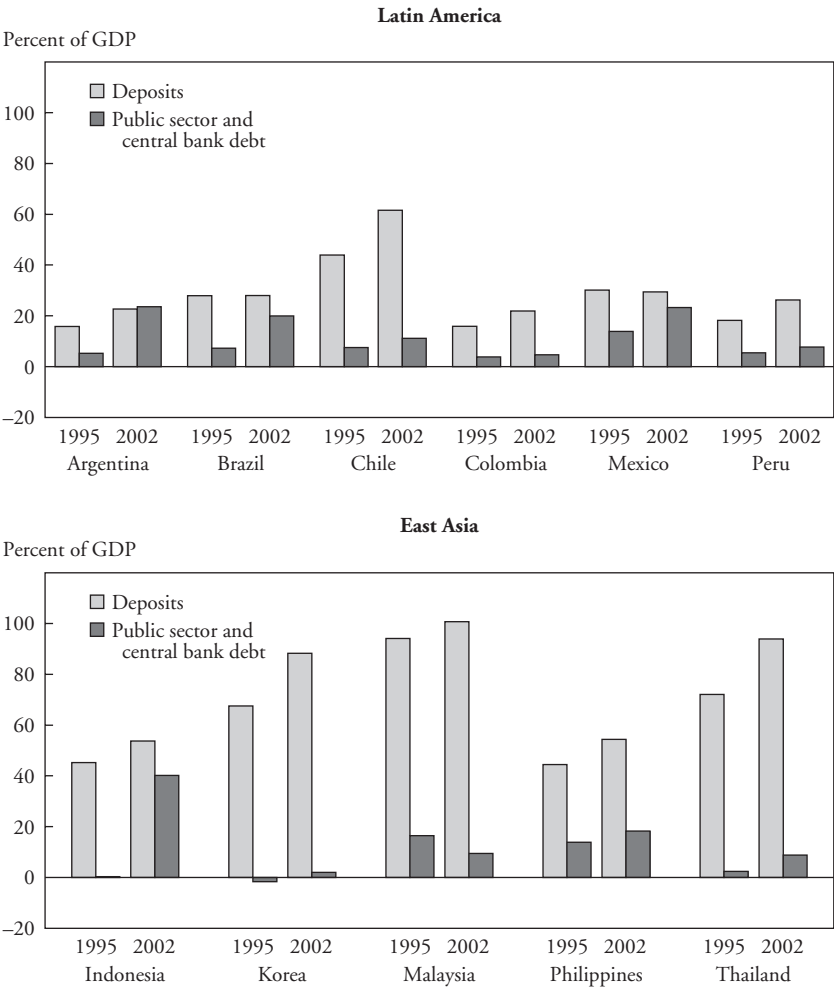
10. This outcome contrasts with the standard analysis of a lender-of-last-resort facility in a closed economy, where depositors shift their funds to other banks or currency. Public sector banks sometimes gained deposits in the crises; despite the well-known poor performance of their portfolios, depositors considered these banks to have the full backing of the government.

11. World Bank (2000).

12. Kaminsky and Reinhart (1999).

13. In Korea and Thailand, government debt in the banks did not rise substantially, but the government took over the external debt of the banks and other intermediaries, shrinking their balance sheets.

Figure 2-1. *Bank Deposits and Public Sector and Central Bank Debt as a Share of GDP in Major Latin American and East Asian Countries, 1995 and 2000<sup>a</sup>*



Source: IMF (various years).

a. With the exception of Argentina, for which the postcrisis date is 2002.

implicitly or explicitly guaranteed by the government.<sup>14</sup> The resultant bank was either merged with another bank or banks (often in the public sector) or kept open—under old or new management or, in some cases, under the asset management company—and eventually sold. Whatever initial optimism existed regarding recovery of the bad loans proved false—typically the recovery was 20 percent or less of face value. The governments eventually had to put their debt into the banks to replace the debt of the asset management company. The implications of this process for banking systems postcrisis are discussed below.

## The Macroeconomic Recovery: Low Inflation and the Return of Growth

Inflation remained surprisingly low despite the crises and, in some cases, fell even lower afterward. In East Asia, inflation traditionally had been low and remained in single digits in almost all cases during the crisis. The exception was Indonesia, where inflation jumped to more than 50 percent after the large devaluation. However, Indonesian inflation fell back to about 6 percent in 2003 and 2004. Latin America historically had high inflation, with inflationary spurts, and the associated inflation tax on depositors was often used to finance governments and clean up bank balance sheets. However, in a break with history, Latin American inflation dropped sharply in the 1990s. Most Latin American emerging-market borrowers, which often had experienced three- or even four-digit inflation at the beginning of the 1990s, dropped to single-digit inflation in 2000, despite their crises.<sup>15</sup> The crises in Argentina and Uruguay that began in 2001 were associated with large real devaluations and inflation that rose to the 20–30 percent range, but by 2004 their inflation returned to single digits. The crisis in the Dominican Republic that began in 2003 was associated with an even sharper rise in inflation, but after July 2004 inflation was largely halted by a sharp appreciation of the peso.

14. Banking data from the International Monetary Fund's *International Financial Statistics* typically do not show the rise in government debt from the crisis until the government actually puts its debt into the system. In Mexico, for many years, some of the debt from the asset management company remained in the system with a government guarantee that was renewed annually by congress.

15. Mexico experienced a rise in inflation after the crisis at the end of 1994, but by 2001 its inflation was down to the 4–6 percent range. Jamaica reduced its inflation after the large outburst in 1992 and, with a sharp fall in 1997, began a run of single-digit inflation. Colombia also maintained single-digit, declining inflation after 1999. The exceptions are Ecuador and Venezuela, where inflation remained high.

The general prevalence of single-digit inflation has had some benefits. Low inflation reduces the need for high nominal interest rates, the pressures for government intervention to favor particular borrowing groups, the massive subsidies associated with interest rates that were kept well below inflation, the attention to financial engineering rather than efficient production, and the allocation of credit to activities that benefit from inflation. Low inflation has largely eliminated the issue of whether financial intermediaries charge reasonable real interest rates; the issue has become more one of ensuring loan repayment.

The recovery of growth after the East Asian crises has left the crisis countries with average annual growth in the 4–6 percent range since 2000. This is relatively high by developing-country standards, but less than these countries enjoyed in the first half of the 1990s. Except for Korea, all the crisis countries are well below their previous growth path (figure 2-2).<sup>16</sup> Investment ratios have fallen from their high levels of the early 1990s, but proportionately not as much as growth has declined.

Among the East Asian countries, Korea recovered most rapidly and had roughly returned to its previous growth path by about 2002, but growth has since slowed to an average of less than 4 percent a year. Korea's financial crisis was, relative to GDP, the second smallest of the East Asian countries, and it benefited from a large international support package and an agreement among major international creditors to roll over a substantial part of their outstanding loans. Korean imports fell dramatically initially, and the country began to accumulate international reserves; by 2001 it had prepaid its debt to the International Monetary Fund (IMF) and much of its crisis-related external debt. Korea is also generally considered the East Asian country that reformed the most. Some chaebols (conglomerates) were allowed to go bankrupt, others were forced into major restructurings, and a few banks were sold to foreign investors.

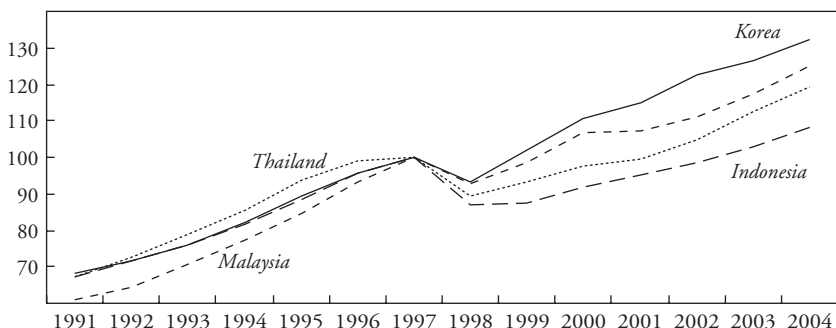
A major factor in Korea's rapid recovery was a rise in household consumption. With a slowdown in traditional export markets and competitive pressures from China, the government elected to stimulate the economy by encouraging a rise in consumption, including a major expansion of credit cards. Although banks eventually suffered losses on consumer credit and one

16. Barro (2001) finds that output loss after the financial crisis in East Asia was larger than in a broad sample of crisis countries, the recovery was strong, and the previous growth path may not be resumed. Cerra and Saxena (2003) also find a quick recovery from the crisis, but some permanent loss of output.



Figure 2-2. *Precrisis and Postcrisis Growth in Select East Asian Countries, 1991–2004*

Index of GDP 1997=100



Sources: IMF (various years); World Bank estimates.

of the largest non-bank credit card companies went bankrupt and had to be bailed out, principally by Korean Development Bank, the consumption-led growth strategy was initially successful in supporting a rapid return to Korea's earlier growth path. When world growth increased, Korean exports and capital account receipts also increased, and the buildup in international reserves increased massively. However, consumption is now lagging, household indebtedness is high, and, with high oil prices, GDP growth seems likely to be less than 5 percent in 2005, after 4.6 percent in 2004.

Thailand's recovery was slow until, as in Korea, its consumption picked up in 2002, followed by sharp rises in exports in 2003 and 2004. The government that took office in 2001 adopted a somewhat populist strategy, putting a moratorium on rural debts, offering new lending after write-offs of old loans by public sector banks, and providing funds for revolving credits in villages, low-cost medical care, and incentives for home buying. The government also resisted industrial restructuring or execution of collateral on past-due debts. However, the fiscal accounts actually tightened after 2001, and monetary policy was largely unchanged. Thailand has reduced its international debt by one-third since 2000 and paid off its IMF debt in 2003, two years early. The government is now promising a push on infrastructure, but high oil prices and the tsunami that devastated the country in December 2004 are limiting growth in 2005 to less than 5 percent.

In contrast to Korea, Indonesia has recorded average growth much slower than in the first half of the 1990s and hence has fallen well below its previ-

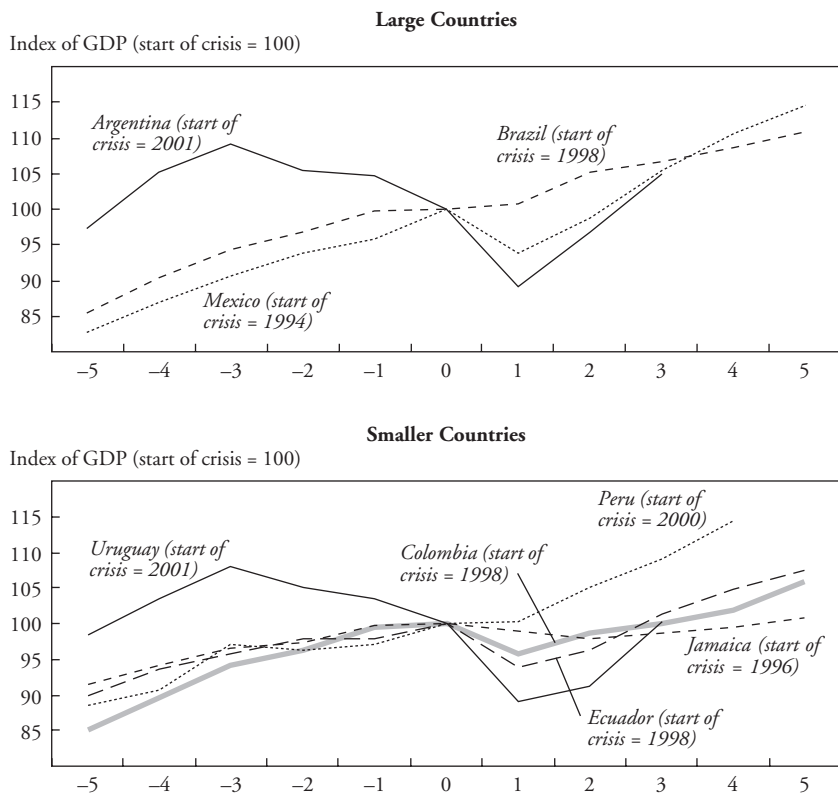
ous growth path. Indonesia suffered the worst crisis of the Asian countries.<sup>17</sup> In 1998 democracy replaced the long-lived regime of President Suharto and his cronies, which meant a complete restructuring of Indonesia's political economy and major adjustments in the economy. Recently, the country was unable to take advantage of the rise in petroleum prices and reduce its fiscal deficit or increase public investment or social spending, because of a large subsidy of domestic oil prices, a long history of underinvestment in petroleum production, and a generally unfavorable climate for foreign direct investment, all of which had turned the country into a net importer of petroleum. The election of a new president was associated with a rise in growth, and construction in Jakarta is picking up, but the tsunami may slow growth again, and foreign investors still cite many issues, including security. Malaysia and the Philippines have also remained below their precrisis growth path.

In the Latin American crisis countries, growth has resumed, but most countries remain below their relatively slow precrisis growth paths, despite 2004 bringing the highest growth in Latin America since the 1980s (figure 2-3). In many of the Latin American countries the crises were smaller, relative to GDP, than in East Asia, and hence the recoveries did not have to be as large. In addition, the crises in some of the Latin American countries started after 1997, which meant that the recovery periods coincided with a pickup in the world economy and growing markets for primary products. However, Latin American growth rates were much slower than in East Asia, and, until 2004, the Latin American economies seemed to have benefited less from the rise in world growth than the East Asian economies. Although the Latin American economies recently benefited from the increased world demand for primaries, many Latin American economies still face significant adjustment problems in their manufacturing sectors as a result of globalization. Investment rates in most Latin American countries are 20 percent of GDP or less, which is somewhat lower than investment rates in East Asia today and much lower than East Asian rates in the first half of the 1990s.

Regarding individual Latin American countries, Peru did better than most, increasing its growth rate and rising above the previous growth path. Peru suffered a relatively small financial crisis that it managed well. Despite a major political upheaval in 2000, Peru maintained a strong fiscal stance and a market orientation, while continuing to limit government intervention in the economy. Mexico also seems to have risen above its growth

17. Some indicators suggest that postcrisis growth and exports may be underestimated, particularly in forestry and related industries, because of the growth in illegal logging after the end of the cronies' control of logging concessions, which was related to their monopoly on plywood exports.

Figure 2-3. *Precrisis and Postcrisis Growth in Select Latin American Countries, 1994–2001*



Sources: IMF (various years); World Bank estimates.

path prior to the 1994 crisis (not shown in figure 2-3, where the last date for Mexico is 1999). Jamaica also is above its former growth path, but its growth remains less than 3 percent a year.

Argentina and Uruguay rebounded quickly from the large losses in output after their crises; it remains to be seen whether they can sustain growth in coming years. Argentina suffered a recession before the 2001 crisis, especially after Brazil's devaluation in 1999 (figure 2-3). Many observers attribute that recession to Argentina's declining competitiveness because of the peso's link to the dollar. Both Argentina and Uruguay suffered sharp declines in output

following the Argentine debt-financial crisis that began in late 2001. Since then, Argentina has benefited, at least temporarily, from its default, and its exports have become much more competitive since it broke the link between the peso and the dollar. Uruguay has benefited from Argentina's recovery. And both countries, along with Brazil, have benefited from the rise in demand for major agricultural exports such as meat and soybeans. Brazil managed to avoid a debt default in 2002–03, and export-led growth has picked up. The other crisis countries, Colombia and Ecuador, have recovered but continue to suffer from country-specific problems that limit their growth.

## International Debt and Reserves

Globalization of financial markets has given international debt and reserve issues an important role in both financial intermediation and crises. International borrowings played a major role in financing the private sector up to the mid-1990s in many of the larger developing countries.<sup>18</sup> Excessive external debt and “sudden stops” in inflows played an important role in the crises of the 1990s.

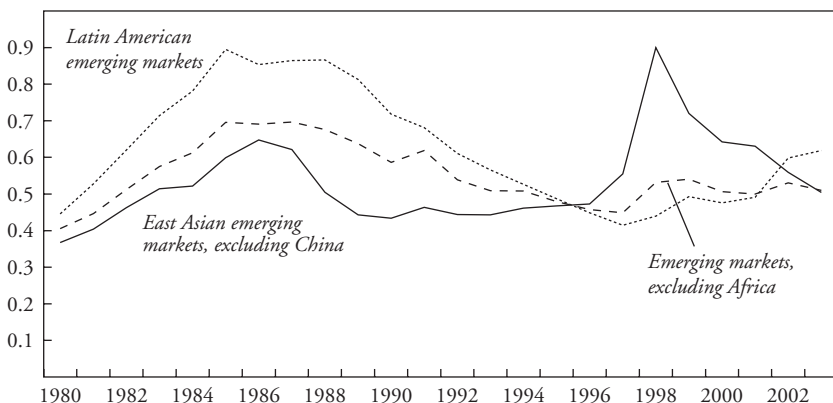
Since 1997, among the “emerging markets,”<sup>19</sup> the average ratio of external debt to gross national income (GNI) in East Asian countries has declined to roughly the 1995 level; in Latin America, the average ratio has risen since 1997 and exceeds the levels of the mid-1990s (figure 2-4). The fall in East Asia reflects sharp declines in the amount of external debt in Korea and Thailand—and a smaller decline in Indonesia—as well as real growth and real exchange rate movements. The rise in the average debt ratio in Latin America since 1997 reflects the sharp rise in the debt ratios of the crisis countries of Argentina, Dominican Republic, and Uruguay, because of real exchange rate depreciations and declining output (compared to 1997). In the other emerging-market crisis countries of Latin America, the amount of debt in dollars was roughly constant, and the ratios of external debt to GNI tended to rise less sharply than in the other crisis countries and, in some cases, were roughly constant, reflecting changes in the real exchange rates

18. Hanson (2003).

19. The term “emerging markets” refers to countries that have issued international bonds; as used here, these are Indonesia, Korea, Malaysia, Philippines, and Thailand in East Asia and Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Jamaica, Mexico, Panama, Peru, Uruguay, and Venezuela in Latin America.

Figure 2-4. *Ratio of Average External Debt to Gross National Income in East Asia, Latin America, and Emerging Markets, 1980–2003<sup>a</sup>*

Ratio (percent)



Source: World Bank (various years).

a. The figure covers thirteen emerging markets in Latin America and five in East Asia.

and GNI growth as well as the absolute change in external debt since 1997. Nonetheless, it is worth noting that the average external debt ratio in Latin America has risen since 1995, even excluding Argentina, Dominican Republic, and Uruguay, while it has fallen in East Asia since 1997, even excluding Korea and Thailand, basically because of the reduction in the ratio of debt to GNI in Indonesia. Thus less has been done to reduce the postcrisis overhang of external debt in Latin America than in East Asia.

One element in the overhang of debt from crises is the growth of IMF and World Bank debt in some countries (table 2-1). In Argentina in 2004, IMF and World Bank debt became even more important in relative terms, with the reduction in private debt values. The IMF and the World Bank have preferred creditor status. Hence their large position in a few countries may even deter the entry of new private borrowing, which would face substantial default risk because of the large overhang of indebtedness of these countries to the IMF and the World Bank. In addition, some observers have criticized the IMF for not being tough enough on Argentina, one of its largest borrowers.

In 2003, and even more in 2004, net external borrowing by East Asian and Latin American countries rose, with measured net private external lend-

Table 2-1. *Select Countries with Large Exposure to the IMF and World Bank, 2003*

Percent

<i>Ratio of</i>	<i>Argentina</i>	<i>Brazil</i>	<i>Indonesia</i>	<i>Uruguay</i>
IMF debt to total external debt	9.3	12.0	7.6	20.5
IMF debt to public sector debt (medium and long term + IMF)	10.8	13.1	9.2	23.4
IMF debt to GNI	12.7	6.0	5.2	22.4
World Bank debt to total external debt	4.5	3.6	7.3	6.1
World Bank debt to public sector debt (medium and long term)	7.6	9.0	13.3	9.7
World Bank debt to GNI	6.1	1.8	4.9	6.7

Source: World Bank (2004).

ing turning increasingly positive.<sup>20</sup> Moreover, borrowing plus net errors and omissions was substantially higher than in the mid-1990s, indicating that nonregistered flows were following the same pattern as registered flows, not offsetting them in capital flight, as occurred in the mid-1990s.

The rise in private flows reflected private lenders' search for higher yields than were available in industrial countries.<sup>21</sup> In 2003 and 2004, private lenders shrugged off Argentina's default and the more recent problems in the Dominican Republic and drove down spreads on debt of emerging-market countries, notably Brazil, where market opinion reversed itself on the new government. In 2004 Uruguay even managed to issue \$150 million of external bonds, despite a debt restructuring in 2003.

The recent rise in borrowings also involved a wider menu of instruments than in the past. Various kinds of debt were collateralized. Domestic currency bonds were issued internationally by Colombia and a few Brazilian banks. In their search for higher yields, private lenders even began to participate in local debt markets in developing countries. For example, in Brazil,

20. World Bank (2005b).

21. Another factor may have been the need for oil exporters to invest their higher earnings: even if these funds were recycled back to industrial-country markets, the downward pressure they exerted on interest rates there may have encouraged other investors to move into developing-country instruments.

an estimated 10 percent of domestic debt was held by nonresidents in 2004. These new trends raise questions about the reasons for the previous concentration of developing-country debt denominated in foreign currency—so-called “original sin.”<sup>22</sup>

In addition to the lenders’ higher tolerance for risk, the flow of new debt and the declining spreads also reflect improvements in country ratings and performance. Moreover, lower interest rates on external debt have lowered costs and improved fiscal performance.

By February 2005, the spread on emerging-market bonds over U.S. treasuries hit a record low, and the spreads on Brazil’s debt were back to the levels of 1997. Latin American countries took advantage of the decline in spreads to increase net borrowing, replace old, high-interest-rate debt, and lengthen maturities, to some extent. East Asian countries tended to go slowly on new borrowing and simply amortized debt. Even in 2003, before the full impact of the lower interest rates and the replacement of old debt was felt, average interest rates being paid on the stock of long-term external debt fell 50 to 100 basis points for the major emerging-market countries in Latin America and East Asia.

For private borrowers in developing countries, the impact of these trends was delayed somewhat. For example, in banks in many of the major emerging markets in Latin America and East Asia, the net overseas asset position improved after 2000 as the banks increased their offshore holdings and creditor banks reduced their lending. In 2003 private sector total external borrowing in most developing countries was still down, relative to 2000, as was the countries’ short-term external debt. By 2004, however, private borrowers in developing countries also began to increase their offshore borrowings.

22. Eichengreen and Hausmann (2004) argue that a major factor in financial crises has been the denomination of emerging-market countries’ debt in industrial countries’ currency, which they term “original sin” and attribute to some sort of market failure. The denomination of borrowing in an industrial country’s currency imposes a massive cost if the borrowing country has to devalue in a currency crisis. However, as discussed in Hanson (2002), there are incentives for a country to denominate its debt in foreign currency—the low up-front interest cost and the corresponding longer effective maturity of the debt compared to a local currency bond that would carry high interest rates that include a large devaluation premium—even given the foreign currency-related risk to the issuer that, of course, only becomes an actual cost over time. The recent appearance of bonds in Colombian pesos and external investor interest in Brazilian reais bonds, both currencies that recently appreciated substantially relative to the dollar, raises the issue of whether what appeared to be “original sin” simply reflected incentive-based decisions, not some sort of market failure.

To what extent could sudden changes in international markets—in particular, increases in U.S. interest rates and depreciations of the U.S. dollar—generate new external debt-related problems in East Asia and Latin America similar to those that began in the mid-1990s? The still-high external debt levels raise the issue of vulnerability, particularly in Latin America, where debt ratios remain higher than in East Asia.

Rising international interest rates, as predicted by the U.S. yield curve, would raise the costs of new external borrowing directly as well as indirectly, if investors redirect their funds to the United States.<sup>23</sup> In addition, spreads would probably widen on emerging-market debt, particularly for countries with high external debt. A short-lived example of the turbulence that such developments could create occurred in early 2005. Rises in U.S. interest rates, a rise in oil prices, and concerns about U.S. growth were followed by rises in developing-country rates, leading some countries to postpone their bond issues.

Vulnerability to rising international interest rates seems limited by a number of factors, however. First, current international interest rates are low by historic standards. For example, the rate on long-term U.S. government bonds has remained below 4.5 percent for much of 2005 and even dipped below 4 percent in the early summer, compared to an average rate of about 6.5 percent in 1995–96. Thus not only are spreads on developing-country debt low, but interest rates on them are low historically. Even a 2-percentage-point rise in U.S. rates, plus an associated increase in spreads, would only bring rates back to about 1995–96 levels. Moreover, many countries have “locked in” recent low interest rates and longer maturities to some degree, thereby reducing future external borrowing needs. Nonetheless, countries that are still highly indebted, that did not lock in low rates, and that did not take advantage of the period of low interest rates to raise fiscal surpluses enough to reduce their excessive debt could encounter difficulties.<sup>24</sup> In addition, countries’ borrowing costs would tend to rise because of the sympathetic rise in local currency rates on the debt issued in domestic markets, which is often short term.

23. Whether investors would redirect funds to the United States is not clear; it depends not only on rises in U.S. interest rates but also on investors’ expectations of future U.S. dollar devaluations.

24. The optimal level of debt depends on expectations of future rates. Thus reducing debt, even in a period of low interest rates, may make sense. If the current stock of debt is excessive, then using the fiscal gains from low interest rates to reduce the stock of debt to optimum levels is a politically easy approach.



A depreciation of the U.S. dollar against major currencies would tend to reduce the burden of most countries' debt, not directly worsen their situation.<sup>25</sup> Such a decline has occurred since 2002. However, sudden depreciations of the dollar could make it more difficult for developing countries to earn foreign exchange, because of a slowdown in the world economy and a loss of competitiveness in those countries that allow their currency to appreciate relative to the dollar.

Another element reducing the vulnerability to current debt levels and to "sudden stops" in new inflows is the large accumulation of international reserves in many countries, particularly in East Asia, combined with limited growth or even declines in measured short-term debt. The average ratio of short-term debt plus external interest payments to reserves has declined about 20 percent since the mid-1990s (figure 2-5). Moreover, most countries also show an improvement; the outliers in 2002 and 2003 were mainly crisis countries.

The biggest improvements were in East Asia, reflecting mainly sharp rises in reserves, although declines in short-term debt and interest costs also played a role. In Korea, reserves increased nearly 500 percentage points between 1996 and 2004 (figure 2-6). Reserves also increased by 65–150 percent in Indonesia, Malaysia, and the Philippines. The sharp rises in reserves in East Asia reflect a combination of (a) maintenance of the exchange rate with respect to the dollar to maintain export competitiveness, despite large capital inflows, and (b) a deliberate policy to build up a shock absorber, for example, in Korea. One issue, however, is the extent to which this growth in reserves reflects capital inflows in expectation of an appreciation and how quickly currency inflows could turn to outflows after an exchange rate adjustment.

In Latin America, the buildup of reserves has been much less than in East Asia and occurred mainly in 2003 and 2004. To some degree, the differences between Latin America and East Asia reflect the more recent dates of the Latin American crises. But they also reflect slower growth of reserves in

25. A dollar depreciation, given constant export prices, makes it easier to earn enough foreign exchange to repay the debt. A dollar depreciation would not affect the ratios of reserves to debt, except to the extent that debt was not in U.S. dollars. Much of emerging-market external debt is in dollars. Not only have some countries been trying to refinance their debt to reduce interest costs, but some have been converting their stock of debt into dollars, to avoid a potential capital loss (in dollars) on non-dollar-denominated external debt. Of course, a dollar depreciation would reduce the value of developing-country reserves relative to domestic currency, assuming the country did not also depreciate and thus possibly reduce its ability to cover a bank run.

Figure 2-5. *Ratio of Short-Term Debt plus Interest to Reserves in Emerging-Market Economies, 1986–2003*



Sources: IMF (various years); World Bank (various years)

Latin America, even recently. In Latin America, much of the improvement in the ratio of debt and interest to reserves reflects slow growth of short-term debt and the recent dampening of interest costs, not strong growth of reserves.

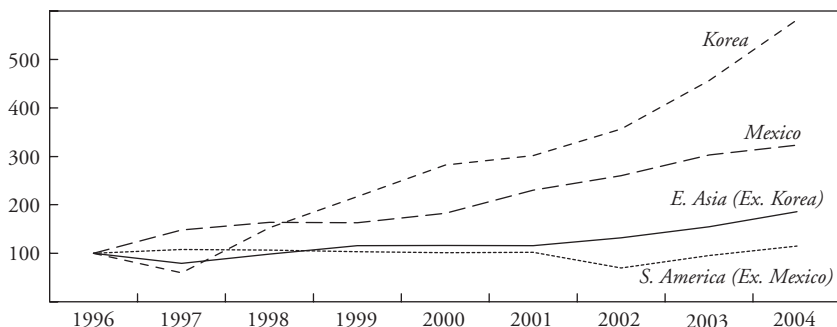
A final issue in the area of international debt is the implication of the recent Argentine default. To some extent, Argentina's case is unique. Nonetheless, the default, and the events leading up to it, could affect international financial transactions during the next few years (box 2-1).

## Risks and Challenges in Domestic Financial Systems in East Asia and Latin America circa 2004

Banks continue to dominate the financial systems of East Asia and Latin America. However, private pension systems have become large relative to banks in some Latin American countries—for example, in Peru, pension system assets are now roughly one-third as large as bank assets, and in Chile, the system with the longest, most successful history, they are roughly as

Figure 2-6. *Reserve Accumulation Index in the Crisis Countries of East Asia and Latin America, 1996–2004<sup>a</sup>*

Reserve accumulation index (1996 = 100)



Source: IMF (various years.)

a. East Asia includes Indonesia, Malaysia, Philippines, and Thailand. South America includes Argentina, Brazil, Colombia, Ecuador, Peru, and Uruguay.

large as those of banks.<sup>26</sup> Other non-bank intermediaries, such as the finance companies in Korea, Malaysia, and Thailand and the mortgage banks in Colombia, suffered problems in the financial crises and are being wound down to various degrees.<sup>27</sup> Government bond markets in local currency have developed in almost all of the “emerging markets” of East Asia and Latin America.<sup>28</sup> Their development in some cases—for example, Indonesia and Jamaica—is the result of the large volume of government debt arising from the crisis. Markets in central bank debt also exist in some countries. Secondary trading in government and central bank debt remains small, however, because most investors simply buy and hold and because the legal framework for repos, forward transactions, and security-based lending is poorly developed. Private bond markets have also developed in some countries, helped by various combinations of increased GDP growth, the development of the government bond market, and the demand from

26. In theory, private pension funds transfer risk to their contributors, unlike banks where depositors are usually insured. However, in many countries, governments guarantee a minimum pension, which represents a contingent liability. Another risk is in the insurance companies. The retirement of workers enrolled in these private pension funds, who generally will buy annuities from the insurance companies, will increasingly make the soundness of the insurance companies an issue.

27. The crisis-related problems of Thailand’s finance companies are not new—in the early 1980s, they suffered from problems prior to the banking crisis, and many were closed (Baliño and Sundarajan 1991).

28. The exceptions are the Dominican Republic and Ecuador.

**Box 2-1. *The Possible Consequences of Argentina's Recent History***

Argentina is unique to a large extent. In the early 1990s Argentina ended a series of currency crises and hyperinflation by converting short-term deposits into longer-term debt, adopting a currency board, and resolving an external debt default with a Brady Plan restructuring. Growth was strong for some time but turned negative because of what many observers see as a loss of competitiveness, especially after Brazil devalued in 1999. Despite close relations with the IMF during the 1990s, Argentine government debt soared, partly because of deficits, but largely because of debt injected into its pension system to cover privatization and judicial reversal of earlier government cuts as well as to resolve arrears on suppliers' credits. In 2001 Argentina defaulted on its debt, asymmetrically converted banks' dollar deposits and loans into pesos, and then converted much of the deposits into longer-term instruments. In June 2005 it completed an agreement with 76 percent of its bonds holders that cut these obligations to 34 percent of their face value and accrued interest. This has left the IMF and World Bank holding a substantial fraction of Argentina's debt. Nonetheless, total debt remains \$120 billion (about 75 percent of GDP).

Argentina's recent history may have at least five possible implications:

1. Currency boards will be less attractive.
2. International banks will have less interest in large-scale expansion in the banking markets of developing countries.
3. The large discount on Argentina's restructured debt may set a benchmark for future restructurings.
4. Individuals' small-scale purchases of developing-country debt will be unlikely, although sophisticated investors seem unfazed—Argentina was upgraded to a B-rating by Standard and Poor's and is rumored to have received offers of new loans.
5. The IMF and the World Bank will be more careful about future large exposures.

pension funds. Large corporations, which financed themselves offshore in the first half of the 1990s, are now using domestic bond markets to some degree; pension funds and insurance companies, as well as banks, are buyers of these instruments. As with the government bond market, the secondary market in private bonds is small. Securitized instruments have not developed because of legal and tax issues. In response to the loss of highly rated borrowers, banks in the two regions are increasingly moving into consumer credit and mortgages, a process that has occurred in industrial countries. Equity market capitalization has risen in both Latin America and East Asia, but trading (turnover) remains low, particularly in Latin America.

Listings have actually declined in most Latin American countries since the mid-1990s, while rising in East Asia.<sup>29</sup> Hence equity markets, particularly in Latin America, have not been a major source of funding.

As discussed in this section, the main developmental challenge facing banks is in Latin America: limited financial intermediation between depositors and private borrowers,<sup>30</sup> because of low deposit mobilization, the absorption of deposits by government, and debt held by the central bank. Credit to the private sector has been identified as a major positive factor in growth by a number of studies,<sup>31</sup> which suggests that the lack of intermediation is and will be a factor limiting Latin America's growth. Corporations can offset the lack of bank intermediation to the extent that they can finance themselves by selling bonds to non-banks (for example, pension funds and insurance companies) and the public. However, small borrowers, particularly those in rural areas, will face limited access to credit because of limited intermediation as a result of low deposit mobilization and crowding out by government and central bank debt.

Various risks and vulnerabilities also exist in Latin America, because of the high levels of government debt and dollarization—and, to a lesser extent, in East Asia—as well as the standard problems of credit quality in the banks in both regions. Informational and legal frameworks, on which credit quality and access depend, are improving but remain weak. Public banks are growing again, and their nonperforming loans have been costly in the past. Well-known international banks, which at one time were thought to be a solution to many of the problems in the banking sector, are less interested in expanding to developing countries; instead regional banks are expanding across borders, creating their own problems. To deal with the risks and credit quality in the banks, governments have attempted to strengthen regulation and supervision, as well as market discipline, but technical and, more important, political issues are likely to hamper these efforts.

### *Developments in Banking after the Crises*

In East Asia, banks have largely recovered from the 1997 crisis, and intermediation remains high, except in Indonesia. The ratio of bank deposits to

29. World Bank (2005a). To some extent, the decline in listings in Latin America reflects the multinational takeovers of major local firms, such as telephone companies.

30. Banks' credit to the private sector reflects not just intermediation of deposits but also intermediation of foreign funds and the use of bank capital.

31. See King and Levine (1993); Levine (1998, 2003); Levine, Loayza, and Beck (2000), and works cited there.

GDP remains large, although it has declined in Indonesia, the Philippines, and Thailand since 2000 (figure 2-7). Banks' holdings of public sector and central bank debt have fallen relative to bank deposits in all countries, compared to 2000. Bank credit to the private sector (relative to GDP) is larger than in either 1995 or 2000 in Korea (although some of this credit now represents consumer credit) and is about the same as in Malaysia. However, in Malaysia, total credit to the private sector has declined because its non-bank sector has declined since the crisis. In Thailand, private sector credit is lower than in either 1995 or 2000, reflecting the decline of both bank deposits and the non-bank sector. Finally, private sector credit is lower in the Philippines and substantially lower in Indonesia than in either 1995 or 2000, reflecting the declines in deposits and, particularly in Indonesia, the large volume of recapitalization bonds in the banking system.<sup>32</sup>

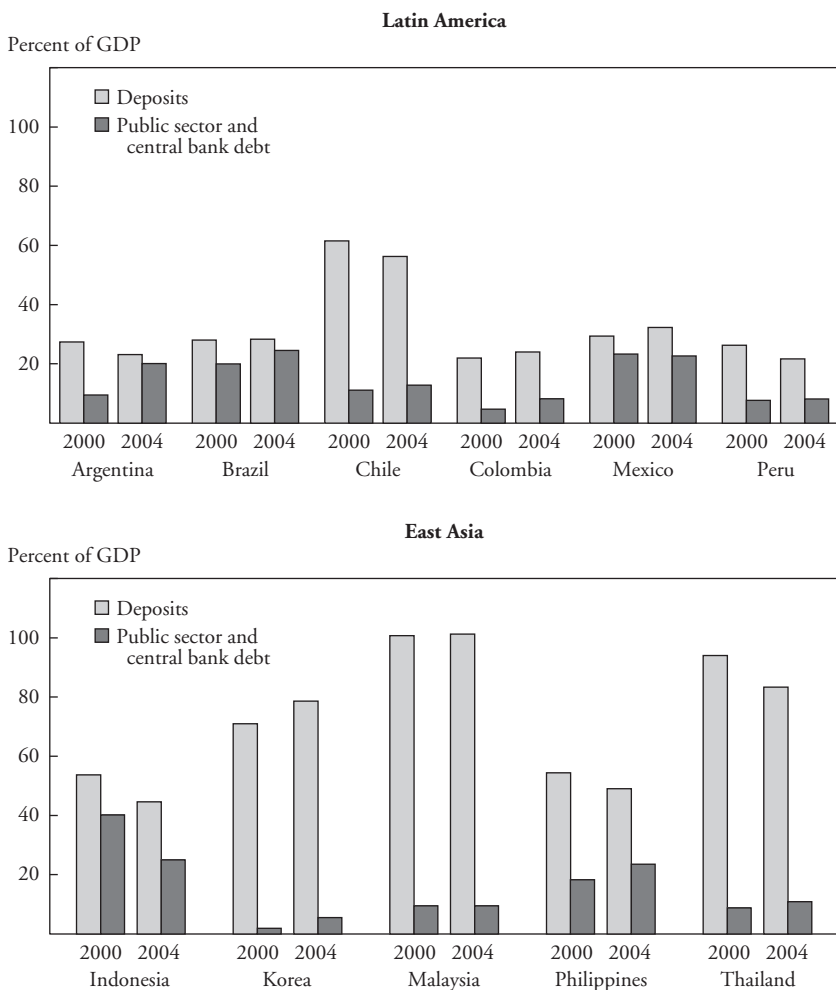
In six major Latin America countries, bank deposits were still only a small fraction of GDP in 2004 and have not grown much since 2000.<sup>33</sup> Deposits averaged only 38 percent of GDP in 2004, compared to 73 percent in East Asia. Only Chile's banking sector is similar in size to that of the East Asian countries. Deposits stagnated, or fell, as a percentage of GDP in four of the Latin American countries between 2000 and 2004 and rose only slightly in the other two. Moreover, banks' net foreign borrowing declined in all six countries except Chile. Hence banks in Latin America are generally raising fewer funds to intermediate to the private sector than they were in 2000.

Latin American banks in the six countries also hold more public sector debt (almost wholly government debt, net of government deposits) and central bank debt compared to private deposits than they did in 2000. Public sector debt and central bank debt rose relative to deposits on average and in every one of the countries, except Mexico. Bank credit to the private sector, as a percentage of GDP, has fallen in all six countries since 2000, from its already low levels compared to levels in East Asia.

32. In cases of crises, assessing the contribution of private sector credit to economic growth involves both a measurement issue and, more substantively, a productivity issue. The measurement issue occurs because, after a crisis, large volumes of private credit typically are transferred from banks to an asset management company. Hence private sector credit declines in banks but rises by an equal amount in the asset management company—that is, no change occurs in the overall volume of private credit. Measuring the volume of private sector credit correctly means taking into account the loans held by the asset management company. Substantively, there is a productivity issue. The prices that the asset management company eventually realizes for the credits (or the collateral on them) are often less than 30 percent of their face value, not to speak of accrued interest at market rates. Hence the economic value of these private sector credits is substantially less than their face value. This reflects the fact that the use made of these credits does not contribute substantially to growth after the crisis.

33. The following analysis applies to Venezuela and the smaller Latin American emerging markets.

Figure 2-7. *Bank Deposits and Public Sector and Central Bank Debt as a Share of GDP in Major Latin American and East Asian Countries, 2000 and 2004*



Source: IMF (various years).

The small size of deposits of Latin American banks largely reflects history. Years of high and variable inflation, high taxes, and bank defaults generated a lack of public confidence in bank deposits. Latin American corporations and wealthier individuals placed their deposits offshore—in regional centers or the United States—to avoid these problems. Dollarization and the recent history of low inflation and institutional change that supports it led to a rise in the ratio of deposits to GDP in the 1990s, but deposits still remain a much smaller fraction of GDP than in East Asia (figure 2-7).<sup>34</sup>

The growth of government and central bank debt in Latin America reflects four factors. First, crises in Latin America—particularly in Argentina and in Jamaica and Uruguay among the smaller countries—led to a rise in government debt. Moreover, many of the crises were more recent in Latin America than in East Asia, meaning that there has been less time for growth to reduce the relative size of government bonds that were injected during the crises.<sup>35</sup> Second, the increase in government debt in Latin America reflects the interest on the overhang of debt from the 1990s and a fiscal policy that was not sufficiently tight to offset it, compared to East Asia, where governments have run small surpluses. Third, Latin American governments have taken advantage of growing domestic debt markets and the lower interest rates in them to issue more debt locally, reducing their currency risk.<sup>36</sup> For example, Peru, which did not have a government debt market in 2000, now plans to amortize some offshore debt with funds raised locally. Finally, the monetary policy of central banks has led to substantial and rising amounts of debt, for example, in Mexico, Brazil, and Peru, where in the latter two cases it represents more than one-third of private sector deposits.<sup>37</sup>

The small size of Latin America's small deposit base and its absorption by public sector and central bank debt mean decreasing room for private sector credit. To some extent, corporations can find other sources of funding: domestic bond issues and external borrowing, particularly by the multinationals that took over local firms in the 1990s. However, small borrowers

34. World Bank (2005a).

35. The differences also reflect the approach of Korea and Thailand, which took over banks' external debt, rather than injecting government debt into the banking system.

36. Unfortunately, some governments and central banks still have substantial currency risk, not just in their international debt, but because of foreign currency hedges offered to borrowers onshore, either directly or through sales of foreign currency-denominated bonds in domestic markets. These practices, particularly the former, may be creating risky, nontransparent contingent liabilities for governments.

37. Central bank debt is also a large fraction of deposits in Chile, to some extent dating back to the approach taken during the 1982 financial crisis.



suffer from this crowding out. Thus slow growth of private credit represents a challenge to growth in Latin America and, to a lesser extent, in East Asia.

*The Challenges and Risks of Government and Central Bank Debt in Banks: Mainly a Latin American Issue*

Latin American banks often are criticized for not lending to the private sector, but this criticism neglects the implications of the large inelastic supply of government and central bank debt.<sup>38</sup> Banks' holdings of government and central debt do not reflect banks' unwillingness to lend to the private sector nor the attractiveness of government and central bank debt to banks because of their low capital requirements, liquidity, and likelihood of repayment. Rather, the main reason for these holdings is a macroeconomic constraint—the large outstanding stock of government debt must be held by someone. This stock and the new bond issues to amortize it and cover interest on it are essentially unresponsive to the interest rate.<sup>39</sup> Similarly, central banks, pursuing monetary policy, are inelastic net suppliers of debt in sufficient quantities to reach their target interest rate. In some countries, this central bank debt has accounted for a substantial and growing portion of banks' assets, as the central banks have tried to (a) sterilize capital inflow, while holding the exchange rate roughly constant, and (b) roll over their previous issues of debt. Thus government and central debt crowd out private borrowing, because the interest rate on private debt must be high enough to "create space" for the entire inelastic supply of government and central bank debt.<sup>40</sup>

The recent rise in government and central bank debt has had some benefits. It is less risky than private sector debt—in theory, the government could always print money to pay the bonds, although the resulting inflation would be an effective default. Government debt can also be used as riskless collateral for central bank liquidity support or be sold in markets to raise liquidity, although government debt markets remain thin.

38. Also, in some countries, banks face liquidity requirements to hold government or central bank debt.

39. Any responsiveness comes from the government choosing to borrow offshore rather than onshore or to finance the deficit by issues of money, both of which are out of favor. Many governments, particularly in Latin America, are increasing their reliance on domestic borrowing because low interest rates have allowed them to reduce their currency risk at low cost. Governments' ability to use inflationary finance has been curbed by independent central banks with inflation targets.

40. Private pension funds may also hold central bank debt, easing the crowding-out pressure on banks, but not macroeconomic crowding out, except to the extent that their growth has increased the net demand for financial assets and overall saving.

At the same time, the rise in government and central bank debt also represents a challenge (low intermediation) and two risks (default risk and market risk). The challenge represented by government and central bank debt is that it reduces the already low level of bank intermediation between private depositors and borrowers in Latin America: crowding out. Recent studies show that low levels of deposits (M2) and low levels of credit to the private sector are related to slower GDP growth in the future. To some degree, corporates can use direct offshore funding, which was important in the first half of the 1990s, bond market finance, which has grown, and equity market finance, which has grown in Asia, to offset the lack of bank finance. However, these substitutes are available mainly to large corporations. The limited options of small borrowers mean that crowding out affects them heavily.

Government and central bank bonds are less risky than private sector debt, but they still have default risk and market risk. Default risk arises because governments may not be able to service their debt fully, as occurred in Argentina, a case that perhaps has overly focused bank regulators on government default risk. Market risk arises because bond prices may fall relative to banks' liability prices. Moreover, government bonds are repriced in markets relatively frequently, and the capital loss on bonds is more obvious to depositors than the loss on loans, where the asset values are obscured.<sup>41</sup>

The well-publicized defaults on government debt in Argentina have led bank regulators to discuss ways to reduce the risk of government default, but these approaches neglect the macroeconomic constraint mentioned above. Suggestions for reducing government default risk often involve increases in capital requirements or limits on financial institutions' holdings of government debt. However, raising the capital requirements on government debt merely raises the cost of inelastic government borrowing (to allow banks to cover the cost of additional capital). Since the same amount of government debt must still be held, raising capital requirements on government debt simply leads to a rise in the loan rate on private borrowings at which the crowding out occurs.<sup>42</sup> Limits on banks' government debt holdings may simply

41. Even though secondary market trading of government bonds is limited, new issues and the yield curve allow regular revaluations of government bonds. Loans have to be classified according to bank regulations, and this information is increasingly public. However, banks are often able to hide deteriorations in credits by restructuring loans and "evergreening," despite regulation and supervision.

42. Raising the capital requirement may also reduce the attractiveness of government debt to banks, relative to pension funds, corporations, and individuals. Other than pension funds, the participation in government debt markets in developing countries is limited. Nonetheless, this policy would probably lead to a shift of government debt to non-banks and a corresponding transfer of the risks on it. In any case, such a rise in non-banks' holdings of government debt would not affect the overall availability of funding for the private sector, just increase funding from banks and reduce funding from non-banks.

push borrowing offshore. But excessive government borrowing, whether external or internal, will lead eventually to a crisis. As the crisis approaches, domestic financial institutions will get into difficulties, even if their government debt holdings are limited—no economy does well when its government goes bankrupt. Attempts to protect the financial system from excessive government borrowing from banks—limits or disincentives to hold government debt—are the wrong instrument to deal with a problem of excessive government debt and fiscal deficits. These policies are effective in reducing the fiscal costs of crises only to the extent that requiring more bank capital may transfer more of the costs of any default on government debt to bank owners.

Market risk on government bonds is potentially a major issue for Latin American banks in coming years, when international interest rates rise and push up domestic interest rates. A rise in interest rates will reduce the value of government debt holdings. Governments, and some central banks, have been taking advantage of the development of domestic debt markets and low interest rates to extend the maturities of their domestic debt, to lock in low rates, and to reduce their rollover risk. However, this process transfers risks to financial intermediaries that hold the debt, particularly to banks, which have liabilities that have relatively short maturities, have fixed prices, and must pay higher rates as interest rates rise.<sup>43</sup> The risk to banks is limited somewhat by the existence of stable “core deposits.” Nonetheless, at a minimum, the capital loss on longer-term debt will cut into bank earnings and could create substantial losses of bank capital. Forcing bank owners to put in more capital may be difficult, particularly given the source of the problem. Moreover, bank depositors, concerned about bank solvency, may withdraw deposits and put them overseas.

Attempts to reduce market risk on government bonds have taken two paths—the accounting for gains and losses on debt and the placing of disincentives on mismatches. With regard to accounting, regulators typically allow banks to separate their holdings of government debt into portfolios for trading and for holding to maturity. The trading portfolio is marked to market, and, to various degrees, profits and losses on it are recorded. The hold-to-maturity portfolio is typically valued at original cost, which means that losses due to rising interest rates are not recorded. Nonetheless, (a) the costs

43. Pension funds and mutual funds holding government debt simply transfer to their investors the effective loss from not being able to convert their long-term government debt into higher-interest-rate assets.

of the deposits needed to hold this debt rise with interest rates, reducing earnings on the debt, and (b) capital is lost, even though the loss does not show in accounting terms. With regard to the disincentives to take such risks, regulators may require capital in the case of maturity mismatches between deposits and government debt holdings. However, the capital requirement is likely to be small relative to the potential loss. An alternative to reduce market risk, from the side of the government, would be to issue floating-rate domestic debt, but few governments have made such issues.<sup>44</sup> Ultimately, the issue comes back to the government's need to issue enough debt to cover its rollovers and deficits. Either the government or the financial institutions and the public must take the risk of rollovers and higher interest rates. Currently, the rise in domestic government debt is transferring the risk to banks and, through pension funds, to the public.

### *Credit Risk and Dollarization: Old Problems of Vulnerabilities*

Credit risk of bank portfolios is a traditional vulnerability issue. In East Asian banks, it remains very important given their large volume of private sector credits. Moreover, in some East Asian countries, the link between banks and large, well-connected borrowers remains because postcrisis reforms have been limited. Such links contributed to the crises of the 1990s. In Latin America, the large presence of government and central bank debt has reduced the overall portfolio risk. However, credit risk remains an issue for Latin American banks. Credit risk also exists in pension funds and insurance companies and, through them, for the public and the government (to the extent that it guarantees a minimum pension).

It seems likely that the loan portfolios of commercial banks (excluding credit to governments) are becoming riskier. One reason is that the better borrowers migrated offshore in the first half of the 1990s or have begun to raise funds in local markets (bonds in Latin America, bonds and equity in East Asia). Correspondingly, there has been a reduction in the better borrowers' use of bank credit, a process that has been occurring in industrial countries. In response, banks have increased their lending to other clients.

44. Few countries in East Asia or Latin America have issued floating-rate debt, although this is probably a best practice from the standpoint of reducing market risk for banks (see Honohan 2005). In Indonesia, some of the recapitalization bonds originally carried floating rates; to make the intervened private banks more attractive to potential buyers, their fixed-rate recapitalization bonds were converted to floating-rate debt.

Often these new loans have taken the form of consumer credit, mortgages, and, in some cases, loans to microenterprises and small and medium firms, again a process that is occurring in industrial countries.

Consumer credit, mortgages, and micro- and small business credit can be risky for traditional banks. The traditional business of developing-country banks was loans to large firms. Lending to these firms depended on the balance sheet and evaluation of prospects (if they were not part of the bank's financial-industrial conglomerate). In contrast, consumer credit, mortgages, and micro- and small business credit depend on an evaluation of the likelihood that the borrower will repay and, more generally, group probabilities of repayment. In the past, some micro-credit institutions, such as MiBanco in Peru and Credi-Fe in Ecuador, have successfully kept nonperforming loans low by relying heavily on a costly evaluation of individual borrowers. Another approach for loans for consumer durables and mortgages has been to rely on repayments through deductions from wages and salaries earned in the formal sector, where employment is typically steady. However, large banks that wish to expand consumer credit and mortgages may find that such "micro" procedures are too expensive or reach too small a client base.

In some cases, consumer lending has been expanded simply by issuing large numbers of credit cards, hoping that the average default rate will be covered by the high rates of interest being charged. However, this procedure has sometimes proved costly, for example, in Korea, as noted. Expansion of mortgages is an even more complicated issue, given the possibility of a weak credit culture as a result of the previous dominance of public sector banks in the mortgage market and the weak legal framework.

A second element of the credit risk problem is related to the still-large stock of foreign currency loans and deposits—henceforth dollarization. Dollarization developed as a way to recognize the buildup of foreign currency in the economy and to capture some of the demand for foreign currency assets and liabilities in the domestic banking system.<sup>45</sup> Despite a recent reduction in inflation and more stable monetary policy, dollar deposits have remained large in many countries. To cover the foreign currency deposits, banks have issued foreign currency loans, an elementary risk management scheme.<sup>46</sup> Banks did not have to force borrowers to take these loans; foreign currency loans have

45. See Hanson (2002) and Savastano (1992, 1996) for discussions of the reasons for dollarization. Honohan and Shi (2003) provide data on the buildup of dollar deposits over the 1990s.

46. Since the crises, the banks in many countries have shifted from being net international borrowers of foreign exchange to net holders of assets offshore. These assets provide insurance against a devaluation.

a lower cost than domestic currency loans until a devaluation occurs, they have a longer effective maturity than domestic currency loans with their higher interest rates, and there is always the possibility of a government-ordered bailout for borrowers in foreign currency.<sup>47</sup>

Thus the risk from financial sector dollarization is usually credit risk owing to borrowers' lack of assured access to foreign exchange that can be tapped in the event of devaluation, not a mismatch of foreign currency loans and assets in bank portfolios. With devaluation, debt servicing problems arise among nonexporters, whose earnings and asset values typically do not rise proportionately to the devaluation. Even if such borrowers have access to foreign currency assets—for example, offshore—they may not be willing to use them to repay foreign currency loans, because of hopes of a favorable restructuring. The risk for banks is being exacerbated, since the smaller borrowers, who make up more of banks' portfolios, usually do not have easy access to foreign exchange but often borrow in dollars. Indeed, since government debt in local markets is increasingly sold in local currency, these smaller borrowers increasingly represent a counterpart to dollar deposits in the financial system. These trends may have been mitigated to the extent that highly rated borrowers have returned to borrowing from domestic banks when external private-to-private credits declined after 1997. At the moment, with many developing countries facing appreciation rather than depreciation, this credit risk is low. However, the situation could change, perhaps quickly.

Of course, local currency loans would also have credit risk, and their credit risk would tend to rise when interest rates rise sharply with rising expectations of devaluation. Hence the solution to reducing credit risk associated with dollarization is not simply to reduce dollar lending and deposits by fiat. Such a policy would reduce deposits and limit the availability of credit, on average, especially in periods when expectations of devaluation increase and credit risks on local currency loans rise.

47. As discussed in Hanson (2002), interest rates on foreign currency credits avoid the high, up-front cost of an expected devaluation that is factored into local-currency interest rates even though the devaluation may not occur for some time—the “peso problem.” The lower interest rates on dollar loans improve cash flows (lower deficits for governments using cash accounting) and increase the loan's effective maturity. Moreover, if and when devaluation occurs, its cost is spread out over the amortization period for dollar loans. For these reasons, it is not surprising that governments borrow externally, and many countries—for example, Mexico in 1994 and Brazil and Turkey recently—have indexed some domestic debt to foreign currency. For private firms, in addition to the attractions described above, the hope exists that a devaluation may lead to a government bailout, either by a favorable takeover of foreign currency loans or by an asymmetric conversion of domestic foreign currency debts and deposits to local currency, as occurred in Mexico (1982) and Argentina (2002).

To deal with credit risk, both the traditional kind and risk due to dollarization, banks in developing countries are slowly improving their risk management systems. Not surprising, this will take time. Bank regulators and supervisors are encouraging better risk management, and the more complex levels of Basel II make evaluation of risk management by the banks part of supervision. However, improving risk management and reducing credit risk also will depend on some changes in the informational and legal framework for lending.

Reducing credit risk, and expanding access to credit, will depend heavily on improvement of the information framework. Banks' development of risk management techniques is based on information about the potential borrowers, particularly for consumer and small business loans. An information framework of borrowers' credit histories is also important because it creates an incentive for borrowers to pay on time—development of the intangible asset of a good credit record. Based on a substantial information base of borrowers' histories, U.S. banks have expanded consumer credit without large losses. The ongoing growth of credit bureaus in Latin America and East Asia will generate a similar information base and allow a similar approach to expanding consumer credit. However, the development of credit bureaus depends on sharing information on even the small loans made by banks and on maintaining that information on debtors for some time.<sup>48</sup> Often credit bureau development is limited by legal protections of privacy and the unwillingness of large banks to share information on their best clients to other banks. Moreover, since many potential credit card customers will not have borrowed from the financial system, information on borrowers will need to include data on their payments for telephone service, public utilities, and credits from stores.

Improvement in the legal system is also important to reduce credit risk. Improvements are needed in titling, defining collateral, and executing collateral promptly. In some countries, such as Mexico, special courts have been created to deal with debt default cases, thereby speeding up the execution of collateral. These improvements are not solely to make it easier for banks to take over assets. Banks are in the business of taking deposits

48. Politicians may mistakenly seek to reduce the length of credit histories to help defaulters by eliminating their bad credit records after a short time. However, shortening credit histories not only reduces the value of the credit bureau to lenders, it also reduces the intangible asset value of a good credit record to potential borrowers. As a result, their borrowing costs will increase and their access to credit will decline.

and making loans, not managing assets. Collateral that is taken over is usually not worth as much to a new buyer as it was to the borrower, and thus its sale may not bring enough to repay the loan. Rather, the value of these legal improvements to banks is to create a credible threat that collateral will be executed and thus to create an incentive for on-time debt service by borrowers.

### *Vulnerabilities and Risks in the Renewed Growth of Public Sector Banks*

Public sector commercial and development banks still play a major role in many East Asian and Latin American countries, and, in some cases, their role is growing, reflecting the politics of postcrisis recovery. Public sector banks have a long tradition in Latin America and East Asia. Governments wanted to use public sector banks to lead the development “takeoff,” particularly industrial development; reduce the power of private bank owners, who were often foreigners; and provide funds to underserved groups and government supporters, as well as the public sector itself. Public sector banks also have often had a major role after financial crises, even though their bad lending was often a major factor in the crises.<sup>49</sup>

In Latin America in the 1990s, after a history of multiple, costly bailouts of public sector banks, a wave of bank privatizations occurred along with the general move toward market-based economies. However, major public sector banks often were not privatized. For example, in Argentina, most provincial banks were privatized after 1995.<sup>50</sup> Nonetheless, public sector banks constituted more than 30 percent of the system in 2000, reflecting the large size of Banco de la Nación, Banco de la Provincia de Buenos Aires, and Banco Hipotecario.<sup>51</sup> In Brazil, Banco do Brasil and Caixa Econômica Federal received large injections of fiscal resources. They remain among the top five banks and account for about 30 percent of the commercial bank system, even as the state banks were sold off, closed, or turned into agencies between 1996 and 2002. In addition, BNDES (Banco Nacional de Desenvolvimento Econômico e Social), a development bank that relies on borrowing and low-cost pension fund money for resources, had assets that would place it

49. Hanson (2004).

50. Clarke and Cull (1999, 2002).

51. Figures are based on Barth, Caprio, and Levine (2001a, 2001b) and refer to the share of government ownership in commercial banks in 150 countries, as reported by the country’s central bank.



among the top five banks. In Chile, despite its commitment to the private sector, Banco del Estado accounts for more than 10 percent of the banking sector. The development bank, CORFO (Corporación del Fomento de la Producción), remains active, particularly as a second-tier lender for small-scale finance. In Mexico, Nacional Financiera, a development bank, remains a major force in the financial market, even though the commercial banks that were taken over in 1982 were privatized in the first half of the 1990s, renationalized after the crisis, and then reprivatized. Peru also made a major effort to get rid of public sector banks—all but COFIDE (Corporación Financiera de Desarrollo) and Banco de la Nación, the government's international and domestic agents, were closed in the early 1990s, and the activities of those two banks were circumscribed. In some countries, privatization never really occurred. In Ecuador, public sector banks (Corporación de Fomento Nacional and Banco Nacional de Fomento) remained large, although lending operations have been limited since the crisis. In Uruguay, Banco de la República and Banco Hipotecario together represented more than 50 percent of the system in 2000.

East Asia did not experience a Latin American-type privatization wave in the 1990s,<sup>52</sup> but the relative importance of public sector banks declined as a result of their own problems and the growth of private sector banks and non-bank intermediaries. For example, in Indonesia, the share of public sector banks in loans fell from 55 percent in 1991 to 45 percent in 1995. In Thailand, Bank Krung Thai continued to be the second largest commercial bank, and the government continued to operate other financial institutions, such as the Savings Bank and various development banks. However, their importance as a source of loans to the private sector declined in the first half of the 1990s, as did the importance of all banks, with the growth of the finance companies.

The crises hit the public sector banks hard. Indonesia is probably the costliest recent example of weak lending by public sector banks. Indonesia's crisis is estimated to have cost more than 50 percent of GDP, with the public sector banks estimated to account for half or more of the total and the cost of cleaning up one public sector bank, Mandiri, equal to nearly one-fifth of GDP. In 2001 the Brazilian Finance Ministry recapitalized the federal banks in various ways to offset their bad loans at an estimated cost of more than \$30 billion (before recoveries on bad loans). In the Uruguayan

52. Sales of equity occurred in some cases, but the governments retained a controlling interest, if not a majority of the capital.

crisis, Banco Hipotecario, with assets of almost \$3 billion, collapsed because of the mismatch between deposits indexed to dollars and peso-denominated mortgages that, in many cases, had not even been finalized legally.

Despite their weak lending, governments have often used public sector banks as part of the crisis resolution process, sometimes in concert with asset recovery companies. Public sector banks also were used to take over the remnants of private banks and other intermediaries, for example, in Argentina, Indonesia, and Thailand. In Indonesia, public sector banks bought some of the failed banks' assets that were sold by the asset management corporation. Some consolidation also occurred in public banks in the 1990s. For example, in Indonesia, Bank Mandiri was formed from four public sector banks just before the crisis, and a fifth was added after the crisis. In Uruguay, Banco de la República took over the deposits of the bankrupt Banco Hipotecario after the crisis.

This process, as well as postcrisis policies to stimulate growth, has led to an increased role of public sector banks, or public sector-controlled banks, in many countries. It has taken a long time to sell off intervened banks because of the technical complexities of privatization, concerns about getting a reasonable price in a depressed economy, and the politics of sales when either the former owners or foreign banks are the most likely buyers. For example, in Indonesia, it took nearly six years from the founding of the asset management company, IBRA (Indonesian Bank Restructuring Agency), to sell off all the banks, with most of the sales coming in the last two years. In Jamaica, it took nearly five years to sell off the intervened banks. In Uruguay, rather than sell off the banks, a new public sector bank, Banco Comercial Nuevo, was formed from the consolidation of the remnants of Banco Comercio, Banco Crédito, and Banco Montevideo, which collapsed in the crisis, although that is now being privatized.

In addition, public sector entities are returning to credit markets. For example, in Peru, government agencies have become involved in lending—AgroBanco was set up in 2001 to begin limited agricultural lending; Mi Vivienda has become a dynamic force in second-tier lending to finance small-scale mortgages, using the funds that remained after Banco Vivienda's closure; and Banco de la Nación has been reauthorized to expand its deposit-taking and lending in areas that are underserved by private banks. Indonesia created numerous small-scale lending programs, despite having one of the most successful small-scale lenders in the world: the public sector Bank Rakyat Indonesia. And public sector bank credit has been expanding. Indonesia's Bank Mandiri, Indonesia's regional development banks, and Thailand's

Bank Krung Thai and other public sector banks were exhorted to increase their lending in recent years. Despite these exhortations, in all these cases loans have grown only slightly faster than overall bank lending, which has been rising fairly rapidly. In Brazil, also, lending by Banco do Brasil and BNDES has been growing slightly faster than bank lending in general.

These recent developments reflect the traditional motives for public sector banking, probably enhanced by restrictions on economic policy facing the new governments. The sale of public sector banks has always been complicated by issues of political power, particularly sales to foreigners. Governments have always regarded public sector banks as a policy instrument to jump-start development. Governments are impatient to increase credit, even if much of the lack of credit relates to government debt's crowding out of private sector borrowing. Governments have also always regarded public sector banks as a way to channel credit to groups that have lacked access and to political supporters. Political pressures for such directed credit tend to rise as private credit becomes scarce. Moreover, these traditional arguments and pressures for public sector banking are probably felt more strongly in today's world when governments have limited room for maneuver—fiscal deficits are limited by IMF programs and the need to keep borrowing costs low to maintain country ratings, while monetary expansion is limited by the inflation targets of independent central banks. In these circumstances, the resurgence of public sector banking and interventions in credit markets are not surprising.

At the same time, the costs of such public sector pressure for expanded lending are also becoming evident. For example, the costs of the Indonesian small-scale credit programs as well as the write-offs of old small-scale credits have been large. The defaults on Korean credit cards have been costly to banks and to the government-owned Korean Development Bank. Bank Mandiri of Indonesia experienced substantial losses on the loans it purchased from the Indonesia Bank Reconstruction Agency; the central bank ordered it to increase its provisioning substantially, even though the loans were reported to be performing. Since the election, a substantial amount of bad loans was discovered, often linked to well-connected parties. Bank Krung Thai was similarly required to increase provisioning by Thailand's central bank recently. The other Thai government banks have also experienced non-performing loans of 10 percent or more, in part reflecting their leadership in the government's village fund and low-cost credit schemes. Thus the resurgence of public sector banks represents a risk to governments because of the weaknesses of their lending.

*Risks in the Slowdown of Major International Banks'  
Expansion and the Entry of New Players*

A standard recommendation of the 1990s to ease the problems of the financial system was to privatize public sector banks and allow the entry of well-known international banks. It was thought that these banks would increase competition and lending to underserved groups with their lending expertise and skills. Moreover, they were likely to absorb costs of any losses without expense to the government rather than suffer a reputational loss. In Latin America in the 1990s, the presence of well-known international banks and major Spanish banks grew substantially, through purchases of private and public sector banks, direct entry, and growth of existing offices. In East Asia, in contrast, most countries limited the presence of such banks, and their shares of the banking market rose little over the first half of the 1990s. For example, in Indonesia, the share of foreign and joint venture banks in total credit remained about 9 percent over the period 1991–96.<sup>53</sup>

Once the international banks entered the countries, their performance was good, but not as good as their strongest proponents had claimed. These banks did indeed bring new approaches, often played important roles in developing the new government bond markets, and stimulated competition for the best borrowers. They also did not impose any costs on the countries during the crises of the 1990s.<sup>54</sup> However, credit to underserved sectors did not expand substantially after these banks entered the market. Critics of large international banks have argued that they basically focus only on large, well-known borrowers, and it is generally agreed that they have lowered costs and improved service to these customers. However, foreign banks with a large presence have also tended to provide at least as much small-scale lending as large local banks, according to the only econometric study on the issue.<sup>55</sup>

53. Indonesia eased bank entry significantly in 1988, and the number of domestic and international banks rose significantly. However, because of difficulties in enforcing contracts in the Indonesian legal system, international banks usually signed their loans offshore; the local bank offices focused mainly on client services and loan origination.

54. One exception was Banco Comercial in Uruguay, which went bankrupt in the crisis that began in 2001. It was run by local and Argentine investors, who had 25 percent of the capital, but well-known international banks had 75 percent of the capital. The case has generated various lawsuits. Two international banks did leave Argentina after the government generated massive losses in the banking system by an asymmetrical conversion of dollar deposits and loans into pesos.

55. Clarke and others (2005). The same study shows that international banks with a small presence did not lend to small businesses as much as small domestic banks, but such international banks were probably set up as offices to service international clients.

Both types of banks have faced two major problems in expanding credit to underserved borrowers. First, public sector banks offer loans to these groups with low interest rates and do not pressure borrowers to repay. For example, agricultural lending in Brazil, Mexico, and Uruguay and mortgages in Brazil and Uruguay have been the province of public sector banks, which charge low interest rates and allow easy rescheduling and defaults. Lending in those sectors, even to those borrowers that did not obtain loans from the public sector banks, probably face high default risks owing to the credit culture and the weaknesses of the local legal system in enforcing loan contracts and executing collateral.<sup>56</sup> Second, international banks have been frustrated by the lack of information on borrowers, as have local private banks. However, progress is occurring in the informational and legal areas in many countries. This progress, together with the loss of business of the best borrowers to international and domestic bond markets, has led international banks, as well as local banks, to expand consumer, small-scale, and mortgage lending, for example, in Brazil, Mexico, and Peru.<sup>57</sup> Citibank has played a major role in issuing credit cards in Indonesia and other East Asian nations.

In any case, the ability to use well-known international banks to resolve potential financial system problems largely became moot, because these banks have been less interested in such expansion. There are probably two reasons for this change. First, profits in developing markets have not been as high as expected, particularly since the crisis in Argentina. Second, recent strategies of some of the large international banks have focused on domestic markets in the United States (Citibank, the consolidations of Bank of America) or expansion within the European Union (Santander, Banco Bilbao Vizcaya Argentaria [BBVA]). In Latin America, the net result has been either outright withdrawal, such as the withdrawal of Bank of Boston from Latin America after it was absorbed by Bank of America and the withdrawal of Santander from banking in Peru when it switched its investment into pension fund management, or decisions to base growth solely on capital

56. In Ecuador, the bankruptcy of the public sector intermediaries left room for a dramatic growth of private intermediaries focused on small credits in the last two years, for example, by Credi-Fe, a subsidiary of Banco Pichincha. These intermediaries' loan expansion has been based on a strategy of identifying clients who will repay and has been highly profitable.

57. "Mexican Banks Ride a Strong Wave of Lending: After Years of Stagnant Growth the Industry Is Seeing a Dramatic Upturn," *Financial Times*, March 3, 2005; "Brazil's Banks Adjust View of Their Market," *New York Times*, April 9, 2005.

generated by the existing bank assets in the country, which seems to be Citibank's strategy. In East Asia, Indonesia's sale of eight intervened banks between 2002 and 2004 brought bids from only one well-known international bank, which eventually bought one of the banks; other well-known international banks were not interested in expanding their existing operations in Indonesia with a merger. Korea's sale of banks initially went to investment banks, not well-known international banks, although recently Citigroup has bought the Carlyle Group's holdings in KorAM and Standard Charter bought Newbridge Capital's holdings in Korea First. Well-known international banks may still be interested in expansion in some markets, such as Brazil, China, India, Korea, and Mexico. However, interest in expanding elsewhere has been limited, particularly where the political and legal environment is uncertain.

While expansion of well-known international banks has slowed, some new players have offered bids in privatizations, and banks from developing countries have expanded regionally. For example, Lone Star, Newbridge Capital, and Carlyle purchased equity in the Korea Exchange, Korea First, and KorAM banks, respectively. Salvadoran banks have expanded in Central America; Banco Pichincha of Ecuador has expanded into neighboring countries. Royal Bank of Trinidad and Tobago purchased one of Jamaica's intervened banks and is expanding in the region. Salvadoran banks are expanding in Central America. In East Asia, Singapore's state investment arm, Temasek Holdings, and Malaysian banks have expanded through purchases of intervened banks.

While providing capital and new techniques, these banks may not have great concern for their international reputation and are difficult to supervise by local authorities. After international expansion, if problems occur in their home markets, they may simply withdraw, leaving the government to resolve the issues with depositors and manage the loans. Problems such as these occurred with Serbanco of Chile in Peru and with Banco Galicia of Argentina in Uruguay. Regarding supervision, it may be hard to evaluate even the capital of these banks, since the bank often is legally owned by an entity located in an offshore financial center with limited cross-border supervision. It is true that in Korea the banks were turned around by their new owners and later sold to reputable international banks, but it is easy to imagine different scenarios that might have occurred. Hence these banks, unlike the well-known international banks, may pose as much risk to the government as local banks or even more.

## Reducing Risks: Prudential Regulation and Supervision, Market Discipline, Information, and Legal Improvements

After crises, governments have typically attempted to reduce financial sector risks by strengthening prudential regulation and supervision. The intent is to limit the expansion of weak banks and the tendency of bank managers to adopt high-risk, high-return lending strategies that leave the depositors and the government at risk. In both East Asia and Latin America, the 8 percent ratio of capital adequacy to risk-weighted assets rule (CAR) was widely adopted where it was not already in place, and in some Latin American countries where the requirement existed it was raised. The classification of nonperforming loans and provisioning also was strengthened, and exposure limits were reduced. East Asian crisis countries also strengthened their regulation and supervision after the crisis.<sup>58</sup> In addition, the high ratios of government debt to deposits represent collateral for liquidity support in the event of a bank run on performing assets unless there is a government default. Of course, at the same time, the high level of government debt (typically with a zero risk weight) also means that not much capital is needed to comply with the 8 percent CAR. Hence the capital at risk by bank owners that is available to buffer losses to depositors is sometimes very low compared to the regulatory figure of 8 percent.

Prudential supervision has been strengthened as well. The process of improving prudential regulation and supervision has been supported by the IMF–World Bank Financial Sector Assessment Program, which provides governments with a confidential evaluation of the country's prudential financial regulation and supervision, including the Basel core principles for supervision, the International Organization of Securities Commissions principles for capital markets, and the principles for systematically important payments systems.<sup>59</sup>

The international comparisons with other countries and the pressures from international bond markets and, in some cases, the IMF have contributed to improvements in prudential regulation and supervision. Most countries have indicated their intention to adopt Basel II standards gradually. Among other things, Basel II would link bank capital to operational as well as credit risk and encourage banks to develop better risk management

58. See Lindgren and others (1999).

59. However, Indonesia, Malaysia, and Thailand have not participated in the Financial Sector Assessment Program.

systems. In addition, some countries have begun to consolidate supervision of banks, other financial intermediaries, and capital markets in a single agency, in an attempt to improve supervision. However, these complicated changeovers may create a distraction from the current need to improve supervision and may even weaken supervision during their implementation.

The issue, however, is whether the changes in prudential regulation and supervision will provide more protection from crises than in the past, given the problems of ensuring compliance. Perhaps the worst example in the past is the case of Indonesia. The 1988 financial liberalization was followed by a strengthening of prudential regulation, including higher capital ratios and tighter exposure limits.<sup>60</sup> However, the capital requirement was phased in for public sector banks, where nonperforming loans were high, and the reduction in exposure limits was largely evaded by portfolio swaps involving off-balance-sheet guarantees. Most participants in the financial sector considered supervision to be weak and corrupt. But issues of the performance of regulation and supervision are not confined to developing countries. Perhaps the best-known case is the U.S. savings and loan crisis. The U.K. Financial Service Authority has recently come under criticism both for failing to prevent some problems and for engaging in overly heavy-handed regulation. Shadow financial regulatory committees of the United States, Japan, and Europe have criticized Basel II for its complexity, emphasis on supervision, and lack of emphasis on market discipline.

Issues of weak supervision and regulatory forbearance, particularly for public sector banks, have been major issues in many countries, not only before but even after crises.<sup>61</sup> In most developing countries, private banks have been intervened only after they were unable to meet their obligations in the payments system, not when supervisors found them insolvent, although the usual rule is that banks become insolvent well before they become illiquid. The recent crisis in the Dominican Republic was triggered by a bank collapse related to a diversion of deposit fraud (commonly called a “bank within a bank”) that had gone undiscovered for many years. It remains to be seen whether prompt corrective action procedures have been strengthened enough to change such outcomes.<sup>62</sup>

60. Cole and Slade (1996).

61. Lindgren and others (1999).

62. In the United States, after the banking and savings and loan debacles of the 1980s and early 1990s, the deposit insurance agency is legally required to intervene in banks well before estimated capital is lost. Although there are still complaints that intervention is too slow, the change in procedure probably reduces losses to the deposit insurance agency (Benston and Kaufman 1997). Similar procedures have been introduced in some developing countries, but the legal requirement for intervention is often missing.



The question is whether the recent strengthening of prudential regulation and supervision can deal with the increasing complexities of banking and the real obstacles that faced prudential regulation and supervision in developing countries in the past and continue to face them today. Prudential regulation and supervision are technically difficult. Banks are inherently complex organizations. These complexities are complicated by weak auditing and accounting standards in many countries. Moreover, the technical difficulties of supervision are continually increasing with the growth of industrial financial conglomerates, complex hedging transactions, and the opening of capital accounts that allow funding and even capital to be shifted offshore at electronic speed. In this regard, despite improvements in supervision, most countries still face well-known difficulties in the supervision of conglomerates' consolidated activities and intermediaries' offshore activities. And supervisors' salaries are usually far below salaries paid by private sector firms for mastering the technicalities of complex transactions and the risk management systems that are supposed to be supervised now and under Basel II.

The political dimension is probably an even bigger obstacle to strong prudential regulation and supervision. In many developing countries, the owners of private banks are politically powerful; in small countries, bank owners and large borrowers are often one and the same. A good supervision of bank activities, particularly prompt corrective action, requires substantial political backing, which often does not exist. Hence there is a tendency for forbearance, particularly given the costs of resolving a large bank.

Attempts to avoid this problem by making supervisors independent or protecting them legally have many problems. Legal protection for supervisors has often been difficult to achieve.<sup>63</sup> Even if it were achieved, the protection would be subject to the judicial problems that exist in many countries. Moreover, empirical evidence suggests that supervisory independence and greater supervisory authority have had little effect on reducing the negative influences of corruption on banking and may even be associated with greater corruption.<sup>64</sup>

The supervision of public banks faces additional problems. Such supervision need not protect the public against the adoption of risky, high-return lending strategies by the managers—unlike private bank owners, public

63. An important issue with legal protection is that it could protect supervisors who seek bribes. To reduce this problem, legal protection would need to be supplemented by alternatives to the legal system under which supervisors can be charged with such malfeasance.

64. Barth, Caprio, and Levine (2001a, 2001b, 2006).

bank managers would not benefit from such strategies. However, a major role of public banks is to carry out government-directed programs to borrowers that often do not repay, using their deposits and borrowings that effectively have a government guarantee. Public sector banks also may lend to well-connected parties. The costs of these policies are often hidden by the complexity and intertemporal nature of banks' accounts. Good supervision of public sector banks could bring out the costs of these programs to the government and the public. However, pressures within the government are likely to be against such disclosure, particularly if the press and political opposition to the government are weak.<sup>65</sup> Intervention in public banks, which tend to have far worse portfolios than private banks, is usually politically impossible. Nonetheless, there are some signs of improvement in the area of public sector banks. For example, in both Indonesia and Thailand recently, supervisory authorities have publicly taken action to require reclassification and additional provisioning of loans held by public sector banks. In Brazilian states and Mexico, shifting government programs from banks to government agencies that are financed through the budget not only avoids contingent liabilities for the government but also requires a review of the programs during the annual budget debate.

Market discipline is another, complementary approach to reduce the risk of crises that governments in East Asia and Latin America have begun to use. The idea is that depositors will avoid weak banks and thus limit their expansion, which otherwise might turn into a crisis. Some arguments and evidence exist that market discipline can work in developing countries.<sup>66</sup>

The efforts to improve market discipline include requiring banks to make information more frequently available on portfolios and performance. Accounting standards and auditing are also being improved gradually. Basel II includes reference to improving market discipline as a complement to regulation and supervision.

Market discipline faces significant problems under the current financial framework, however. Banks' balance sheets and the contracts that are increasingly part of their business are inherently complex, as experience in industrial countries shows. The average depositor in a developing country would certainly have trouble evaluating risks in a bank balance sheet, and given the limited role of stock markets in many developing countries, there are few market analysts to assist in the process.

65. Barth, Caprio, and Levine (2001a, 2001b, 2006) provide some evidence supporting this view.

66. Caprio and Honohan (2004); Martínez-Peria and Schmukler (2001).

Large, savvy depositors can exert market discipline, but their role is often blunted by deposit guarantees and public sector banks—depositors are likely to pay little attention to a bank's performance if their deposits are protected by deposit insurance or the government. In most countries, deposit insurance covers individual deposits up to large multiples of per capita income, and in most cases the blanket guarantees offered in crises are still in place. One might expect that in such circumstances there would be high capital requirements, strong supervision, and strong prompt corrective action in order to limit moral hazard, but there is no evidence of such relationships.<sup>67</sup> Some attempts have been made to limit deposit insurance on large deposits or on deposits paying excessive interest rates, such as might be offered by weak banks. However, in crises, deposit insurance or blanket guarantees have usually been extended, *ex post*, to deposits that were uncovered. The increased coverage reflects both the political power of large depositors and a more general government concern that a large bailout will be needed if the large depositors initiate a run on a bank. Some governments have attempted to cope with the deposit insurance issues and to increase discipline by charging risk-based fees for deposit insurance. The theory is that differential fees would slow deposit mobilization and lending by weaker banks. However, although a differential in fees is better than a single fee for all banks, in practice the actual differences in fees are far less than the differences in bank risk.<sup>68</sup> The limited differences in fees probably reflect the political influence of private domestic bankers, who benefit the most from deposit insurance. Thus the actual, small differences in fees for deposit insurance are likely to have only a limited effect on deterring deposit mobilization and lending by weak banks.

In sum, governments are attempting to use both stronger prudential regulation and supervision and market discipline to limit crises before they start by encouraging banks to improve their balance sheets and risk management and by limiting the growth of weak banks. However, technical and, more important, political issues represent major challenges to these approaches and are likely to limit their impact on crisis prevention.

## Summary and Conclusions

Rapid world growth and a low-interest-rate environment have made the postcrisis recovery easier, particularly in Latin America. Nonetheless, the

67. Barth, Caprio, and Levine (2001a, 2001b, 2006).

68. Laeven (2002a, 2002b, 2002c).

crises of the 1990s have left major challenges, risks, and vulnerabilities in the countries of East Asia and Latin America:

—High external debt ratios still represent a source of vulnerability in some countries, particularly in Latin America. Countries often have not taken sufficient advantage of their savings on debt service in today's low-interest environment to reduce their excessive debt. Slowing growth and rising interest rates could create problems.

—High ratios of government and central bank debt to deposits represent a major challenge to growth. Government and central bank debt absorbs much of the small volume of bank deposits in most Latin American economies and is also an issue in Indonesia; in most cases, the debt arose from the crises and has not been reduced much by tight fiscal policy. The debt is a challenge because it, not banks' unwillingness to lend, limits credit to the private sector—a key factor in growth—and access of small borrowers to credit.

—The high government debt in the banking system represents new risks, not just default risk (which is less than on private credit) but market risk as well.

—Credit risk remains a source of vulnerability, from dollarization, from banks' entry into new lines of business, such as consumer credit, mortgages, and small business lending, and from financial industrial conglomerates.

—A potentially costly risk exists in the resurgence of public sector banks. These banks' expansion reflects an attempt to satisfy political demands for faster credit growth and loans to particular groups, but costs of this expansion are already appearing.

—A potential vulnerability exists in the expansion of regional banks; the expansion of well-known international banks is likely to be limited, except in a few countries.

—Another vulnerability exists in the increasing links between onshore and offshore banks, which allow funds and even capital to move back and forth in split seconds.

Governments have attempted to meet these risks in a variety of ways:

—Countries, particularly in East Asia, have built up their international reserves and reduced their short-term international debts to reduce the risks of sudden shocks.

—Countries have taken advantage of the low-interest-rate environment to refinance high-interest-rate external debt and lengthen the maturities of international debt.

—Governments have developed domestic government debt markets and taken advantage of them to reduce their reliance on foreign currency—

denominated debt. While this has contributed to crowding out, it also has reduced currency risk for the government and provided banks with liquid assets that generally will be serviced.

—Government debt markets and low inflation have also contributed to development of the domestic bond market, but equity markets remain stagnant in most Latin American countries.

—Banks are improving their risk management.

—Risks of bank expansion into new areas are being reduced, and credit access is being improved by development of credit bureaus that provide improved information on borrowers. Credit bureaus help to reduce risks and provide an incentive for prompt debt service: the development of the intangible asset of a good credit record.

—Credit risks are also being reduced, albeit slowly, by improvements in the legal system, titling, definition and execution of collateral, and the setup of special courts to handle debt issues.

—Government agencies are replacing public sector banks in a few countries, such as Brazil and Mexico, which reduces the contingent liabilities facing government and forces annual performance review as part of the annual budget debate.

—Governments are attempting to improve prudential regulation and supervision, but this may not help much. Technical problems, such as offshore banking and conglomerates, not only remain but may be increasing. More important, political issues related to politically influential businessmen and the role of public sector banks in financing them and government programs will continue to hinder bank regulation and supervision. This is particularly true in countries that have not taken advantage of the recent crises to undertake reform.

—Governments are also attempting to improve the market discipline of weak banks, but this is blunted by high levels of deposit insurance and government guarantees. Attempts to use risk-based deposit insurance that charges domestic banks fees reflecting their high risks face political difficulties.

The balance of these challenges and vulnerabilities remains unclear. It seems likely that some new crises are likely to occur in Latin America, when countries that have remained highly indebted, internally and externally, and still have high fiscal deficits face a higher-interest-rate environment, a slowing world economy, and deteriorating commodity prices, as in the past. Domestically, banking systems seem to have improved somewhat in most of the larger countries. However, they continue to face challenges to expand private credit, particularly to small borrowers, that will be hard to overcome

given the high government debt in many Latin American countries and Indonesia. The banks also face numerous credit risks, and these have increased in some cases. Perhaps most vulnerable are small countries, like the Dominican Republic, where the links among government, banks, and industry are strong, and well-known international banks have lost interest in expanding.

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