

INTERNATIONAL RESCUES VERSUS BAILOUTS: A HISTORICAL PERSPECTIVE

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Recent events in Asia and other parts of the globe have prompted calls from many quarters for international rescue of the monetary or fiscal authorities of distressed countries, not only the current batch but also likely candidates for succor in years to come. The current debate over the experience of this decade's rescue attempts and the calls for a change in the global financial architecture to possibly redefine the roles of the present international financial institutions make the case timely for a study of international rescues from a historical perspective.

A study of the record for the past two centuries suggests that rescues before this decade were quite different from the recent series of bailouts. Prior to the 1990s, rescue loans were made in an attempt to prevent a devaluation or abandonment of a pegged exchange rate. They were temporary loans, often quite modest, offered on commercial lines usually on a reciprocal basis, and accompanied by a package of remedial policies. In many cases they were successful. In all cases the loans were repaid.

The international rescues of the 1990s mark a watershed in the purpose, size, and term of the funds provided to countries in distress. In the era before the 1990s, the purpose of international loans was to help monetary authorities preserve a pegged exchange rate, while the loans of the 1990s were made after the peg collapsed in order to bail out investors and lenders who would otherwise have suffered from a devaluation. These bailouts have been justified on the ground that they will prevent contagion—that is, stop the financial crisis from spreading to other countries. With regard to size, the large bailouts

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of the 1990s reflect the growth of international capital flows to the affected countries provided by banks and nonbank financial institutions of the industrialized world. Finally, the longer term of the loans made during this decade is an indication that the troubled countries were not only illiquid but insolvent. For that reason the success of the rescues is in question.

In the remainder of this paper, I provide an overview of the history of international financial crises and rescues, discuss the lessons from that history, and consider the case for reforming the international financial architecture. Special attention will be paid to the case for making the International Monetary Fund a lender of last resort during international liquidity crises.¹

The Historical Experience

I demarcate the rescues of the past two centuries by international monetary regime. In the period before World War II, rescue loans to central banks and sovereign governments were often arranged by or intermediated by private investment banks, such as Rothschilds, Barings, and J.P. Morgan. Since World War II, all of the rescues have been arranged by official monetary authorities, or international agencies, the IMF, Bank for International Settlements, and the World Bank.

The Gold Standard, 1821–1914

In the century before World War I, frequent short-term loans were made to central banks and other monetary authorities to relieve pressure on their reserves during financial crises. Those crises, referred to at the time as either internal or external drains, occurred as a result of real shocks—such as domestic or foreign harvest failures, wars, and indemnities—that created an adverse balance of trade. Crises also occurred during banking panics, when the public's demand for specie or expansionary action by the lender of last resort threatened the monetary authorities' reserves.

In virtually every case, rescue loans were made on commercial terms to central banks that had a record of solvency and of credible adherence to specie convertibility. The loans were regarded as a supplement to or, in some cases, as a substitute for other remedial actions designed to replenish the monetary authorities' reserves, such as raising the discount rate and credit rationing. In many cases the loans were made on a reciprocal basis. As Marc Flandreau (1997)

¹This discussion draws on Bordo and Schwartz (1999).

suggests, there is little evidence to suggest that these rescues were in any way systematic or part of a pattern of central bank cooperation, as has recently been maintained by Barry Eichengreen (1992).

Three episodes have resonance for today. A major banking panic in London in 1825 climaxed a business expansion of booming real activity, rising commodity prices, and speculation in Latin American stocks. Country bank credit and a highly accommodative Bank of England monetary policy, following resumption of specie payments in 1821, fueled the boom (Neal 1998, Bordo 1998). The Bank of England was late in providing liquidity to the market that would have prevented bank failures and bankruptcies. Suspension of convertibility was averted by a loan of £400,000 from the Banque de France on Monday, December 19, through the intermediation of the Rothschilds in Paris. The loan was quickly repaid.

A second episode was the failure of the House of Barings in November 1890 resulting from a debt default in Argentina, whose securities it had underwritten. The Bank of England averted a panic by arranging a "lifeboat" operation, whereby the government guaranteed loans by London banks to recapitalize Barings. The Bank's share in the rescue would have depleted its gold reserves sufficiently to threaten convertibility. In addition to raising the discount rate, the Bank protected its reserves by borrowing £2 million in gold from the Banque de France, the Rothschilds acting as intermediaries. Subsequently, it borrowed a further £1 million. The Imperial Bank of Russia also agreed to provide £1.5 million of German gold coins. British Exchequer bonds served as collateral for each of the loans. The news as much as the fact of the loans restored confidence.

After defaulting on its debt, Argentina was cut off from further British loans. Severe recession ensued. Lending resumed in the mid-1890s, after the private foreign creditors and the Argentine debtors rescheduled the debt.

The final episode was a privately arranged rescue of the U.S. Treasury in 1895. A U.S. budget deficit after 1890 and the issue of legal tender Treasury notes of 1890, redeemable in silver coin, which the Sherman Silver Purchase Act of 1890 mandated, created uncertainty about the convertibility of the U.S. dollar into gold. In January 1895, a run on gold in exchange for legal tenders reduced the Treasury's reserve to \$45 million. In February 1895, the Treasury secretary contracted with the Belmont-Morgan banking syndicate to market a 4 percent bond issue and provide the Treasury with a six-month, short-term, interest-free gold credit to restore the gold reserve. During the five months after the contract was signed, no gold was withdrawn from the Treasury.

The Interwar Years, 1919–39

The regime that was restored from 1924 to 1936 was a gold exchange standard that differed profoundly from the pre-1914 gold standard. Flaws in the structure and inappropriate policies by its members meant that whatever attempts at rescues were made when crises struck in 1931 were doomed from the start.

Austria, May–June 1931. On May 17, 1931, the Credit Anstalt, Austria's largest bank revealed that it was insolvent. The Credit Anstalt was then recapitalized by the Austrian government. A run on other Austrian banks ensued. The Austrian National Bank, as lender of last resort, engaged in discount window lending. Fears that expansionary monetary policy would reignite the hyperinflation that Austria suffered in the 1920s led to a run on the reserves of the Austrian National Bank.

The Austrian authorities tried to stem the crisis by soliciting a foreign loan from the Bank for International Settlements. The BIS arranged for a loan of 100 million schillings (\$14 million) from 11 countries. The process took two weeks and almost immediately the credit was exhausted. A request for a second loan foundered when France and several other countries insisted that Austria forswear joining a customs union with Germany that had been announced in March. The Bank of England then unilaterally extended a loan of 50 million schillings (\$7 million) for a week. When a rise in the discount rate proved ineffectual in defusing the speculative attack, exchange controls were imposed and Austria in effect left the gold standard.

Germany, July 1931. The crisis spread to Germany, as foreign depositors feared the Austrian events would be repeated in a country with a similar banking system and similar problems. A full-fledged banking panic occurred after the failure of the Danat Bank on July 17, 1931. The Reichsbank responded by guaranteeing its deposits. The run on other banks was ended by a suspension of cash payments. A speculative attack on the Reichsbank's reserves threatened to breach its statutory gold reserve requirements in June. The Reichsbank then sought and obtained an international loan of \$100 million (\$25 million each from the Bank of England, the Banque de France, the Federal Reserve Bank of New York, and the BIS) on June 25. The loan proved insufficient to stem the speculative attack. A second loan request by Hans Luther, president of the Reichsbank, for \$1 billion foundered in the face of opposition by both the Banque de France and the Federal Reserve. The external drain was finally halted by the announcement of a standstill agreement on July 20 and the imposition of exchange controls.

Great Britain, September 1931. A succession of political and economic shocks unhinged sterling's link to gold. Reserve losses starting in May 1930 brought gold reserves down to under £150 million, a level observers regarded as a critical minimum. In May 1931 the Austrian banking crisis precipitated capital flight and the announcement of a banking holiday. British deposits of £5 million in Vienna were thereby frozen. The next month banking difficulties in Germany made £70 million of German debts to British banks uncollectable, and at the same time German investors repatriated their London funds. The closing of Germany's largest bank in July and the publication of the Macmillan Committee Report led to a fall in sterling below the gold export point against major currencies. The Bank rate was raised twice in July from 2.5 percent to 4.5 percent, but it was not changed again before convertibility was suspended.

In the final week of July 1931, the Bank of England obtained matching credits of £25 million from the Banque de France and the Federal Reserve Bank of New York. The amount was inadequate to halt the run. Further loans to Britain of \$200 million each from a syndicate formed by J.P. Morgan in New York and a syndicate in Paris also proved inadequate. With reserves dwindling, the government suspended convertibility on September 19.

An argument has been made that had rescue loans of sufficient magnitude been advanced and had the central bank cooperation that prevailed before 1914, or in the 1920s, been extended, the crisis of 1931 could have been prevented (Eichengreen 1992). Alternatively, had an international lender of last resort been present, it could have saved the day (Kindleberger 1989). It seems doubtful, however, that either cooperation or an international lender of last resort would have worked. The fundamental problem of worldwide deflation and depression lay with the incorrect policies followed by the United States and France, which combined with the flawed structure of the gold exchange standard inflicted depression and deflation on the central European countries with weak banking systems. Absent a reversal of the deflationary policy stance of the Federal Reserve and the Banque de France, successful rescues would have been short-lived. In the case of Great Britain, absent a major fiscal reform, no rescue no matter how large would have allowed Britain to preserve the parity.

Bretton Woods

The framers of the Bretton Woods agreement in July 1944 established an international monetary framework that would overcome the perceived problems of the interwar period, especially the perceptions

that capital flows (hot money movements) were a key source of the instability of the 1930s and that international cooperation had failed. Embedded in the Articles of Agreement was a proscription of free capital mobility. The International Monetary Fund was established to provide temporary assistance to countries with current account imbalances. Members were to declare par values in terms of dollars and/or gold. As it evolved, currencies became convertible into dollars, with the dollar alone convertible into gold. Par values could only be altered in the event of a fundamental disequilibrium.

In addition to crises facing the members of the system, which in some respects echoed the events of the interwar experience, the Bretton Woods system was threatened by a systemic crisis. As outstanding dollar liabilities increased relative to U.S. gold reserves, so did the likelihood of a run on the center country of the system. By the late 1960s this confidence problem was worsened by expansionary U.S. monetary policy. In the face of U.S. inflation, other member countries became increasingly reluctant to accommodate growing U.S. balance of payments deficits and the system collapsed on August 15, 1971, when President Nixon closed the gold window in the face of an attempted conversion by Britain and France of dollar liabilities.

Sterling in Crisis, 1967

Sterling's experience of continuing crises and rescues presents a revealing insight into the rescue experience of the Bretton Woods regime. From 1964 internal and external objectives were on a collision course in Britain. Expansionary monetary and fiscal policies to promote employment produced inflation, a deficit in the current account, and declining international reserves. Speculation against sterling followed. The Labour Government that assumed office in October 1964 opposed devaluation, and instead adopted a surcharge on imports, leaving internal policies unchanged. In November a \$4 billion IMF and G-10 loan package was arranged.

The authorities continued to maintain a relatively expansionary policy through 1965, and pressure on sterling reserves continued. In March the Bank of England drew on its swap credits with the Federal Reserve and other central banks. In May, Great Britain drew \$2.4 billion from the IMF under the General Agreements to Borrow (Solomon 1982: 59).

A tight budget package was instituted in July 1965, along with restrictions on capital outflows. The pressure temporarily abated but arose anew in the spring and summer of 1966. This time a massive austerity program was instituted on July 20, and external assistance was provided by the Federal Reserve and other central banks (the

Federal Reserve swap facility with the Bank of England was increased from \$750 million to \$1.4 billion).

Declining output and rising unemployment in early 1967 led to a reversal of the tight fiscal and monetary policies. The balance of payments deteriorated in the summer of 1967. A series of adverse shocks—the closing of the Suez Canal during the Six-Day War and a dock strike in October were contributing factors. A speculative attack on sterling was mounted in November. Loans of \$1.7 billion from May to November were insufficient to stem the tide. Discussion of a \$3 billion rescue package came to naught (Solomon 1982: 90).

The rescues of the United Kingdom and other countries during Bretton Woods occurred against a backdrop of an ongoing systemic disequilibrium that ultimately would lead to the collapse of the Bretton Woods system. Although many of the rescues were successful, in the sense that they alleviated the pressure to devalue and the loans were ultimately repaid, in the end, the adjustable peg system collapsed into the managed float regime that endures to the present. Hence, at best, the rescues were holding actions.

Post-Bretton Woods, 1973–90

The OPEC oil embargo in the 1970s dominated international events. Loans extended to low-income countries were structural and humanitarian, to enable them to buy high-priced oil. They were not rescue loans. A similar observation applies to the recycled loans by syndicated commercial banks in advanced countries, in which OPEC deposited the huge increase in its income. Those loans were extended mainly to the Latin American public sector, but the private sector also assumed a heavy burden of debt. Debt service including short-term amortization represented a claim that virtually exhausted current account income. As foreign debt continued to increase, and the ratio of public debt to GDP soared, capital flight became pronounced. Debt service by the public and private sectors came to a halt in 1982.

The strategy of national authorities in the face of this crisis was to protect the lending banks. They were cajoled to extend enough new loans to the borrowers to enable them to pay interest, and thus avoid the designation of the original loans as nonperforming on the banks' books. That strategy, also followed by the IMF, which lent enough to borrowing countries to keep up debt service, was maintained until 1987 when the banks began to provision the Latin American loans (Schwartz 1989). The solution of writing down the loans was not adopted until the end of the decade when Brady zero-coupon bonds were sold by the U.S. Treasury to the Latin American governments. This was no international rescue.

Bailouts of the 1990s

The Mexican Crisis of 1995, the current Asian crises, and the Russian crises, unlike their predecessors, arose because of capital account, not current account, reversals. Capital flight produced the crisis in each country, beginning with a devaluation of the national currency that had fixed or crawling peg ties to the dollar or a basket of currencies.

A massive bailout of \$50 billion for Mexico was arranged by the IMF and the Exchange Stabilization Fund so that it did not default on its dollar-indexed, short-term debt. Only subsequently did observers take notice of the problems of the banks with large amounts of nonperforming loans.

The Asian problems were rooted in excessive credit to the private sector fueled by international capital flows to the banks and to corporate borrowers. Credit was allocated without attention to ordinary standards of return on investment. The banks borrowed short-term in foreign-currency denominated debt and lent long-term in domestic currency. Withdrawal of foreign capital was triggered by mounting current account deficits relative to GDP. Stock market valuations plunged and overvalued currency exchange rates that were pegged to the dollar or a basket of foreign currencies depreciated as capital fled (Schwartz 1998).

The Russian economy has made unsuccessful efforts to convert a command economy into a market-oriented one. The basic command structure remains, with state enterprises, whether or not nominally privatized, operating as before. Government bonds were acquired by foreign investors, but the government has been unable to collect tax revenue sufficient to pay for its outlays. Enormous arrears of wages due government employees in state enterprises have mounted. Reform pledges have not been kept.

The Asian countries were given close to \$120 billion on the ground that failure to rescue them threatened contagion not only to the immediate region but worldwide. On the same grounds Russia was given funds, but rescue has not been accomplished.

Lessons from History

Several important lessons can be learned from the foregoing historical episodes of financial crisis and rescue. Five lessons stand out in particular.

The Changing Nature of Financial Rescues

The first lesson contrasts the experience of the period before 1973 with that of subsequent decades. International lending then consti-

tuted rescues of monetary authorities of advanced countries temporarily short of liquidity. Their difficulties were resolved with relatively small amounts of money, sufficient to stave off devaluation or abandonment of a fixed exchange rate, while remedial policies were put in place. Taxpayers' funds were not required. The recent experience of bailouts involves handing over relatively large amounts to both foreign lenders and domestic investors of emerging countries *after* devaluation of a pegged exchange rate to avoid their incurring wealth losses. These are transfers from the less wealthy to the wealthier.

A Repetition of 19th Century Events

The background to the crises of the 1990s is the opening of capital markets after 50 years of impediments to free flows enabled emerging countries to borrow vast amounts from the advanced countries (Obstfeld and Taylor 1998; Bordo, Eichengreen, and Kim 1998). The net flows today rival those of the golden age of European overseas investment before 1914, and the gross flows are a multiple of those in earlier times.

The liberalization of the capital accounts in addition to creating opportunities for growth in the emerging countries has exposed them to serious hazards. Lenders may ignore structural problems of underdevelopment in these countries and incorrect policies in their eagerness to profit from the promise of high-yielding investments. Lenders are not fully informed about internal conditions in emerging countries, and borrowers may not put the funds made available to them to their best use. In this respect the boom-bust cycle of international borrowing repeats events of the 19th century. Prominent examples include British lending to the United States in the 1830s on which a number of states defaulted, and Latin American booms followed by busts and defaults in the 1820s, 1870s, and 1890s (Marichal 1989).

The Shifting of Risk

What is different in today's boom-bust episodes compared with earlier ones is the belief that domestic financial institutions are protected by an internal safety net and that foreign lenders will not suffer losses on their loans in hard currencies because funds to compensate them will be made available by international lending agencies and the monetary authorities of the advanced countries. In earlier times losses were actually sustained by lenders, and by borrowers who were then cut off from further loans. Eventually, settlement of outstanding debts was reached, but at the cost of cessation of economic growth. Moral hazard weakens incentives for lenders to monitor the performance of both the private and public sectors where they invest. By

contrast, in earlier times, presumably both borrowers and lenders learned the hard lesson that caution paid.

The Rise of Moral Hazard

Why has moral hazard assumed an important role in the environment of the 1990s? I offer four explanations. The first is contagion. The second is "too big to fail." The third is extension of the safety net. The fourth is an implicit contract with the IMF.

In simplest terms, the argument for the threat of contagion is that failure to bail out investors in one emerging country's markets will spill over to other emerging markets, so investors, fearful of getting burned, will abandon those markets as well. Pure contagion would occur only in circumstances in which other emerging countries were free of the problems facing the first emerging country. I know of no evidence of pure contagion. Transmission is another story. Shocks to one country will spill over to other countries through trade and the capital accounts. When investors withdraw their capital from countries with the same problems as were present in the first such country, this is a demonstration effect, not contagion.

As for "too big to fail," this is a fallacy that domestic lenders of last resort should supply liquidity to insolvent institutions because not to do so would endanger the stability of the entire financial system. The fallacy is that markets cannot distinguish between illiquid and insolvent institutions, and that normal bankruptcy procedures will not allocate resources in a timely fashion to their best use.

Extension of the safety net to cover investors' foreign holdings, such as large investment firms, presumes that the national welfare depends on their welfare. It is far from clear that protection of any sector or industry benefits the whole economy.

Finally, emerging countries may believe that they have an implicit contract with the IMF to be saved from their own folly. This is an expansion of the original terms of the Articles of Agreement at Bretton Woods that established the IMF as a social insurance fund in which members contributed resources, which would be made available to them or other members as needed. Members could have access to the fund in the event of temporary current account imbalances. Capital movements then were proscribed. Today, capital mobility has been restored, and the size of the drawings required greatly exceeds any one country's initial deposit or line of credit. Massive loans from other members at below market rates are now expected. One could argue that higher tranche IMF loans are subject to conditionality, and therefore are not free from penalty. However, in contrast to rescues of

earlier times, where loans were offered attendant upon remedial policies, conditionality has proved to be more easily evaded.

The Failure of Pegged Exchange Rates

A pervasive problem in the case of all the crises was pegged exchange rates. In the recent examples, loans were extended by foreign commercial banks and other private lenders at interest rates that did not account for exchange risk based on the incorrect belief that adherence to the peg was durable and credible. This experience supports floating exchange rates to avoid speculative attacks on pegs (Obstfeld and Rogoff 1995). If countries maintain floating exchange rates, capital markets should be able to handle any exigencies of both private and public finance. On the other hand, in normal times small open economies may be well advised to link their national currencies to the currency of a larger trading partner. In those cases, however, when countries are faced with large foreign shocks, they have to weigh the costs of sticking to the peg against the benefits.

Reforming the International Architecture

The rescues of earlier times that were successful teach us that one should rescue a monetary authority that has a temporary liquidity problem, is adopting remedial policies, and has a good chance of timely repayment. Today's monetary authorities, including the IMF, should follow Bagehot's principles: Lend short term at a penalty rate on good collateral that exceeds the value of the loan.

One recent proposal for reform that might fit the bill is the suggestion by Charles Calomiris (1998) and Allan Meltzer (1998) that the IMF be converted into a lender of last resort on Bagehotian lines. In order for such an institution to avoid the pitfalls of moral hazard, it would need to establish tight eligibility values for members to get access to the discount window. In the Calomiris plan, for members to qualify for assistance they would have to have sound financial systems within a comprehensive framework of market-based supervision and regulation. The package includes: capital ratios based on subordinated debt, reserve requirements, secondary liquidity ratios based on foreign securities, deposit insurance, and no restrictions on entry by foreign banks. Those requirements would minimize claims on the domestic monetary authority from unsound financial institutions and the likelihood of bailouts of insolvent banks. In addition, his plan would restrict the ability of members to issue short-term sovereign debt and would require high international reserve ratios for a central bank committed to a peg.

With those requirements satisfied, in the event of a liquidity crisis, members could borrow from the IMF on a penalty rate, on the basis of collateral of 125 percent of the loan (25 percent of which is in the form of foreign securities). The IMF would obtain the high-powered money needed to act as a lender of resort by having access to lines of credit from the monetary authorities of the G-3. Those borrowings would be fully collateralized by government securities of the country of issue. The IMF members would finance the purchase of the collateral.

Transformation of the IMF from its present structure would build upon its current functions in providing surveillance and information to the international monetary system. This plan would go a long way toward moving away from today's bailouts and the attendant moral hazard toward the true international rescues of earlier times. However, one could argue that, in today's world of open and deep capital markets, private markets could perform the same role. Hence, the need for having the IMF act as an international lender of last resort may only arise under rare circumstances.

References

- Bordo, M.D. (1998) "Comment on Neal." *Federal Reserve Bank of St. Louis Review* 80(3) (May/June): 77–82.
- Bordo, M.D., and Schwartz, A.J. (1999) "Under What Circumstances, Past and Present, Have International Rescues of Countries in Financial Distress Been Successful?" *Journal of International Money and Finance* (August): forthcoming.
- Bordo, M.D.; Eichengreen, B.; and Kim, J.-W. (1998) "Was There Really an Earlier Period of International Financial Integration Comparable to Today?" In *The Implications of Globalization of World Financial Markets*. Conference Proceedings. Seoul: Bank of Korea.
- Calomiris, C. (1998) "Blueprints for a New Global Financial Architecture." Unpublished manuscript. Columbia University Business School.
- Eichengreen, B. (1992) *Golden Fetters*. New York: Oxford University Press.
- Flandreau, M. (1997) "Central Bank Co-operation in Historical Perspective: A Skeptical View." *Economic History Review* 50(4): 735–63.
- Kindleberger, C.P. (1989) *Manias, Panics and Crashes: A History of Financial Crises*. Revised ed. New York: Basic Books.
- Marichal, C. (1989) *A Century of Debt Crises in Latin America*. Princeton: Princeton University Press.
- Meltzer, A. (1998) "What's Wrong With the IMF? What Would Be Better?" Unpublished manuscript. Carnegie Mellon University.
- Neal, L. (1998) "The Financial Crisis of 1825 and the Restructuring of the British Financial System." *Federal Reserve Bank of St. Louis Review* 80(3) (May/June): 53–76.
- Obstfeld, M., and Rogoff, K. (1995) "The Mirage of Fixed Exchange Rates." *Journal of Economic Perspectives* 9(4): 73–96.

- Obstfeld, M., and Taylor, A. (1998) "The Great Depression as a Watershed: International Capital Mobility over the Longer Run." In M.D. Bordo, C. Goldin, and E.N. White (eds.) *The Defining Moment: The Great Depression and the American Economy in the Twentieth Century*, 353–402. Chicago: University of Chicago Press.
- Schwartz, A.J. (1989) "International Debts: What's Fact and What's Fiction." *Economic Inquiry* 27(1) (January): 1–19.
- Schwartz, A.J. (1998) "Asian Banking Crises in the 1990s: All Alike?" In G.G. Kaufman (ed.) *Research in Financial Services*, Vol. 10. Greenwich, Conn.: JAI Press.
- Solomon, R. (1982) *The International Monetary System, 1941–1982*. Revised ed. New York: Harper and Row.

CREDITOR PANICS: CAUSES AND REMEDIES

Jeffrey D. Sachs

Emerging market financial crises are characterized by an abrupt and significant shift from net capital inflow to net capital outflow from one year to the next. By this standard, we find 10 cases of significant financial crisis among the middle-income developing countries in the past four years: Turkey 1994, Venezuela 1994, Argentina 1995, Mexico 1994–95, Indonesia 1997–98, Korea 1997–98, Malaysia 1997–98, Philippines 1997–98, Thailand 1997–98, and Russia 1998.¹ It is the contention of this paper that such crises typically reflect a three-stage process that hits a developing country engaged in large-scale international borrowing.² In the first stage, the exchange rate becomes overvalued as a result of internal or external macroeconomic events. In the second stage, the exchange rate is defended, but at the cost of a substantial drain of foreign exchange reserves held by the Central Bank. In the third stage, the depletion of reserves, usually in combination with a devaluation, triggers a panicked outflow by foreign creditors holding short-term claims.

The trigger of panic, in most cases, is the devaluation itself, resulting from the exhaustion of reserves. The panicked outflow of short-term creditors leads to macroeconomic overshooting, characterized by sharp economic downturn, typically followed by a nearly equally sharp recovery. Various dimensions of the macroeconomy are involved in this overshooting: real GDP, the real exchange rate, real interest rates, net capital flows, and stock market valuations.

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¹For further details on many of these cases, see Radelet and Sachs (1998b).

²More detailed arguments along these lines in the case of Mexico can be found in Sachs, Tornell, and Velasco (1996a, 1996b) and in the case of East Asia in Radelet and Sachs (1998a and 1998b). Two important theoretical treatments of these crises are Chang and Velasco (1998a, 1998b), extended to an empirical discussion of East Asia in Chang and Velasco (1998c).