CAPITAL FLOWS AND FINANCIAL CRISES

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2

Contending with Capital Flows: What Is Different about the 1990s?

Barry Eichengreen and Albert Fishlow

Recent financial difficulties in Mexico and Asia have been widely seen as the latest in the series of debt crises that have punctuated lending by the industrialized countries to the developing world. This characterization of the historical record implies, of course, that smooth capital transfers are the norm and disruptions to international financial flows are the punctuation marks. The opposite might also be argued: debt-servicing difficulties, the suspension of voluntary lending, and calls for third-party intervention—the constituents of which are called debt crises—are the normal state of affairs. Thus the three short, post–World War I periods when large quantities of international portfolio investment took place—1924 to 1929, 1976 to 1981, and the 1990s to date—were the exceptions. Either way, the repetition of events prompts a search for parallels and policy precedents.

Those who insist that history repeats itself would nonetheless acknowledge that it never repeats itself in the same way. This observation is pertinent to the three post–World War I episodes of large-scale foreign lending and to the crises that followed. Perhaps the most prominent difference across these episodes lies in the method of finance. Although trade credits, fixed-interest securities, and direct foreign investment (DFI) were important in each period, the three episodes can be differentiated from one another by the distinctive financial market institutions and arrangements that mediated the major part of the flow of funds.

In the 1920s the U.S. bond market was for the first time the vehicle for portfolio capital flows from industrial to developing countries. Government bonds were underwritten by investment banks in New York and marketed to institutional and private investors. During the second half of the decade, a large secondary market developed for the bonds of industrial and industrializing economies. For a country seeking access to foreign cap-

ital, the critical steps were to establish a relationship with a reputable investment bank and to arrange a bond flotation, whereas the key to retaining access was to ensure that the bonds subsequently traded at prices close to their par values.

In response to the defaults of the 1930s, the bond market fell into disuse. After an extended hiatus during which little portfolio lending took place, commercial banks entered the market in the second half of the 1960s. The volume of bank lending to less-developed countries (LDCs) increased enormously during the "recycling boom" that followed the oil shock of 1973. Money-center banks originated and syndicated dollar loans to developing countries; in contrast to the preceding episode of bond finance, the banks themselves held these obligations. With the subsequent rise of securitization and a secondary market in LDC debt, this process of bank intermediation increasingly resembled the bond finance that had preceded it. Critical differences remained, however. One was the failure to subject the decision to extend a bank loan to the government of a developing country to the market test. Rather, bank loan officers made the decision of their own volition. It had only a muted effect on the market valuation of the bank's equity.[1] This was in contrast to the era of bond finance, when each bond issue had to float on its own bottom. At that time, a large number of individual investors decided whether to subscribe to each bond issue, thereby subjecting it to a market test.

Following the 1982 debt crisis and the subsequent effort at remedy launched by the Baker Plan in 1985, when commercial banks engaged in limited amounts of concerted lending, the banks withdrew from lending to the governments of developing countries. At the end of the 1980s, when large-scale lending resumed, the new conduit for capital transfer was equity markets. Trade credits, fixed-interest securities, and DFI remain important vehicles (as they were during the two earlier waves of foreign lending), but an unprecedented volume and share of capital flows to developing countries began to take the form of equity purchases by individual investors. These were made available through their institutional representatives: mutual and pension funds. To a greater extent than in the 1920s or in the 1970s and early 1980s, these are investments in private and semiprivate companies rather than in government obligations. They are residual claims to the profits that remain after debts with higher seniority have been serviced and promise a return denominated not in dollars but in local currency.

These differences in the structure of lending by developed to developing countries have had an important influence on the course and consequences of debt crises in the twentieth century. They conditioned the responses of lending and borrowing governments, of multilateral organizations, and of market participants alike.

1. This point should not be overdrawn. Megginson, Poulsen, and Sinkey (1995) identify a statistically significant, if small, negative effect of the announcement of syndicated loans to Latin American borrowers on the stock prices of the issuing banks.

We develop these points by highlighting three differences among the crises of the 1930s, 1980s, and 1990s. The first is their scope. Whereas the 1930s' crisis was global, that of the 1980s was more selective, affecting several regions (Latin America, eastern Europe, and Africa, but not East Asia), and those of 1995–1997 were isolated in that they were limited to a single country (e.g., Mexico) or a single region (e.g., Asia). In part these differences are attributable to the severity of the macroeconomic shock. In the 1930s the crisis was global because the Great Depression was global; all capital-importing countries were rocked by the collapse of the commodity markets on which external debtors relied to generate foreign exchange, and by the debt deflation and high real interest rates that disrupted financial markets. Not even countries with light debt loads and flexible economic structures were immune. The crises of the 1980s and 1990s were less general because the macroeconomic shocks that contributed to them were smaller. Real interest rates rose, as in the 1930s, but production and imports in the industrial world did not collapse.

In addition to the severity of global economic disturbances, intervention by creditor-country governments and multilateral institutions affected the scope of the three crises. This is the second difference. In the 1920s, when money-center banks floated but did not themselves hold significant quantities of bonded debt, default did not jeopardize the stability of creditor-country banking systems. Consequently, default elicited little response by creditor-country governments concerned for the stability of their financial systems. In the 1980s, by contrast, the risk to creditor-country banking systems prompted the industrial countries to support early and decisive intervention by the International Monetary Fund (IMF). In 1995–1997 there was also intervention, but it operated through the leadership of regional powers such as the United States (in the case of Mexico) and Japan (in the case of Thailand), as well as through multilaterals such as the IMF. Once again, crises in the developing world pose a threat to the stability of financial institutions in developed countries, but that threat is more selective than it was in the 1980s in terms of which intermediaries are at risk and which countries are affected. The Mexican crisis posed a threat mainly to Wall Street firms with heavy exposure to Mexican debt, whereas the Asian crisis was a problem mainly for Japanese banks with heavy commitments in Thailand. Such specificity resulted in a regional response.

The third difference between episodes lies in the response of the borrowing countries themselves, which took the form of import substitution in the 1930s, fiscal adjustment in the 1980s, and monetary adjustment in the 1990s. In part the different responses reflected different external conditions. In the 1930s the global nature of the crisis and the absence of in-

tervention to contain its spread prompted developing countries to de-link themselves from the international system. With the collapse of global financial and commodity markets, the capital importers resigned themselves to life without foreign funds. That also meant reduction of external obligations, which was accomplished through policies of import substitution, reducing dependence on foreign markets and foreign capital. In the 1980s, import substitution was less attractive because export markets remained buoyant even when portfolio lending was suspended. But the sharp curtailment of lending to LDC governments forced those governments to institute budget cuts. Fiscal correction became the principal vehicle for external adjustment. In the 1990s, foreign capital flowed heavily to private and semipublic enterprises; therefore, governments did not make use of foreign funds to finance their budget deficits to the same extent, and hence, there was less need for fiscal correction.[2] But because most equity claims were denominated in the currency of the borrowing country, foreign investors were exceedingly sensitive to the specter of devaluation. Adjustment was therefore effected through the use of monetary as well as fiscal instruments. Mexico and Thailand both raised interest rates to reassure equity investors of their commitment to sound currency policies.

But external conditions do not provide the entire explanation for the differing responses of capital-importing countries. Domestic policies were no less important in the periods leading up to each of the three crises. In the 1990s many countries sought to sterilize capital inflows through the pursuit of restrictive monetary policies. Governments resisted the temptation to finance deficit spending with increased supplies of money. Instead, they accumulated international reserves in record quantities, acquiring a cushion that could be used when inflows dried up. (But as the Mexican and Thai cases both illustrate, not all countries used that cushion productively to buy time for adjustment.) The crisis of 1982, by contrast, was preceded by a period of rapid inflation, generated largely by the need to finance budget deficits. Without a cushion of reserves, adjustment was necessarily drastic, and harsh fiscal retrenchment was essential. The late 1920s more closely resembled the 1970s than the 1990s. Fiscal policies expanded as capital flowed in; borrowing countries accumulated budget deficits rather than international reserves. But whereas prices rose rapidly on the eve of the 1982 crisis, they fell alarmingly in 1931. In the 1980s it was possible for countries to price their exports back into international markets by curtailing their inflation rates; in the 1930s, when falling prices

2. This is not to say that fiscal retrenchment was unimportant. But in the countries at the center of our story, it had a small effect compared with the last time. For example, while under President de la Madrid, the Mexican fiscal adjustment was on the order of 10 percent of gross domestic product (GDP), this time it appears to be closer to 2 percent. The Thai budget was already in balance when that country's crisis struck.

were already severely straining mortgage markets, financial institutions, and labor market conventions, the scope for adjustment was more limited.

In the remainder of this chapter we elaborate these arguments from a historical vantage point. Each main section focuses on one of the three twentieth-century episodes of large-scale lending to developing countries. The goal of each section is to highlight distinctive institutional features of the operation of the lending process and to link them to the response to crises. In the conclusion we synthesize our findings and glean the policy implications.

The Era of Bond Finance

By the 1920s there was nothing new about the use of bond finance to transfer funds to developing countries. The bond markets of London, Paris, Berlin, and Amsterdam had been the vehicles for massive amounts of capital transfer to the emerging markets of the United States, Canada, Australia, Latin America, and Russia in the century preceding World War I.[3] The prewar record was checkered; lending to these and other countries was interrupted by defaults in the 1820s, 1850s, 1870s, and 1890s. But although lending was sometimes interrupted, there was no extended hiatus like the one that began in the 1930s, because each wave of default was confined to a relatively small number of countries. Reflecting this fact, creditor-country experience was reasonably satisfactory, especially in Britain, where capital markets functioned with a minimum of government interference, and export-oriented infrastructure projects were financed in overseas regions of recent settlement. Results were least satisfactory for countries such as France, whose government sought to use international investment as a foreign policy lever to encourage investors to finance the fiscal ambitions of Russia, Egypt, and other interventionist states.

The global debt crisis of the 1930s was unprecedented in scope, superseding the more limited defaults of the nineteenth century. Understanding this crisis requires first comprehending what changed between the prewar and interwar period, setting the stage for global defaults.

Changes in the structure and operation of the markets are not hard to identify. In fact, they affected the origin and destination of foreign funds, the structure of the intermediation process, and the uses to which foreign finance was put. Many accounts focus on the rise of New York relative to

3. There is a vast literature on pre–World War I foreign lending, synthesized by Fishlow (1985) in "Lessons from the Past: Capital Markets in the 19th Century and the Interwar Period," in M. Kahler, ed., *The Politics of International Debt* (Ithaca: Cornell University Press, 1985), pp. 37–94.

London and the continental European financial centers as a source of foreign funds.[4] The United States, traditionally a recipient of international capital, first shifted from net capital importer to net capital exporter in the 1890s. During World War I it sprinted to the head of the pack of lending countries. The United States was the one major industrial country whose economy was not severely disrupted by the war; it was the one place where saving naturally exceeded investment, and therefore it was an obvious source of foreign funds.

Prior to the war, U.S. lending predominantly comprised direct investment in railways, sugar mills, and mining ventures in the Western Hemisphere. The war years saw large-scale, officially sanctioned bond flotations on behalf of France, Britain, and other Allied governments. But it was the sale of U.S. government bonds as much as foreign flotations that awakened the American bond market from its dormancy. Whereas in 1914 there had been no more than 200,000 bond buyers in the country as a whole, wartime Liberty Loan campaigns raised that number to the millions (Stoddard 1932, 43). Once jarred from its slumber, the bond market was awake for good. Estimates for 1897 show that more than 90 percent of U.S. foreign investment was direct; by 1930 the share of portfolio investment had risen to more than 50 percent.

U.S. financial intermediaries took aggressive steps to compete in this market. They had to secure an agreement with a foreign government or corporation to underwrite a bond issue, and they had to place the bonds with investors at prices that yielded an acceptable profit margin. The inexperience of many U.S. banks may have contributed to subsequent difficulties; Mintz (1951) shows that financial institutions that were newly entering the market for foreign debt were disproportionately associated with issues that defaulted in the 1930s.

Financial innovation was a concomitant of rapid expansion. In the 1920s investment trusts played much the same role as emerging-market mutual funds in the 1990s. They pooled the subscriptions of their clients, placed their management in the hands of specialists, and issued claims entitling holders to a share of their earnings.[5] They facilitated position-taking in foreign securities by investors who would have been otherwise deterred by transaction and information costs. Commercial banks established bond departments and securities affiliates, much in the manner that commercial banks in the 1990s created their own mutual funds.

It is hard to ascertain how well or poorly this process worked independent of the unsatisfactory outcome whose causes we are seeking to comprehend. Senator Hiram Johnson, head of the congressional 1931–1932 foreign bond investigation, argued that these structures created pervasive incentive problems. Those who placed their money in investment trusts, he and other critics alleged, were given an exaggerated sense of the extent of portfolio diversification and underestimated the risks. Those who purchased foreign bonds through the bond departments and securities affiliates of commercial banks failed to realize that these investments entailed risks unlike those attached to U.S. government securities. The banks, for their own reasons, were loath to advertise the risks. Underwriting divisions pressed securities affiliates and bond departments to place the issues they originated; between 1922 and 1931 the number of national banks with securities affiliates grew more than tenfold. They opened ground floor branch offices to encourage walk-in business and advertised their wares in the pages of *Harper's* and the *Atlantic Monthly*. Having created this infrastructure, bond departments and affiliates then pressed the underwriters to make additional bonds available for placement.

Come the 1930s, this process was viewed with considerable disenchantment:

> Up to the slump of 1920, these new clients sought the branch-offices. After the slump, the branch-offices sought them. They did so through hosts of young salesmen, carefully schooled in "high pressure" methods of breaking down "sales resistance." Their keynote was pressure—all down the line. The home office kept the branch-offices "on their toes" by a stream of phone calls, "flashes," "pep-wires," and so forth. The branch managers kept the young salesmen all "burned-up" with "pep-talks," bonuses, and threats of getting fired. Everybody in authority demanded "results"; which meant, more sales. Every salesman must sell his "quota." What he sold, how he sold it, and whom he sold it to, did not much matter. Verily, business had got into banking; or, rather, "banking," in the old sense of the word, had been kicked out of doors by business." (Stoddard 1932, 106)[6]

When foreign governments sought access to the New York market, they found a ready reception. Many had frequented the City of London or the Paris Bourse before the war; Argentina, Brazil, Australia, and Canada were among the leading borrowers of the 1920s. They were joined by the newly truncated Germany and the successor states of the Austro-Hungarian Empire, which were among those that had suffered the most severe wartime devastation and had the heaviest reconstruction costs. Some, such as Germany, were saddled with reparation burdens that placed heavy short-term

4. See, for example, Mintz (1951).
5. The role of investment trusts is relatively neglected in the literature; two contemporary discussions were written by Speaker (1924) and Robinson (1926).
6. Recent research casts some doubt on the extent to which securities affiliates were really at fault. See Krosner and Rajan 1994.

drains on their balance of payments, encouraging them to seek external financing to bridge the gap. The high interest rate policies adopted by their central banks to limit reserve losses in turn encouraged foreign investors to purchase their high-yielding securities. As would again be the case in the 1970s and 1990s, the development of new markets in countries in fragile political positions was integral to the lending process.

Reparations and infrastructure investments had to be financed out of government budgets. Central, state, and municipal governments borrowed abroad to finance their operating expenses. While funds sometimes were used for the construction or modernization of roads or port facilities that served to enhance export competitiveness, more commonly they were devoted to paying public employee salaries and transfer payments that were unlikely to augment export revenues. Clearly, if exports suddenly turned down, debt service would become a very serious problem.

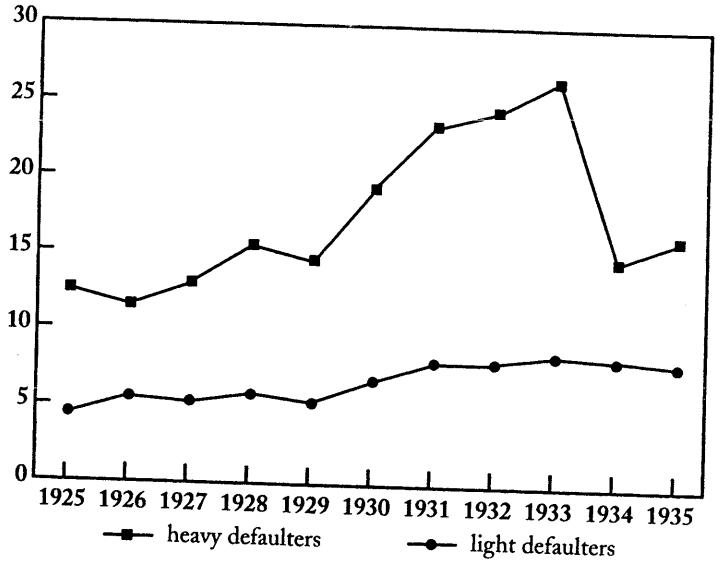
Events in the center also shaped the flow of lending. U.S. interest rates (as proxied by the yield on domestic medium-grade bonds) peaked in 1923 and trended downward through 1928. The decline in yields encouraged U.S. investors to seek more remunerative returns abroad. After 1925 the yield on Lary's sample of foreign bonds consistently exceeded that on domestic medium-grade securities (Lary 1943). U.S. foreign lending rose steadily to its peak in 1927–1928. Thus, the surge of lending in the 1920s can be understood only as a combined result of financial innovation, the investment trust and bond market revolution, and the downward trend in U.S. interest rates.

Figure 2.1 shows the evolution of debt service relative to exports after 1924. Following Eichengreen and Portes (1989), it distinguishes countries for which default starting in 1931 was minimal or absent, from those that defaulted on a substantial share of their external debts.[7] Debt service relative to exports was higher for the heavy defaulters all through the 1920s and rose quickly during the period of peak borrowing, 1926 through 1928. Figure 2.2 shows these same data for Latin America and central and eastern European debtors.[8] The Latin American debt ratio was consistently higher (not so much because of higher-debt stocks, the data suggest,

7. The heavy defaulters were Brazil, Bulgaria, Chile, Colombia, Costa Rica, Germany, Greece, Hungary, Poland, and Uruguay. The light defaulters were Argentina, Australia, Austria, Belgium, Canada, Czechoslovakia, Denmark, Finland, France, Italy, Japan, New Zealand, Nicaragua, Norway, Spain, and Venezuela. Figures reported are unweighted averages of country statistics. Cline (1995) notes that this categorization weights the light-defaulter category toward relatively advanced industrial countries, an asymmetry that is important to keep in mind when interpreting the results.

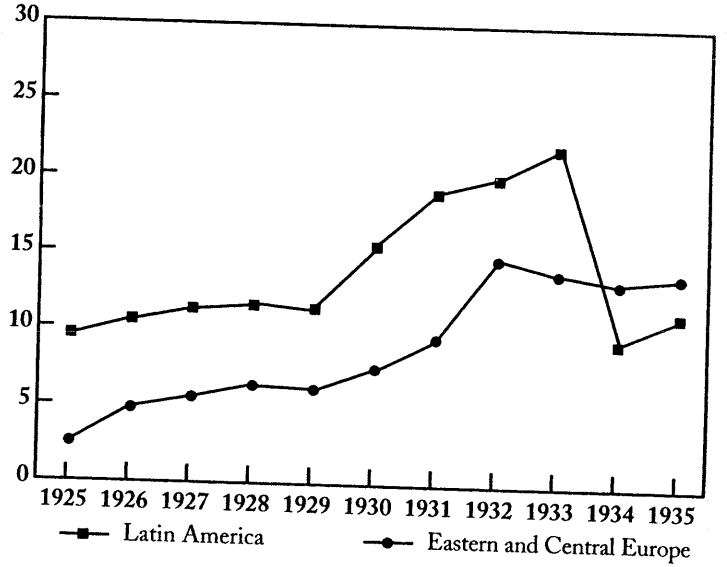
8. Latin America includes Argentina, Brazil, Chile, Colombia, Costa Rica, Uruguay, Nicaragua, and Venezuela. Central and eastern Europe include Bulgaria, Germany, Hungary, Poland, Austria, and Czechoslovakia.

Figure 2.1 Foreign debt service to exports (%).



Source: United Nations 1948a, 1948b, 1953; Mitchell 1975, 1983, 1995.

Figure 2.2 Foreign debt service to exports (%).

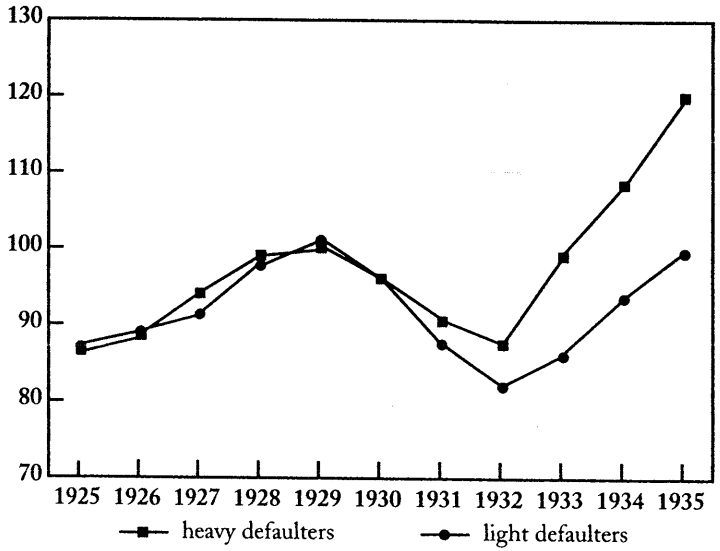


Source: United Nations 1948a, 1948b, 1953; Mitchell 1975, 1983.

as higher interest rates). This heavier burden is consistent with the fact that Latin American defaults historically began first.[9]

In a period when capital inflows were strengthening the balance of payments, it was possible for countries to accumulate international reserves. Under the gold standard of the 1920s, reserves rose automatically as economies expanded, because central banks were required to limit the growth of their monetary liabilities to a specified multiple of their international reserves (typically 250 percent or 300 percent). But nothing prevented central banks from accumulating reserves at a more rapid rate than mandated by the gold standard statutes. Whereas figure 2.3 shows that industrial production (and, by implication, the demand for money) grew in the second half of the 1920s at the same rate for both light and heavy defaulters, figure 2.4 shows that gold holdings rose more quickly for the light defaulter, as if they took advantage of circumstances to accumulate a cushion of reserves.[10] But with many countries mechanically following the gold standard rules, the growth of excess reserves was modest and provided an

Figure 2.3 Industrial production index (1929 = 100).

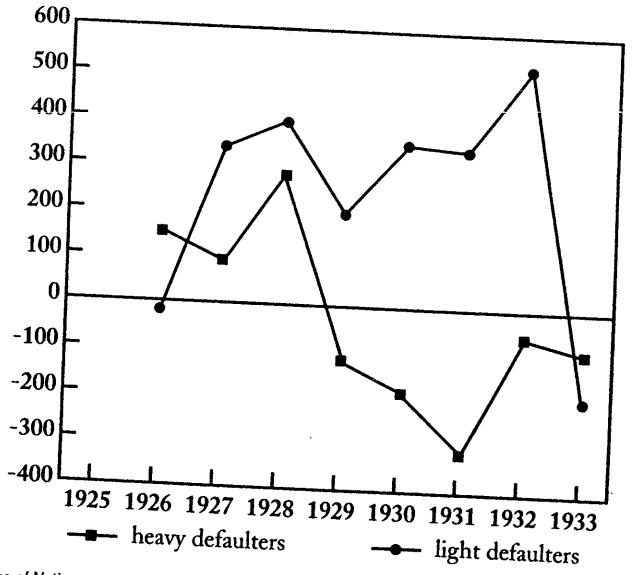


Source: United Nations 1948b; Mitchell 1975, 1983, 1995.

9. It is worth noting that these debt-service-to-export ratios of 10 to 15 percent were modest by the standards of the 1980s and 1990s.

10. The changes in reserves in Latin America and central and eastern Europe move in close parallel through the end of the 1920s.

Figure 2.4 Changes in gold reserves (million U.S. dollars).



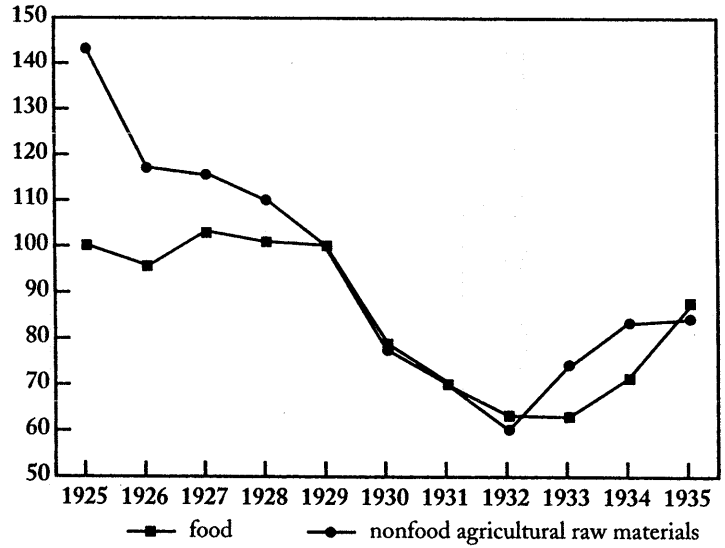
Source: League of Nations.

inadequate support when international financial and commodity market conditions deteriorated toward the end of the decade.

What happened starting in 1928 is sufficiently well known to permit a brief summary. The Federal Reserve Board, concerned about the heights scaled by the Wall Street stock market boom, raised interest rates in a series of steps. Suddenly domestic bills and bonds became more attractive than foreign investments. Net portfolio lending by the United States declined from more than $1 billion in 1927 to less than $700 million in 1928, with virtually all lending in 1928 concentrated in the first half of the year. Bond flotations on behalf of Germany and South America were hit particularly hard. With the cost of servicing dollar loans running at about $900 million a year, lending through the middle of 1928 had proceeded at a rate sufficient for new capital inflows to finance service on the outstanding debt. When new lending dried up in the second half of the year, the entire bill came due.

This interruption to lending came on top of a decline in the relative price of nonfood primary commodities. Figure 2.5 shows that this relative price had been trending steadily downward for five years. The decline accelerated in 1929–1930 with the slump in industrial production in Europe and the United States and the increase in the relative supply of these raw

Figure 2.5 Commodity prices (1929 = 100) relative to manufactured goods.

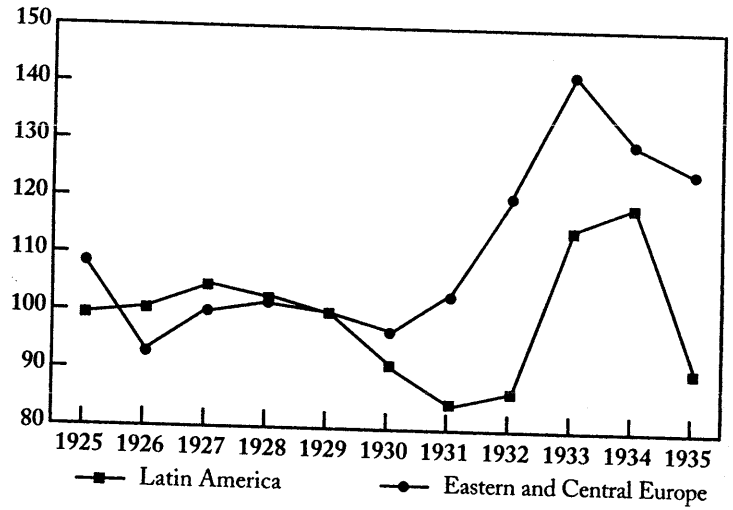


Source: Grilli and Yang 1988, app. I, cols. 5, 7, and 8.

material inputs. The terms of trade of the heavy defaulters deteriorated dramatically in 1929–1930 (Eichengreen and Portes 1989, fig. 4.3). Measured in terms of wholesale prices, the terms of trade of Latin American countries fell more sharply than those of eastern European debtors starting in 1929 (figure 2.6). Together, figures 2.5 and 2.6 underscore the importance of the commodity composition of trade. For Latin American countries that exported mainly primary products, the deterioration in export-market conditions was persistent and began to reverse itself only in 1933; for Germany, Austria, Czechoslovakia, and the other more industrialized countries of central and eastern Europe, terms-of-trade movements were relatively moderate. The depth and persistence of the slump in the industrial world, and its repercussions on primary commodity markets, clearly had much to do with the severity of the debt servicing difficulties of Latin American countries.

The wave of protectionism that started in the United States in 1930 compounded these difficulties. A debate exists over the effect of the Hawley-Smoot tariff (which had itself been imposed partly to aid farmers whose plight reflected the same global commodity-price trends noted in the preceding paragraph) on the Great Depression in the United States. However, there is no question that by switching U.S. demands away from

Figure 2.6 Terms-of-trade index (1929 = 100) wholesale prices relative to those in the United States.



Source: United Nations 1948a, 1948b; Mitchell 1975, 1983.

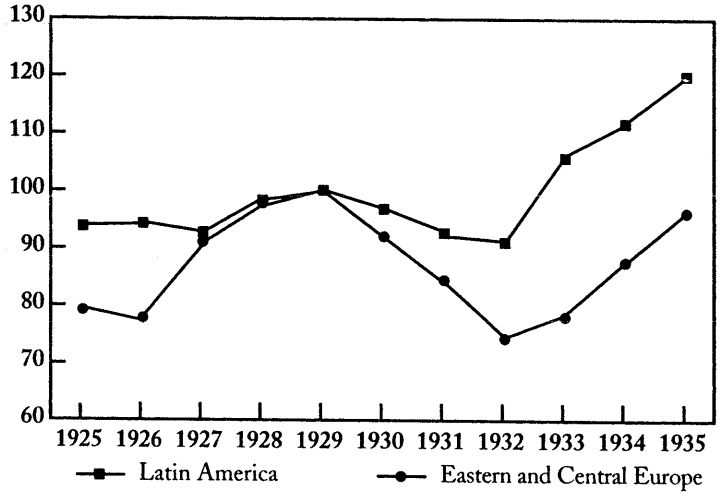
imported goods in general and imported raw materials in particular, the tariff and similar ones in other industrial countries compounded the primary producers' problems.

The debtors' response was to hold on as long as possible. Countries that were ultimately forced to default first sought to finance their deficits by running down their reserves (figure 2.4). When the constraints of the gold standard began to bind, they imposed restrictions on various categories of international gold and capital flows and used this room for maneuver to depreciate their exchange rates. Governments cut public spending, raised taxes (especially import duties), and applied export bounties. These measures worked to strengthen the balances of trade of countries that could no longer finance deficits via capital imports. Argentina, Austria, Australia, Brazil, Bulgaria, Colombia, Germany, Greece, Hungary, Poland, and Venezuela all strengthened their trade balances in 1929. But the further deterioration of international commodity markets and the rise of industrial-country protection in 1930 dealt their efforts a further blow. Bolivia suspended service on its sovereign debts in March of 1931. During the rest of the year much of Latin America defaulted. Only Argentina, with close financial and commercial ties to the United Kingdom, and the small Central American republics dependent on the United States remained solvent. In 1932 default spread to southern and eastern Europe, and 1933 was dominated by default by Germany, the world's largest debtor.

Import substitution was the natural response. The collapse of primary commodity prices and the imposition of tariffs in the industrial world prevented developing-country debtors from exporting their way out of their bind. The depression and the attempt to respect the requirements of the gold standard had already forced severe monetary and fiscal retrenchment. Adjustment to the new circumstances of the 1930s therefore took place by substituting away from imports. Currency devaluation turned domestic spending toward homespun goods. Tariffs and quotas, often supplemented by exchange controls, were used to stifle imports. Governments extended credit on favorable terms to import-competing industries to promote their growth.

The import-substitution strategy was associated with reasonably smooth recovery from the crisis of the early 1930s. (Figure 2.7 distinguishes between Latin America and Eastern Europe.) Eichengreen and Portes (1989, fig. 4.3) and Cline (1995) caution that this result need not carry over to other times. Many Latin American countries possessed an array of labor-intensive industries characterized by limited domestic production and ample opportunity for rapid expansion. Import substitution was attractive not only because of the difficulty of penetrating export markets but also because of the scope it provided for expanding domestic supplies of imported goods. Later, when the easy opportunities for import-substituting industrialization

Figure 2.7 Industrial production index (1929 = 100).



Source: United Nations 1948b; Mitchell 1975, 1983.

had been exhausted, further pursuit of such policies ran up against skill and technology constraints.

The readjustment of defaulted debts involved a protracted process of negotiation. Then, as now, negotiations were complicated by the existence of a large number of investors. A football stadium would have been needed to seat the thousands of bondholders whose assent to the terms of settlement would have been required as a prerequisite for regaining capital-market access. While getting scores of commercial banks to agree on the terms of a rescheduling or a concerted lending program involved significant transaction costs in the 1980s, the transaction costs entailed in debt negotiations in the era of bond finance were more formidable still.

To an extent, this problem was managed by the intervention of bondholders' representative committees. In Britain, the Corporation of Foreign Bondholders had been in existence since 1868. A private entity, it solicited subscriptions from bondholders and negotiated settlement terms with the debtor. When it announced that the debtor had negotiated in good faith and endorsed the offer as the best that could be expected, bondholders were asked to validate the agreement by registering their opinion with the council or by cashing a coupon with the debtor. Stock market sanctions were then withdrawn, in principle reopening the capital market to the debtor.

Bondholders could and did withhold their consent. There was enough dissent over the terms of settlement and enough debt still in default in neighboring countries that few debtors regained significant bond market access until after World War II. In the United States the process worked even less smoothly. Reflecting the country's late emergence as an international creditor, an organization comparable to the Corporation of Foreign Bondholders (the Foreign Bondholders Protective Council) was established only in 1934. Until then, bondholders had to rely on ad hoc committees that lacked the reputation and authority to negotiate effectively.

This process proceeded with a minimum of government intervention.[11] Starting in 1933, the Roosevelt administration attached priority to the reconstruction of international trade and refused to use sanctions as leverage on behalf of private investors. The British government was somewhat more interventionist. It used the 1932 Ottawa Agreements and the Roca-Runciman Treaty negotiations with Argentina to secure favorable treatment of sterling debts. It threatened to impose clearing arrangements on Germany following that country's default in 1933, leading the latter to re-

11. Admittedly, the Foreign Bondholders Protective Council had been established partly with the impetus of the U.S. State Department. But the state department's concern had been not so much to aid American investors as to deflect their demands for assistance.

sume service on its sterling debts. But such intervention was the exception to the rule.[12]

There were also attempts to coordinate the intervention of national governments through international institutions. The first such scheme proposed to endow the Bank for International Settlements (BIS) with resources to extend credit to countries seeking to reorganize their debts. Hubert Henderson, an adviser to the British government, proposed in 1931 to authorize the BIS to issue "International Certificates" to help finance countries' debt-service payments and other balance-of-payments obligations. Another 1931 plan, proposed by Montagu Norman, governor of the Bank of England, and Robert Kindersley, one of the bank's directors, would have created a new international facility, also possibly housed at the BIS, to make loans to countries unable to obtain finance through normal channels. At the 1933 World Economic Conference organized by the League of Nations, the British proposed the creation of a multilateral "normalization fund" to channel funds to countries seeking to reorganize defaulted debts.

None of these proposals bore fruit. Default on private investments, interwar policy makers repeated, was a private matter. While bank failures were widespread, banks in the creditor countries held only limited amounts of foreign debt; from their point of view, sovereign default was only a minor factor in the financial instability of the 1930s. The fear that banking systems might collapse prompted a variety of unprecedented actions, but extraordinary assistance for sovereign debtors was not one of these. To the extent that high finance was a convenient whipping boy for the economic crisis of the 1930s, there was little popular sympathy for investment trusts and other institutional investors with a stake in foreign debt, especially in the United States.

The Era of Bank Finance

The impact of the debt crisis of the 1980s, unlike that of the 1930s, was more regionally focused. The IMF group of fifteen heavily indebted countries includes ten from Latin America. Therefore we emphasize the experience there, while providing some commentary on other continents.

In the mid-1960s, as output flagged and inflation mounted even in countries that were relatively successful practitioners of import substitution, Latin America sought new policies. Tariffs, which had reached extraordinarily high levels, were slowly reduced. Crawling peg exchange

12. This is the conclusion, for instance, of the Royal Institute for International Affairs (1937).

rates were introduced in Chile, Colombia, and Brazil as a means of assuring competitiveness in the midst of continuing inflation. Starting in the second half of the 1960s attempts to promote nontraditional exports led to the adoption of special export subsidy programs. The period as a whole was marked by the relatively rapid expansion and diversification of trade.

Entirely different patterns of development evolved in East Asia and Africa. The former undertook significant reconstruction and embraced a new strategy of rapid export growth joined with substantial increases in savings. Eventually this combination proved extraordinarily successful and initiated the long period of Asian growth that has just come into question. But time was required for the response. From 1960 through 1970, the weighted average annual growth rate in East Asia was not much higher than the 5.7 percent attained in Latin America. Indeed, in the period from 1965 to 1973, it actually was lower.

For Africa the 1960s were a final period of postwar expansion. Rather than finding a new model, as was true in Asia, or experimenting, as Latin America did with state impulses to development, the continent saw more of the same. Africa soon began experiencing negative rates of per capita income growth, from which it has begun to emerge only recently. Similarly, for much of South Asia the 1960s were a period of disappointingly slow growth.

Substantial private capital inflows first became available to developing countries toward the end of the 1960s. The Eurodollar market pursued new borrowers and found them primarily in Latin America. Governments had the luxury of financing additional imports and public sector outlays without the need for private retrenchment. Domestic policies retreated from the regulation that had become widespread during import substitution. Prices were allowed a larger role in the allocation of resources.

Military governments, whose domain expanded in these years, still saw a role for the public sector. The Brazilian miracle of the late 1960s and early 1970s was a clear descendant of the earlier era of import substitution, not to be confused with the outward-oriented policies pursued by South Korea and Taiwan. The home market still dominated, thereby affording advantage to Brazil and Mexico, the largest Latin American countries, both of which managed their highest rates of expansion in this period. Even Argentina, despite its failed attempt at stabilization under military rule in 1969, succeeded in achieving its peak growth rates in these years.

This period of adaptation, which saw an improvement in growth performance regionwide, was brought to an end by the disequilibrium ushered in by the oil price rise in 1973. The post-oil-shock experience in Latin America was conditioned by the almost universal willingness of governments to take on debt in order to sustain imports. Again, the Latin Ameri-

can model deviated from the Asian model, which was dominated by an acceptance of immediate price increases rather than reliance on debt finance.

Debt looked like a winning strategy in a world where real interest rates were low, as they remained until the late 1970s. But there was a shift from debt-led growth in the years before 1973 to debt-led stagnation thereafter. Even when accompanied by continuing growth, the strategy was precarious. It led to a marked increase in debt exposure that proved decisive at the end of the decade when interest rates rose and new capital inflows were curtailed.

In the meantime, countries took advantage of borrowing. In the Southern Cone, led by a newly militarized regime in Chile receiving guidance from the "Chicago Boys," monetarism was the rage. Its downfall was associated with an excessive capital inflow that became impossible to sustain in the 1980s. Mexico was a substantial borrower, relying on newfound oil resources as a magnet for capital; after the second surge in oil prices in the midst of the Iran-Iraq conflict, there was essentially no limit to the external finance available to the country. In Brazil, balance-of-payments deficits financed domestic expansion, albeit at decelerating rates and with rising inflation. Expanding debt inhibited growth but also deterred devaluation because of the implications of increased service payments on outstanding obligations. Only Colombia was able to avoid indebtedness, with rising coffee prices and receipts from illicit drug traffic providing needed resources. Its problem became accommodation to an external boom rather than adjustment to a substantial oil tax.

In the period after the first oil shock, Latin America as a whole showed a deceptive ability to adapt—or rather, a lack of necessity to do so. Foreign finance was readily available. Growth remained high, reinforcing military rule throughout much of Latin America. The precariousness of the situation was revealed only after a new rise in oil prices, an abrupt increase in real interest rates, and a recession among members of the Organization for Economic Cooperation and Development (OECD) coincided in the early 1980s. But, contrary to what Angus Maddison has argued, it was not that governments had continued to follow blindly the original import substitution bias of the 1950s. Maddison states that, "The economic growth performance of Latin America since 1973 has been abysmal. . . . there has . . . been a certain continuity in economic policy attitudes since the 1930s, and the liberal international order which was created by OECD countries and has influenced policy in Asia has left them virtually untouched" (Maddison 1985, 53).

In fact, the major factor contributing to instability in these countries was that they had shown a capacity to depart from earlier policy commitments. What influenced the outcome was their asymmetric opening to the world economy, combining vast financial flows with much more limited trade penetration.

Fiscal distortions also reduced these countries' room for maneuver. For growth to continue in the late 1970s, the governments of Brazil and Mexico had to resort to rising deficits and the nationalization of economic activity. Stop-go macroeconomic policies were only a prelude to the stop-stop policies that became necessary in the 1980s. A situation of renewed external dependence and rapid change in the international economy offered an illusion of permanence.

The strategy did not work badly for a time. Growth continued. Investment ratios remained respectable. The marginal propensity to save out of external borrowing was, on the whole, the same or greater than the propensity to save out of domestic income. There seems to have been no difference in this regard between Indonesia and Korea on the one hand and Brazil and Mexico on the other. Nor do the Asian countries, particularly Korea, seem to have been spared entirely from mistakes in investment.

The real difference lay in the response to the second oil shock. Latin American countries, particularly the Southern Cone and the oil exporters, continued to borrow and paid the consequences when rising real interest rates and accompanying industrial-country recession brought matters to a head. Table 2.1 provides a comparative perspective, distinguishing four negative effects on the balance of payments. First is the terms-of-trade effect; second is the rise in real interest rates; third is the impact of reduced OECD growth on the exports of developing countries; and fourth is the shift in the willingness of commercial banks to continue to lend, measured as the change in the ratio of capital flows to gross product.

Two conclusions emerge. One is the greater impact on Latin America, Colombia excepted, of interest rates and capital supply as opposed to terms of trade and OECD recession effects.[13] The more open East Asian economies were buffeted by deteriorating trade conditions, whereas Latin America was more sensitive to financial shocks.

The second and critical point is the importance of measuring shocks relative to exports rather than gross national product (GNP). Upon doing so, as in Table 2.1, one can see the immediate necessity of attending to the balance-of-payments crisis that did in Latin America; imports declined by $40 billion (more than 40 percent in volume terms) between 1981 and 1983.

When Mexico defaulted (appropriately enough, on Friday, August 13, 1982), the countries of the Western Hemisphere were plunged into difficulties that persisted until very recently. Growth ceased, and what was proclaimed by some to be another temporary balance-of-payments adjust-

13. The reason is straightforward: the former depend on the debt:GNP ratio rather than the export:GNP ratio.

Table 2.1 The impact of external shocks, 1981–1983

	Ratio to GNP					Ratio to exports[f]
	Import and export prices[a]	Interest Rates[b]	OECD recession[c]	Capital supply[d]	Total[e]	Total
Latin America						
Argentina	0.006	−0.025	−0.009	−0.047	−0.075	−0.64
Brazil	−0.044	−0.025	−0.005	−0.022	−0.093	−1.37
Chile	−0.097	−0.034	−0.016	−0.026	−0.173	−0.80
Columbia	−0.057	−0.004	−0.012	0.023	−0.050	−0.31
Mexico	0.018	−0.035	−0.008	−0.020	−0.045	−0.42
Peru	−0.001	−0.039	−0.017	−0.027	−0.030	−0.13
Venezuela	0.131	−0.034	−0.020	−0.162	−0.085	−0.31
East Asia						
Indonesia	0.141	−0.012	−0.018	−0.021	0.132	0.53
Korea	−0.068	−0.027	−0.022	−0.011	−0.128	−0.43
Malaysia	−0.047	0	−0.038	0.112	0.027	0.05
Philippines	−0.076	0.012	−0.014	−0.024	−0.129	−0.70
Taiwan	−0.154	−0.004	−0.038	−0.014	−0.182	−0.35
Thailand	−0.087	−0.007	−0.016	−0.004	−0.114	−0.52

Sources: Import and Export Prices: Economic Commission for Latin America; IMF.
Interest Rates: *World Debt Tables;* OECD.
OECD Growth Rates and Capital Flows: IMF, Asian Development Bank.
[a]Price effect: percentage change in export price index times export/income ratio 1977–79 minus percentage change in import price index times import/income ratio 1977–79.
[b]Interest rate effect: change in nominal implicit interest rate on medium- and long-term debt, adjusted for change in US wholesale price index, between 1977–79 and 1981–83 times net debt/GNP ratio in 1980.
[c]OECD recession effect: change in OECD growth rate between 1977–79 and 1981–83 times import volume elasticity of 1.5 times export/income ratio, 1977–79.
[d]Capital supply effect: ratio of capital inflow, exclusive of exceptional financing and adjusted for net errors and omissions, to income in 1981–83 minus ratio in 1977–79.
[e]Sum of all effects.
[f]Sum of all effects relative to GNP times export/GNP ratio, 1977–79.

ment turned into the region's longest period of negative development in the century. At the end of 1993, national income per person, including the negative effects of a 36 percent terms-of-trade decline, stood at about 90 percent of its 1980 value (Economic Commision for Latin America 1992, 39). By contrast, the 1980s were a period of vigorous expansion in much of Asia.

Latin American adjustment passed through four stages.[14] First there was a phase of drastic balance-of-payments correction between 1981 and 1984,

14. For a summary of the literature up to the new commitment to debt reduction, see Fishlow 1988. For the subsequent evolution of the Brady accords, see IMF *International Capital Markets* various years.

when the continent's imports fell by 45 percent. So rapid was the decline that *World Financial Markets* could speak of "lasting resolution of the LDC debt problem" (*World Financial Markets* 1984, 1). Instead, difficulties worsened in the second phase. The banks were not inclined to lend more but rather were committed to reducing their exposure to the region. Latin America was forced to deal with the crisis through a more fundamental realignment than had been imagined.

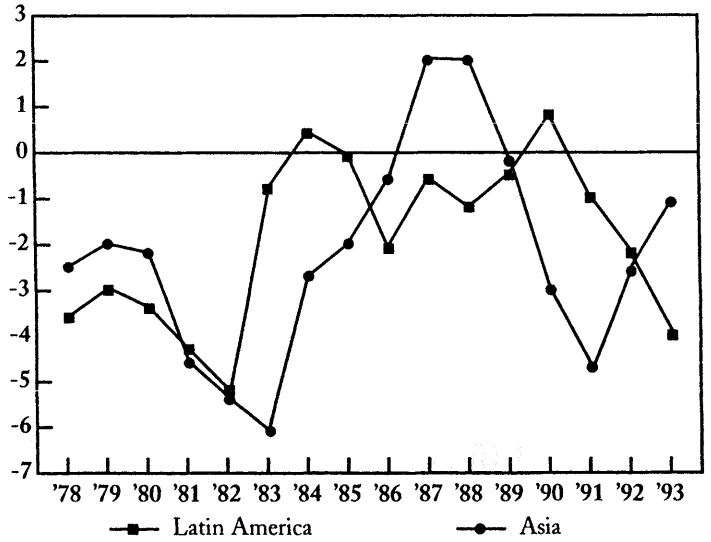
The third phase began with the Baker Plan in 1985, which was a tripartite strategy dependent on the banks, international institutions, and country adjustment. As this effort failed to secure needed bank support, it eventually gave way to the Brady Plan, which allowed, for the first time, substantial reduction of country indebtedness to banks. The policy became a reality in 1988 when Citibank wrote down its developing-country loans; it was confirmed the following year by the settlement of the outstanding Mexican debt at a price of about 65 cents to a dollar. Other countries soon settled at parallel discounts, larger for smaller countries such as Bolivia and Costa Rica, and comparable for those holding large stocks of debt.[15]

A fourth phase of restructuring has followed. Beginning in 1991 there was a sudden and unanticipated flow of capital into the region, which we discuss further in a later section. Latin America was again a place for foreign funds to go. This progression from import surplus to export surplus, back to new import surplus traces the evolution of the region's external accounts, shown in figure 2.8. Note the decline of the Latin American ratio of current account to gross domestic product (GDP) after 1982, and its subsequent rise after 1990. Note also the contrast with Asia, which mirrored the Latin American decline beginning in 1983 but had an earlier recovery and a spontaneous adjustment after 1991. During this latter period, when capital flooded into Latin America, the Asian countries were able to reduce their deficits autonomously.

What remains to be described is the restructuring of domestic economies, which has shown itself in three areas. First, there has been a shift in government fiscal capability, and with it a decline in inflation rates. Brazil was virtually the last country in the region to introduce its new currency, the real, on July 1, 1994, and to mount a serious effort to limit inflation. Second, there has been a significant change of ownership, from public to private. And third, there has been a reduction of tariffs and quotas and greater reliance on internal productive capability.

15. The various relief packages did not reduce debt drastically; indeed, the IMF estimated that only about 8 percent of total obligations were reduced. Note, moreover, that the external debt of the region mounted to some $490 billion at the end of 1993, almost three times exports. Although total interest payments as a percentage of exports have declined, rising interest rates would greatly complicate the situation. (See ECLA 1992, tables 20 and 23; IMF 1994, 95.)

Figure 2.8 Current account balance/GDP (%). *Note:* 1982 GDP weights.



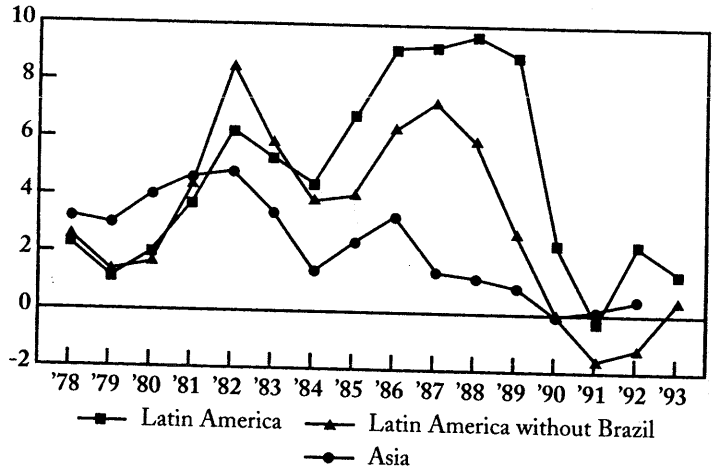
Source: IDB various years; IMF *International Monetary Statistics* various years .

The change in fiscal capability and inflation is major, as is evident in figure 2.9. In most countries it has been a continuous process, especially over the last three years, of increasing government command of revenues and expenditures. The fiscal balance has also benefited from lower international interest costs. Overall, the region's fiscal balance swung from a deficit of the order of 3 percent of GDP in 1989 to a surplus of 1 percent in 1993 (ECLA 1992, tables 20 and 23; IMF 1994, 1995). More than two-thirds of the countries in the region saw some improvement.

This recovery was due mainly to increased public sector revenues. Still, the somewhat skeptical position of the Economic Commission for Latin America requires recognition:

> In only a few countries . . . can the fiscal accounts be said to be structurally balanced. For this to be the case, current income must be solidly backed by a stable tax base, which in turn is consistent with a level of current spending that can support the normal functioning of government administration and the provision of basic social services. The tax base must also be able to support the public investment required to revamp and develop infrastructure necessary for economic growth and enhanced social equity. (ECLA 1992, 2)

Figure 2.9 Fiscal deficit/GDP (%). *Note:* 1982 GDP weights (negative numbers indicate a surplus). Indonesia excluded from 1992.



Source: IMF *International Financial Statistics* various years. 1992–1993 data for Brazil from ECLA 1993.

It is too early to tell whether such caution is justified. But the stabilization efforts of recent years, if continued, promise to respond to a major need of countries in the hemisphere. It is no accident that price inflation has been dramatically reduced. Excluding Brazil, inflation in Latin America, as measured by consumer prices, fell to only 19 percent in 1993, less than half its 1991 value, and extraordinarily lower than the more than 1,000 percent registered in 1990 (ECLA 1992, 1, table 5). For the first time in the post–World War II period the region has made a commitment to fiscal soundness. Figure 2.9 illustrates this in the plot of the ratio of the fiscal deficit to GDP for the Latin American and Asian countries. The stability achieved in Asia is clear. After a decline forced by lack of foreign finance in 1982 and 1983, Latin American deficit ratios increased again before finally declining in the late 1980s. And Brazil has finally shown movement toward greater stability with its real plan.

Latin America thus has emerged from the 1980s with greater fiscal discipline. Contributing to it has been a willingness to entrust the private sector with more responsibility and control. Sales of nationalized enterprises have accounted for sizable revenues, from 1 percent to 4 percent of total government receipts in recent years. Airlines, telephone and telegraph operations, steel facilities, and countless other enterprises have been turned over to private hands. In contrast with the 1970s, when external debt as-

sisted the state in financing its needs, a radically different model has emerged. For the new strategy to work, however, private investment must be sustained and rationalized. If the shift to private hands is simply a one-time event, the benefits will not be realized.

Thus, privatization should not be viewed simply as an aspect of fiscal reform. It encompasses a broader conception of the role of the state. Enterprises that are sold should not merely be those able to yield an immediate return to public authorities. Rather, the objective must be to improve economic efficiency continuously.

A third important policy modification has occurred in the governments' strategy for promoting domestic production. Latin America began the post-1950 period committed to import-substituting industrialization. Import barriers were erected to allow domestic sectors to develop. Already by 1960 it was evident that protection was not working; only Brazil and Mexico, with their large domestic markets, had succeeded in growing. But it was not until the balance-of-payments crisis of the 1980s that all countries in the region moved to freer trade.

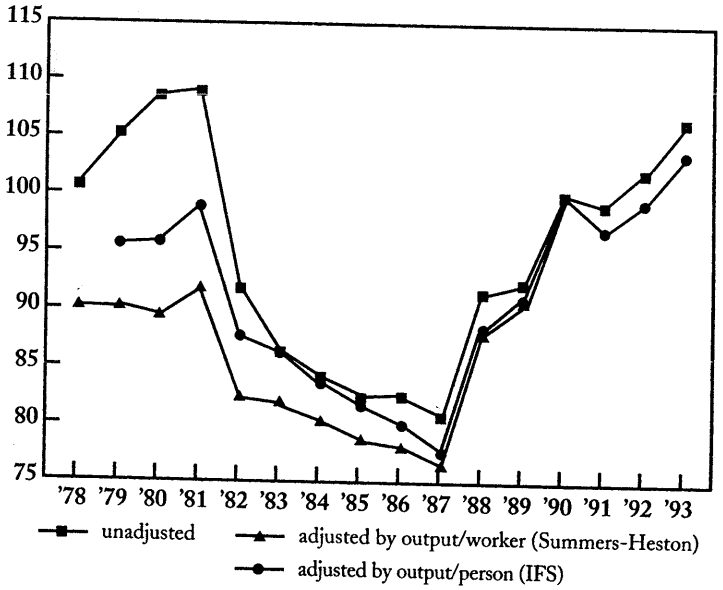
Tariff reductions have been spectacular. Virtually everywhere the value of domestic production subject to restriction has been reduced substantially and the average tariff lowered significantly.[16] A sharp decline in real exchange rates has also been undertaken to reduce imports and encourage exports. Unfortunately, the inflow of capital has resulted in a significant exchange rate appreciation in many countries in recent years. This movement may be contrasted with the stability of the Asian real exchange rate in the first half of the 1990s (see figures 2.10 and 2.11.)

This Latin American appreciation has contributed to the sharp rise of imports since 1990. Between 1990 and 1993, the region's imports grew from $94 billion to $148 billion, an average annual increase of almost 15 percent. The only large country whose behavior was at variance with this pattern is Brazil, which continued to repress imports until 1993 but sharply increased its foreign purchases subsequently.

Latin America is thus a different region from a decade ago. The fiscal situation has improved. Inflation is under control for the first time since the 1950s. Bloated public sectors have been compressed, and the increased efficiency of tax collection has yielded additional revenues for public authorities much in need of them. Trade barriers have been substantially removed, and a commitment to greater competitiveness has emerged. These changes are due to the brute force of the adjustment forced on the region. No longer do people have faith in the ability of state managers to plan. Instead, as elsewhere around the globe, reliance on markets is now the rule.

16. It now stands at little more than 20 percent, compared to close to 50 percent before tariff reduction began (ECLA 1993, table 13).

Figure 2.10 Real exchange rate index: Latin American wholesale prices relative to those of the United States (1990 = 100).



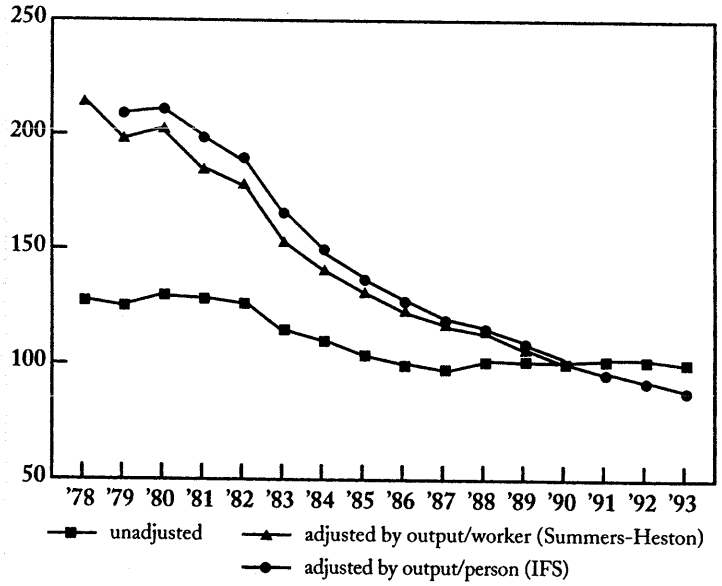
Note: 1982 GDP weights. Productivity adjustments are relative to United States.
Source: Summers and Heston 1991.

The Era of Equity Finance

The age of equity finance can be dated from the end of the 1980s.[17] The international diversification of investment portfolios by pension funds and life insurance companies in the United States, prompted by regulatory changes, was one factor. Another was the liberalization of financial markets and growth of mutual funds—and the reluctance of the money-center banks to commit funds again to emerging markets. These combined to initiate a wave of equity investment to Latin America and Asia.[18] Investment was further encouraged by declining U.S. interest rates, which enhanced the creditworthiness of indebted countries and encouraged mutual fund managers to search for yield overseas. Various observers—Calvo, Leider-

17. A good review of the trends is in Tesar and Werner 1995.
18. In a parallel with the 1920s, Hale remarks that the surge of lending in the 1990s and the negative reaction to the 1994 peso devaluation were "magnified by the moral hazard problems resulting from Wall Street's big investment in emerging market research and investment banking departments. Many firms had downplayed Mexico's exchange rate vulnerability because they were afraid that it might jeopardize the deal flow required to cover their expensive overhead at a time when Wall Street's domestic business was in recession." (Hale 1995).

Figure 2.11 Real exchange rate index: Asian wholesale prices relative to those of the United States (1990 = 100).



Note: 1982 GDP weights. Productivity adjustments are relative to United States.
Source: Summers and Heston 1991.

man, and Reinhart (1992), for example—conjectured that portfolio equity flows were likely to be sensitive to changes in international interest rates and therefore subject to sudden reversal. Subsequent events proved them correct.

Capital inflows to Latin America matched and then exceeded those reached during the peak of bank lending (1978–1981), with $24 billion in 1990, $40 billion in 1991, $64 billion in 1992, $69 billion in 1993, and $42 billion in 1994. The flow was more modest relative to GDP or exports, reflecting the growth of the recipient economies in the interim; whereas the balance on capital account reached 7.4 percent of GDP in 1981, it was "only" 3.8 percent in 1991 (Calvo, Leiderman, and Reinhart 1992, table 1). Mexico and Bolivia were the only Latin American countries for which inflows as a share of GDP substantially exceeded the levels reached ten years before, in the first case reflecting the enthusiastic reception accorded the North American Free Trade Agreement (NAFTA), in the second reflecting the difficulties in which the Bolivian economy had been mired a decade earlier. Flows to Asia similarly exceeded the levels reached the previous decade, absolutely if not as a share of GDP.

What is less widely appreciated is the continued importance of trade credits, bonds, and DFI in the 1990s. As late as 1991, flows of DFI into Asia and Latin America were four times as large as portfolio equity. In 1992 the ratio fell, but only to three times as large. DFI was associated with deregulation and privatization in a way that had no parallel in the 1920s or the 1970s.[19] There was an important contrast between Asia and Latin America, with the latter relying less heavily on DFI and more on foreign investment in equity and bonds.

In the 1990s, as in the 1920s and 1970s, foreign lending was encouraged by declining interest rates in the center.[20] Falling rates in the United States encouraged a search for yield by mutual fund portfolio managers attracted to emerging markets. They enhanced the creditworthiness of developing countries already saddled with a burden of floating-rate debt. Chuhan, Claessens, and Mamigni (1993) conclude that external factors explain about half of the variation in bond and equity flows from the United States to six Latin American countries, and somewhat less of the variation for Asia. The lower share for Asia may reflect the greater weight of DFI insensitive to interest rates in the region's capital inflows; in addition, Latin American countries had a higher share of variable-rate debt (57 percent in 1993, according to IMF estimates), which heightened the region's sensitivity to global interest rates. Calvo, Leiderman, and Reinhart (1993) reach an analogous conclusion. Fernandez-Arias (1994) similarly finds that lower international interest rates explain the largest share of the variation in recent capital inflows to developing countries. The exceptions are Mexico, where an improving investment climate played the dominant role, and Argentina, where improving country creditworthiness was key. Countries such as Peru experienced increased capital inflows as early as 1990, when they were still experiencing severe financial difficulties, consistent with this view of the strong influence of external effects.

This surge of lending was curtailed in the second half of 1994. The research mentioned earlier suggests that the series of interest rate increases undertaken by the U.S. Federal Reserve played an important role. The parallel with 1928–1929 and 1981–1982 is unmistakable.

In addition, 1994 was marked by a series of unsettling events in Mexico, the single largest importer of capital. The size of Mexico's current account deficit, the failure of investment to keep pace with capital inflows, and the

19. The recent wave of DFI is also distinctive for the extent to which it is concentrated in sectors newly exposed to international competition, in contrast with the situation in the 1920s when it was concentrated mainly in extractive industries, and in the 1970s when it was used to jump tariff walls (Stevens 1994).
20. In this context, foreign lending should be understood to include the repatriation of flight capital. that is, the foreign assets of domestic investors.

high real exchange rate already had some observers worried.[21] (For statistics see table 2.2.) Then came a peasant revolt in the southern state of Chiapas and the assassination of Partido Revolucionario Institucional (PRI) presidential candidate Luis Donaldo Colosio in March. Superimposed on rising U.S. interest rates, Mexico was suddenly a less attractive place in which to invest.

A decline in capital inflows from 8 percent of GDP to zero would have required a difficult adjustment under the best circumstances. However, 1994 was an election year, so Mexican officials preferred to delay. They used their international reserves to prevent the peso from depreciating more rapidly than permitted by the country's crawling band; one-third of the total was used to fend off the attack on the peso that followed Colosio's assassination. The Bank of Mexico allowed an expansion of domestic credit at an annual rate of about 20 percent to sustain consumption and support a weak banking system. Off-budget spending by the government's development bank further primed the pump.

When Ernesto Zedillo was inaugurated as president on December 1, 1994, he found the cupboard bare. Some days before, an apparent agreement by the Salinas government to devalue the peso was vetoed by departing Finance Minister Pedro Aspe. What made the situation worse was Mexican speculation in anticipation of a devaluation; IMF numbers indicate some $4.6 billion of capital outflow by nationals just prior to the devaluation in mid-December. The Bank of Mexico again intervened but withdrew from the market when reserves fell to $6 billion. On December 20 it widened the peso's trading range, effectively devaluing the currency by 15 percent, which only incited further outflows. The next day the peso was allowed to float and sank like a stone, soon falling below seven pesos to the dollar. Meanwhile the Mexican stock market tumbled.

Notwithstanding reference to "the tequila effect," this crisis was largely limited to one country. Difficulties there may have been in Argentina and Brazil, but neither country suffered a Mexico-style crisis. Other Latin American countries, such as Chile and Colombia, were little affected by the Mexican affair. Thailand and Hong Kong, which had done the least to limit capital inflows in the preceding period, experienced some difficulty when portfolio investment reversed direction, but although both raised interest rates, neither was forced into a major policy reorientation.

However hard it may be to deny that contagion exists in financial markets[22] and that the Mexican affair negatively affected the willingness of

21. See, for example, Dornbusch and Werner 1994. Mexican investment as a share of GDP did rise modestly from 1989 to 1991 but not subsequently. The real effective exchange rate, calculated as the Mexican consumer price index divided by a trade-weighted average of trading partner CPIs multiplied by their respective dollar currency prices, rose by some 25 percent between 1991 and 1994.

22. As documented by Barry Eichengreen, Charles Wyplosz, and Andrew Rose (1996).

Table 2.2

Mexico: economic indicators, 1989–1993

	Average of four years before start of inflows	1989	1990	1991	1992	1993	Average 1989/93
Balance on the capital account							
Billions of U.S. dollars	−1.0	3.6	6.7	20.6	24.7	23.6	15.8
As a percent of GDP	−0.4	1.7	2.7	7.3	7.6	6.6	5.2
Current account							
As a percent of GDP	−0.7	−2.9	−3.2	−4.7	−7.1	−6.3	−4.8
International reserves							
Change, billions of U.S. dollars	−0.5	0.7	3.3	7.6	1.4	6.2	3.8
Savings and investment (as a percent of GDP)							
Change in investment	0.2	0.5	1.5	2.6	−0.7	0.7	0.9
Change in saving	−0.7	0.4	0.0	−2.0	−1.6	1.3	−0.4
Other macroeconomic indicators (percent changes)							
Real GDP	−0.2	3.3	4.4	3.6	2.6	0.4	2.9
Private consumption	1.0	7.3	6.0	3.8	4.9	−2.7	3.9
Inflation	97.5	20.0	26.7	22.7	15.5	9.8	18.9
Money	80.4	30.6	47.9	91.6	70.2	18.1	51.7
Real exchange rate	5.6	−0.3	−5.3	−9.8	−8.0	−5.8	−5.8
Stock prices in U.S. dollars	45.3	67.8	24.9	102.4	20.0	46.9	52.4

Source: Calvo, Leiderman, and Reinhart 1993.

investors to lend to other industrializing economies, in contrast to the 1930s and 1980s the Mexican crisis was more limited geographically and in extent (Calvo and Reinhart 1995). One reason is that U.S. interest rates were trending down, reflecting some slowing of growth in the United States. This enhanced the credit worthiness of indebted countries and again encouraged the search for yield by U.S. portfolio managers. But a more fundamental reason is the extent of policy reform in the developing world. In contrast to the early 1980s, government budgets are in balance. Savings rates are respectable, although admittedly more so in some places than in others. In countries that suffered high inflation during the previous decade, a new anti-inflation consensus emerged. Policy credibility may be far from perfect, but it is much improved relative to the inheritance of the 1980s, providing some insulation from destabilizing shocks.

This new policy stance has had significant macroeconomic benefits. In Chile and Colombia, to take two examples, the real exchange rate has been kept stable out of concern for export competitiveness. Throughout Latin America, import controls have been removed. Deregulation and privatization have increased the responsiveness of exports. This flexibility allows economies to cope more easily with shocks, as even Mexico illustrates through the massive correction of its current account deficit and unprecedented expansion of exports.

Hence, the Mexican crisis could be perceived as the consequence of an unfortunate conjuncture of economic and political circumstances unique to Mexico rather than a reflection of inconsistent policies in emerging markets generally. Mexico's singular dependence on capital imports reflected its proximity to the United States and the successful conclusion of NAFTA negotiations. Its rapid monetary expansion in the six months leading up to the crisis was a result of electoral politics. Its low savings rate reflected the recent liberalization of consumer goods imports and encouragement of domestic demand. Its reluctance to adjust the exchange rate in the period preceding the election, as had been done prior to every previous presidential inauguration since 1976, reflected the policy's special sensitivity in light of NAFTA, as well as the retiring president's candidacy to head the newly founded World Trade Organization.

Notwithstanding the fact that the incoming Zedillo administration inherited significant handicaps, criticizing its attempts to manage the crisis became popular sport. Among its shortcomings was a failure to recognize how the situation had been transformed by the advent of equity finance. Arguably, equity investors are more sensitive to expectations than are bondholders and banks. Portfolio equity flows, even more than other investments, are driven by expected capital gains, encouraging investors to herd in and out of markets. This makes mutual fund investors highly sensitive to changes in international interest rates, something the Mexican authorities failed to assimilate. It also means that the groundwork for policy changes such as devaluation has to be laid carefully to avoid surprising investors in a way that leads them to conclude that everything gold has turned to dross.[23] Failure to do this accounts for the market's negative reaction to Mexico's devaluation.[24] The Zedillo administration then confounded the problem by attempting to treat Mexico's new creditors like the creditors of the 1980s. It assumed a continuing business relationship, as Mexico once had with the banks, where one did not exist.

For all these reasons, the crisis when it came was severe. Whether it justified the exceptional support extended by the Clinton administration and the IMF is too large a question to answer here. The arguments against Mexican rescue are two. One is that the United States has little economic interest in Mexico (Schwartz 1995). Mexico in 1994 took only 10 percent of U.S. merchandise exports, amounting to less than 1 percent of U.S. GDP. It is hard to argue that U.S. prosperity, either generally or specifically, hinges on the Mexican market. To the extent that illegal immigration will be promoted by economic difficulties south of the border, increased border surveillance, it is said, is a more direct and efficient method for dealing with the problem than a $50 billion bailout.

This view defines U.S. interest in Mexico narrowly. It ignores the political reaction in Mexico to paramilitary operations along the border, minimizes the potential for growth in U.S.-Mexican trade and investment, and attaches no value to bilateral cooperation in the Caribbean and Central

23. Hale (1995) describes the contrast as follows:

> The . . . vulnerability which the peso crisis has exposed is the greatly increased sensitivity of securitized capital flows to adverse news events compared to commercial bank lending and foreign direct investment, the primary sources of private capital for developing countries before the 1990s. Managers of mutual funds and pension funds have different attitudes toward currency devaluations than commercial banks or multinational companies. Commercial banks with dollar loans do not object to currency depreciation in developing countries with large trade deficits because they can improve the credit rating of the country by boosting exports at the expense of domestic consumption. Multinational corporations also can benefit from a currency devaluation if they are using the country as an export base. The portfolio managers of mutual funds and pension funds operate under different constraints. Although they understand that currency devaluations are sometimes a necessary component of an economic restructuring program, they do not like unpredictable exchange rate holdings in cases where they are large holders of debt and where the equity market is dominated by companies oriented toward domestic consumption.

24. Here the contrast with Brazil is striking. Brazil introduced more flexibility into its exchange rate early in 1995 but phased in the new regime, first shifting the existing band and then widening it. While the markets' reception of the new Brazilian policy was not entirely positive (the real plunged to its new floor the day after the band was shifted), the reaction soon stabilized. One reason was the much greater reserve level when Brazilian policy altered.

America. It ignores the fact that a full-scale meltdown could have led to the perceived failure of the U.S.-promoted model of liberalization and privatization, with negative repercussions throughout the developing world.

The second argument against intervention is moral hazard. The analogy with deposit insurance is direct, because the U.S. bailout can be interpreted as an extension of insurance from the U.S. Treasury to depositors in Mexican banks (Hoskins 1995). Aid like that provided by the United States, if extended with regularity, can encourage risk taking by the recipient government. That Mexico has had a financial crisis in every election year since 1976 and received assistance from the U.S. Treasury or the Federal Reserve Board since 1982 ($1.8 billion in 1982, $3.5 billion in 1988, and $20 billion in 1994) can be taken as evidence of this danger. The caveat is that attaching stringent policy conditionality to the loan may mitigate this danger.

The arguments in favor of the bailout are also two. One is contagion: default by Mexico could have spread to other countries, setting back reform and liberalization in Argentina, Brazil, Thailand, and other semi-industrialized nations. The counterargument is that widespread policy reform in Latin America and elsewhere in the developing world would have caused investors to pause before generalizing Mexico's problems. The second justification for the bailout is predicated on the existence of multiple equilibriums. In this view, the markets' overreaction to the Mexican devaluation unnecessarily aggravated the crisis. Timely intervention prevented the markets from shifting the country from the good to the bad equilibrium. Sachs (1994) compares flight from the peso and from Mexican debt to a self-fulfilling bank run. Mexico had nearly $30 billion of *tesobonos* (dollar-denominated public debts that began to be issued in 1994) due in 1995. Although the *tesobono* stock totaled only some 10 percent of 1994 GDP, it was large relative to the Bank of Mexico's reserves and hence vulnerable to a self-fulfilling run.[25] As long as investors renewed their maturing *tesobono* subscriptions, nothing prevented the government from servicing them indefinitely. But each potential creditor realized that if other creditors refused to roll over their *tesobonos*, Mexico could be forced to default even if its low debt:GDP ratio implied long-term solvency. The December 20 devaluation provided a focal point for investors to coordinate such action.[26] Their failure to roll over maturing *tesobonos* pushed the Mexican authorities to the brink of default. It forced them to raise interest rates to extraordinary heights and caused the exchange rate to plummet to the point where

25. Models of self-fulfilling debt runs include those by Calvo (1988); Alesina, Prati, and Tabellini (1990); and Giavazzi and Pagano (1990).

26. The work of Rogers (1992a, 1992b) is consistent with this hypothesis. It shows that a plausible proxy for default risk (the ratio of dollar- to peso-denominated bank deposits) increases with the peso's expected rate of depreciation.

public support for economic reform was jeopardized. Lender-of-last-resort intervention by the United States can be justified on the same grounds as central bank support for an illiquid but solvent bank.[27]

This position is given even greater weight by Mexico's early return to the capital market in July of 1996; an initial $500 million issue was doubled as a consequence of great investor interest in two-year floating-rate notes. To be sure, a substantial 5 percent premium over the London Interbank offered rate also played a role, but Mexico's sharp domestic adjustment program—made possible by the rescue—was equally important.

Cognizant of Sir Walter Raleigh's caution that historians following too close on the heels of events risk being kicked in the teeth, we are reluctant to say too much about the East Asian crisis of 1997. An early reading does suggest, however, that it is consistent with many of our generalizations regarding the era of equity finance. Equity investment played a prominent role in Thailand in the run-up to the crisis; it responded to East Asia's track record of fast economic growth, to the search for yield by U.S. and European portfolio managers cognizant of high valuations on developed country equity markets, and to the ongoing internationalization of portfolios by American households, insurance companies, and pension funds. Thailand, like Mexico, sought to sterilize these inflows, but with incomplete success. In Thailand as in Mexico a weak government delayed the imposition of painful adjustment measures, hoping against hope that the need for them would go away. Reflecting the importance of equity investment, Thailand, like Mexico, then responded to investors' loss of confidence by radically raising interest rates and to the collapse of domestic demand by boosting exports.

Thailand's crisis, like Mexico's, was limited in geographic scope. While there was contagion within Asia, the crisis had only limited repercussions elsewhere, such as in Brazil and a few eastern European countries with Thai-style current account deficits. As in 1995, this reflected the benign interest rate environment and the fact that the crisis took place against the backdrop of global, buoyant economic growth, and investment-friendly policies in a broad range of countries. As in 1995, the initial thought was that the rescue should be spearheaded by the country with the largest economy in the region, in this case Japan, although Tokyo deferred to the IMF when it came time to negotiate conditionality. (We return to this point later.) The crisis gave rise to discussions about the establishment of an Asian stabilization fund to facilitate regional responses to regional problems.

27. However compelling this story, it is also possible to argue that the negative reaction of investors reflected the disarray in Mexican policy and fears that trade union and business support was absent. Although the idea of multiple equilibriums is suggestive, it requires further substantiation.

Admittedly, Thailand's crisis also differed from Mexico's.[28] Thailand had a high private savings rate, Mexico a low one. Thailand had been growing rapidly in the period leading up to the crisis, whereas Mexico had hardly been growing at all. The problem in Mexico centered on the government's reliance on short-term, foreign-currency-indexed debt. In Thailand the crux of the problem was the weakness of the banking system, which created uncertainties for foreign investors (who saw banking problems as putting a damper on the real estate and stock markets and worried whether they would be able to retrieve their money from insolvent financial institutions), for the government (for which bank insolvencies implied fiscal liabilities), and for the economy (for which bank insolvencies meant disintermediation, asset-price deflation, and slower growth). To be sure, Thailand had external debt, and Mexico had insolvent banks, but the relative importance of the two problems was quite different.

Notwithstanding these differences, there are also impressive parallels. In neither case were the traditional causes of balance-of-payments crises, namely excessively expansive monetary and fiscal policies, at the root of the problem. Mexico's budget was broadly balanced; most estimates put the country's consolidated budget deficit for 1994 at no more than 2 percent of GDP. Although the central bank was reluctant to raise interest rates in response to reserve losses in the last three quarters of 1994, inflation and monetary growth were moderate by Mexican standards. There was no significant acceleration in either, relative to the preceding years of financial stability. In particular, the growth of the M1 money supply slowed from 18 percent in 1993 to 6 percent in 1994. And even those who insist that excessive growth in domestic credit was part of the problem would admit that it was only a part.

In Thailand, the government budget was in surplus in the period leading up to the crisis. Thai inflation exceeded inflation in the countries to which the currency was pegged, leading to some real appreciation, but this inflation differential was slight. In the five years ending with 1996, inflation never once reached 6 percent on an annual average basis. Consistent with this, the monetary aggregates rose at the rate of 15 percent per year, not obviously excessive for an economy growing at 9 per cent. Problems of competitiveness resulted from the heavy weight of the U.S. dollar in the Thai authorities' basket peg and the appreciation of the dollar relative to the yen and the European currencies in 1996–1997. But the point is that the domestic economic policy variables to which the IMF customarily directs its attention, namely money growth and the budget deficits, were at best subsidiary concerns in Thailand as they were in Mexico two and one-half years before.

28. Our discussion of Thailand relies on Eichengreen and Portes 1998.

The most striking parallel between the two cases was the current account, which was in deficit to a level of 8 percent of GDP. In both cases this reflected an excess of private investment over private savings (in turn reflecting the fact that the government budget was close to balance), and reliance on foreign financing to fill the gap. Together, these two experiences clearly confirm that current account deficits are not a problem when they reflect private-sector decisions rather than public-sector behavior. They force one to ask why the markets did not draw back sooner and more smoothly before events got out of hand.

Rather than hanging one's argument on investor myopia, one can point to two factors common to Mexico and Thailand that encouraged persistent large-scale capital inflows: the exchange rate peg and the belief that banks could not be allowed to fail. These two implicit commitments provided investors an irresistible incentive to indulge in the relatively high interest rates offered by Thai financial institutions.

A final parallel between the Mexico and Thailand situations is that both cast doubt on the notion that crises necessarily erupt in response to wholly unanticipated events (because if the events that precipitated them had been anticipated, the crises would have broken out earlier). To be sure, in both cases the unexpected occurred: in Mexico the Colosio assassination, in Thailand various political battles within the government and between the government and the opposition. But in neither instance were investors wholly unaware of mounting problems. In the case of Mexico they had been warned by expert commentators many months before the crisis. The curtailment of capital inflows fully six months before the crisis, and the Bank of Mexico's consequent need to support the exchange rate through the expenditure of reserves are evidence that not everyone naively believed that all was copacetic. In the case of Thailand, the baht experienced three episodes of speculative pressure in the second half of 1996 and in January–February 1997, and short-term capital inflows fell off over the course of 1996. Total capital imports declined from $22 billion in 1995 to $17 billion in 1996. Moody's downgraded Thailand's short-term debt rating in September. In both cases, then, there was plenty of unease six months to a year before the eruption of the full-fledged crisis. But opinion was divided, and as long as that remained so, the government could hold out.

The other striking fact about Thailand is that the authorities pursued most of the policies recommended by expert commentators for a government confronted with large-scale capital flows. Thailand tightened monetary policy. It maintained a tight fiscal policy; the 1996–1997 budget targeted a surplus of 0.5 percent of GDP, and in February the Cabinet proposed further cuts in government outlays of 0.8 percent of GDP and in public enterprise expenditures (on infrastructure) of 1.2 percent of GDP. To limit the impact of capital inflows on domestic liquidity, it auctioned

Bank of Thailand bonds. It raised reserve requirements on nonresident baht accounts and on short-term foreign borrowing by the banks. It imposed constraints on the banks' credit:deposit ratios. Loans denominated in foreign currencies made to sectors that did not produce foreign exchange were defined as no longer acceptable as eligible bank assets.

Thailand's experience reveals the difficulty that countries with small economies have when attempting to shape policy to manage large capital inflows. Tightening monetary and fiscal policy was painful in a period when economic growth was decelerating. For a variety of well-known political reasons, large expenditure reductions are difficult to effect in short periods. Whereas higher interest rates may damp down domestic demand and inflation, they will only attract additional foreign funds. Sterilization operations increase the budgetary burden on the government, which acquires low-yielding foreign assets in return for issuing higher-yielding domestic debt. Raising reserve requirements on the banks increases bank costs. For all these reasons, it may not have been feasible for Thailand to call for further adjustment.

In addition, of course, Thailand made two critical mistakes. First, it clung to a policy of pegging its exchange rate within a narrow band. Pegging encouraged capital inflows because foreign investors were not deterred by exchange risk. Thailand, like Mexico, revealed the well-known tendency for government officials, once committed to a currency peg, to regard devaluation as an admission of failure and to cling to the peg for too long.

The second problem lay in the management of the financial system. Until the autumn of 1996, offshore banks (Bangkok International Banking Facilities) were allowed to borrow funds abroad and on-lend them to Thai residents without limit. The government allowed the banks to maintain lax disclosure requirements and asset classification procedures (permitting them to disguise the actual extent of their property loans). In contrast to the policies in advanced industrial economies, Thai banks were not obliged to disclose their nonperforming loans, which encouraged management to delay in provisioning for loan losses. The government allowed the banks to purchase finance companies, which are less regulated and more sensitive to interest rate changes.

As if this was not enough, the banking crisis interacted with the flaws in exchange rate management. Massive capital inflows encouraged by the apparent absence of exchange risk were one factor leading to the deterioration in asset quality. Banks flush with funds scrambled to place them. The volume of loanable funds outstripped the capacity of competent loan officers to administer them.

And when capital markets finally turned around, devaluation threatened to provoke the meltdown of the banking system. Thai banks, mistakenly thinking that the exchange rate was locked, had failed to hedge their foreign currency exposure. Thai borrowers, mistakenly thinking the same, had failed to hedge their loans denominated in foreign currencies. Hence, devaluation threatened to push first borrowers and then lenders into insolvency. As the government came under pressure to aid distressed banks and firms, currency traders, who anticipated domestic credit creation, again push the baht down. This further increased distress among unhedged banks and firms, auguring more political pressure, more credit creation, and more currency depreciation, again worsening the condition of the banks. This positive feedback threatened to generate multiple equilibriums like those described in our earlier discussion of Mexico. The international rescue package was intended to prevent a complete meltdown of Thailand's banking system and a complete collapse of its currency. It was designed to prevent Thailand from shifting to an even worse equilibrium in which the costs of adjustment were greater than necessary.

Policy Implications

It is too early to distill definitive policy implications from the events of the last three years. But we hazard some provisional thoughts about options for managing international capital flows in the future.

It is clear from recent events that international capital markets can turn on a dime. Capital flows can scale high levels relative to the GDPs and domestic financial markets of developing countries and can reverse direction abruptly. They are sensitive to global economic conditions and industrial-country interest rates. Events in individual countries can disrupt the flow of external finance to other borrowers. For all these reasons, developing countries are vulnerable to capital-account shocks not of their own making—more than ever, given the increasing importance of interest rate and expectation-sensitive portfolio equity flows.[29] And adjustment to those shocks can be painful on both political and economic grounds.

What policy response should this recognition prompt? Mexico attempted to obtain assistance bilaterally, appealing to the United States, whereas Thailand's initial approach was to Japan, not to the IMF. One important lesson of these episodes is that bilateral solutions are not feasible. Politicians in countries such as the United States and Japan do not savor the responsibility of having to administer the conditionality attached to bilateral loans. IMF conditionality can become politicized, but the conditions attached to bilateral loans are inevitably more political still. (Recall the Mexican reaction to suggestions from north of the border that Pemex

29. This is evident once again in the wake of the Mexican crisis, which has been marketed by a surprisingly rapid resumption of lending to emerging markets. No explanation for this pattern would be adequate without reference to the decline in U.S. interest rates associated with decelerating economic growth.

revenues be used to back intergovernmental debts. Similarly, imagine the reaction in Thailand had the Japanese attempted to dictate the Thai government's economic strategy, given the intensity with which memories of Tokyo's World War II policies are held.) In addition, while markets move swiftly, politicians do not, especially when the question is aid to foreigners. The Clinton administration may have been able to move relatively swiftly in 1995, but only by taking exceptional measures. Its recourse to the Exchange Stabilization Fund antagonized the Congress and such action will not be as easy in the future. And the United States is unlikely to evince the same willingness to shoulder the risks of a fire-brigade operation for a country more distant from its own borders. Clearly, an alternative to bilateralism is needed.

Some would rely on more timely publication of economic statistics as a way of strengthening market discipline. If the markets are better able to identify countries whose positions are approaching unsustainability, rising interest rates and declining capital flows will force governments to act more quickly. Because information is a public good, however, incentives to provide it may be inadequate . This has led the IMF to establish a Special Data Dissemination Standard to be met by countries actually or prospectively borrowing on international capital markets, for posting up-to-date economic and financial statistics on the Internet, and to put pressure on its members to meet it. There is an analogy with financial disclosure requirements for domestic firms floating securities, as well as a Securities and Exchange Commission with the power to open firms' books and verify that the information disclosed is accurate.

Even with IMF guidance, however, it is not clear that the markets will react by smoothly raising the price and restricting the availability of credit to the debtor. Historical experience suggests that the markets, when they react, tend to overreact, with periods of complacency suddenly giving way to an overwhelming sense of crisis. This means that crises will occur, and that IMF-led assistance will be needed to prevent devaluation or the high interest rates needed to defend the currency from producing a complete financial and economic meltdown. Some recommend in addition that the IMF "blow the whistle" on countries whose policies heighten the risk of a crisis, publicly if necessary. It can be argued that the IMF, by virtue of the leverage associated with its lending capacity, is well positioned to play this role. Of course, there are reasons to question whether the IMF is in a better position than the markets to recognize signs of impending danger. Traders, after all, have considerable profits at stake.[30] In addition, the IMF rightly worries that a public warning that causes the markets to draw back may aggravate economic problems in the borrowing country and jeopardize any IMF Structural Adjustment Program in place. In other words, a mandate for the IMF to issue early warning signals may not be incentive compatible. These concerns were much in the minds of IMF management when the institution warned Thailand—more than once—of the risks it was running in the year leading up to July 1997. It did not go public with those warnings and was the subject of severe criticism in some circles for having taken that approach.

Sudden, even violent, reversals of capital movements may, for all these reasons, be endemic to the markets. Governments can buy insurance against them by tightening fiscal policy, which will damp down private-sector demand and, by lowering interest rates, discourage capital inflows (the opposite of the effect of sterilized intervention). The urgency of public pension reform in countries experiencing large capital inflows is often cited in this connection. In practice, however, pension reform is contentious and protracted. More generally, it is hard to fine-tune fiscal policy with the precision needed to manage sudden swings in capital flows.[31]

The other way for countries to insure themselves against the domestic costs of a sudden capital outflow is to use taxes and taxlike devices to regulate inflows.[32] Restrictions or taxes, for example, can be placed on the ability of banks to borrow offshore. This method can be thought of as an open-economy variant of the standard types of prudential regulation to which all national banking systems are subject.

The fact that governments are the lenders of last resort in the event of banking crises leads them to adopt measures designed to limit the exposure of banks to various kinds of risks that could bring down the country's financial system. In developing economies open to international financial markets, a leading source of such risk is offshore borrowing by banks, particularly borrowing in foreign currency. This link was evident recently in both Mexico and Argentina, where the weakness of the banking system and its vulnerability to a sudden reversal in the direction of capital flows fed on one another. In Malaysia, for example, limits on non-trade-related swap transactions were imposed on commercial banks in 1992. The central bank discouraged inflows in early 1994 by limiting banks' holdings of foreign funds, raising the cost of holding foreign deposits, imposing ceilings on the net external liabilities of domestic banks, and prohibiting the

30. At the same time, the virtual unanimity that more and better information is necessary enables portfolio fund managers to find an excuse for their poor predictions. Once there is fuller information, the next crisis will fail to be foreseen for other, also initially profitable, reasons. So fuller knowledge alone will not suffice to avoid future difficulties.

31. Even countries such as Thailand and Mexico, which were able to engineer sharp fiscal corrections, did not succeed in heading off large capital inflows and preventing the emergence of substantial current account deficits.

32. It is also possible to discourage inflows by taxing or controlling outflows, because foreign investors will be discouraged by impediments to repatriating their funds.

sale of short-term financial instruments to foreigners.[33] As a result, the inflow of portfolio capital was dampened.

In November 1994 India sought to curb capital inflows by ordering firms that were raising funds on international capital markets to keep the money abroad until it was needed for specific projects, and by banning firms' use of warrants (which give investors the right to buy shares at a fixed price at a future date). The Mexican crisis had little effect on any of these countries, in contrast with the temporary reaction in neighboring Thailand, which did not limit capital inflows in this way (Glick and Moreno 1995).

In Latin America, Chile restricted capital inflows starting in 1991. The Chileans required firms borrowing foreign currency to deposit a 20 percent reserve in a non-interest-bearing account with the central bank for a period of one year. In 1992 the reserve requirement was raised to 30 percent. Colombia imposed a similar requirement, at a rate of 47 percent, in September 1993. The non-interest-bearing deposit is to be maintained for the duration of the foreign loan and applies to all loans of eighteen months or less, except for trade credit. In August 1994 Colombia, in response to continued capital inflows and complaints by exporters about their loss of competitiveness, extended the deposit requirement to all loans of sixty months or less (again, excepting trade credit) at a cascading rate that fell from 140 percent for funds of thirty days or less to 42.8 percent for five-year funds. In addition, foreigners were prohibited from investing in the Colombian bond market. In October 1994, in response to the real appreciation caused by the combination of a fixed nominal peg and large capital inflows, Brazil imposed a 1 percent tax on foreign investment in the stock market and raised the tax on Brazilian companies issuing bonds overseas from 3 to 7 percent. Having eased this requirement in the wake of the Mexican crisis, Brazil acted again in August 1995 to check a rapid accumulation of reserves.[34]

It is noteworthy that the Mexican crisis had little impact on Chile and Colombia, whose capital inflows disproportionately took the form of DFI, in contrast with Argentina, which had not limited inflows significantly. Foreign investment amounted to one-third of Argentine stock market capitalization prior to the Mexican crisis, but the comparable figure for Colombia was one-twentieth. Admittedly, these countries also differed in other

33. The effectiveness of these measures was arguably enhanced by the announcement that they were temporary (which encouraged foreigners to delay their investments rather than attempt to evade the controls). In fact, some Malaysian controls were relaxed or removed when the volume of international lending fell off in the second half of 1994.

34. The Brazilian tax on equity investments by foreigners, paid at the time of purchase, will therefore fall more heavily on short-term investors and is designed to encourage a buy-and-hold strategy.

respects. Chile's success in raising its domestic savings rate also helped it to limit its dependence on foreign capital; this is in contrast with Mexico and Argentina, where the savings share of GDP fell in the years following the resurgence of lending.[35] But controls on inflows surely helped the first set of countries weather the storm.

The diverse experiences of these countries confirm the feasibility of measures to stem capital inflows. Such policies can moderate inward foreign investment without repulsing investors and causing the country to lose all access to the capital market. Controls on outflows are less obviously expeditious. If investors fear that a large devaluation is coming, they have a strong incentive to get their money out in advance, and even severe controls on outflows may prove much less than watertight. It is better, in this view, to use modest taxes and controls on inflows to limit the magnitude of the adjustment that will have to be undertaken when the flow reverses than to attempt to use even draconian controls on outflows to fight a losing battle once that reversal has begun.[36] The debate over the efficacy of controls has gained new urgency in the wake of the recent East Asian crisis and with the impending amendment to the IMF Articles of Agreement to give the IMF jurisdiction over its members' efforts to establish capital account convertibility. It is a debate to which more thought needs to be given, and quickly.

There is still another way to organize international help, but this comes after the fact. We refer to various schemes that seek to provide a means of permitting international bankruptcy, in analogy to domestic access to this possibility (Eichengreen and Portes 1996; Sachs 1994; Group of Ten 1996; IIF 1996; Macmillan 1995; U.S. General Accounting Office 1997). To the extent that the purpose of bankruptcy procedures is to freeze payments, such an option already exists insofar as countries can invoke it unilaterally; we saw this in the 1980s when several countries suspended debt service payments. But other provisions of bankruptcy proceedings—assigning seniority to new money and implementing a plan to restructure the firm's operations—have no analogue in the sovereign setting. Schemes to create a full-fledged international bankruptcy court therefore encounter very serious obstacles. Such a court would not possess the power to seize collateral, nor would it "replace" the government of a country in the way that bankruptcy courts in the United States can replace the management of a reorganized firm. Moral hazard would therefore be severe. Bankruptcy

35. This factor does not similarly complicate efforts to evaluate the effects of controls in Malaysia and Thailand, because the savings share actually rose in Thailand while falling in Malaysia over the four years following the reinitiation of lending.

36. This is in line with the controversial conclusion of the IMF's *International Capital Markets* (1995), "Background Paper V," which suggests that controls on inflows may be more efficacious than those on outflows.

statutes in different countries differ significantly, making it unlikely that governments could agree on the structure of a plan. Modest reform to enhance the orderliness of workouts may be feasible (as proposed by Eichengreen and Portes 1996), but not the development of a full-fledged bankruptcy procedure.

International capital flows have much to recommend them. But in a world of distortions, there is an argument for marginal interventions to limit their magnitude. Investors dislike controls that raise questions about a government's commitment to open markets, as do international institutions, which fear that they will be adopted instead of, rather than in addition to, policy reforms (IMF 1994). These are legitimate fears. But those who laud the benefits of open markets and caution that governments can abuse the privilege of intervening in their operation are under an obligation to offer alternatives. In particular, they should be in the forefront of those calling for an expanded IMF role in crisis management and for new procedures to deal in a more orderly fashion with debt crises when they occur.

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3

Effects of International Portfolio Flows on Government Policy Choice

Sylvia Maxfield

"We have to learn about these capital flows and how they might actually matter to governments and national interests."

—John Woolley (1994)

Through modern history, capital flows from capital-rich to relatively capital-scarce countries has taken many forms. The experience of commercial bank lending beginning in the late 1960s and ending with the wave of near defaults that ensued in 1982 dominates recent memory. Since the late 1980s there has been a large increase in securitized lending to and in developing countries. This means investors in Organization for European Cooperation and Development (OECD) countries are purchasing stocks and bonds issued by governments, agencies, or corporations in countries as far-flung as Ghana, Peru, and Kazakhstan. Net capital flows to developing-country equity markets rose from $1.3 billion in 1989 to $52 billion in 1993 (Hale 1994, 21).

The contributors to this book analyze the rise of private international capital flows, focusing on global historical trends, causes and consequences of the contemporary worldwide trend, and specific regional situations. This chapter constitutes a first step in exploring the political consequences of the global rise in private capital flows for emerging market countries. The analysis is concerned specifically with the ways and extent to which economic policy choice may be constrained. Such constraint has indirect consequences for consolidation of democracy, which the following pages do not explicitly address. If the economic policy choices of government leaders in emerging market countries are heavily constrained by the

Kent Eaton provided excellent research assistance. The section "American Depository Receipt Price Determination and Investor Information Use" draws on joint work with Joshua Hoffman. I am grateful for comments on an earlier version from Miles Kahler and participants in the Council on Foreign Relations Study Group on "Emerging Markets."