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## The International Financial Architecture

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For the roughly three decades following the creation of the International Monetary Fund (IMF) in 1944, concerns about the “international monetary system” focused on the exchange rates, international reserves, and balance-of-payments positions of the major industrial countries. The oil-exporting developing countries took center stage during the oil price shocks of 1973–74 and 1979–80 but not beyond that. With the advent of the Mexican debt crisis of 1982 and the subsequent discussions and negotiations between creditors and debtors leading up to the Brady Plan, debt problems in developing countries took on systemic interest—but only temporarily.

The last 10 years have been different in at least four respects. First, the motivating force in the debate about if and how the “system” needs to be reformed has not been the economic situation in the major industrial countries but rather a series of prominent currency, banking, and debt crises (and near misses) in a group of larger emerging economies—namely, Mexico (1994–95), the Asian financial crisis economies (1997–98), Russia (1998), Brazil (1998–2002), Turkey (1999–2002), and Argentina (2000–01).

Second and echoing the renaming of the international monetary system as the “international financial architecture” (hereafter, IFA for short), the scope of reforms has moved beyond exchange rates, international liquidity, and new lending windows at the IMF to encompass broader aspects

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of crisis prevention and crisis management in developing countries—including international standards and codes (covering everything from data transparency to banking supervision to corporate governance), currency and maturity mismatches, early warning systems, and the design of debt contracts (including promotion of collective action clauses).<sup>1</sup> Most of these reforms are aimed either at increasing the role of market forces in emerging economies or at establishing the conditions under which markets would function better in those countries.

Third, when the need for exchange rate realignment and for balance-of-payments correction in the world's largest economy has come to the fore, the proposed remedies now involve policy actions not only in Europe and Japan but also on the part of several of the larger emerging economies, including China.<sup>2</sup> In contrast, the developing countries were at best on the periphery in the earlier discussions of the "dollar overhang."

And fourth, the fora in which architecture issues are now discussed have increasingly included at least the larger emerging economies. Putting aside the IMF, where developing countries have long had a presence, recent years have witnessed the establishment of both the G-20 and the Financial Stability Forum, the increasing involvement of emerging economies in the Bank for International Settlements (BIS), the growth of "regional" monetary, financing, and surveillance arrangements (Association of Southeast Asian Nations [ASEAN] plus 3, the Asia Pacific Economic Cooperation [APEC] forum, among others), and the participation of Russia and China in at least some meetings of the G-7.

The fact that architecture reform has become so emerging market-centric over the past decade does not imply of course that all is well in the major industrial countries. As analyzed in other chapters, the United States is currently facing large actual and prospective fiscal and external deficits, the European Union is grappling with slow economic growth and a host of still-serious structural impediments, and Japan has just in the last year or so begun to break free from a decade of weak economic performance and financial-sector fragility. In addition, there have been cases—the current overvaluation of the dollar being a leading example—when one or more G-3 exchange rates have arguably gotten seriously out of line with fundamentals. But the reality has been that the major industrial countries have not been persuaded that ambitious policy coordination proposals—be they centered around publicly announced exchange rate targets or other proposed reforms—would be preferable to the current system of

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1. One can think of the IFA as the institutions, policies, and practices associated with the prevention and resolution of banking, currency, and debt crises, primarily (but not exclusively) in emerging-market economies.

2. See Goldstein (2004) for an explanation of how inaction on revaluing the renminbi inhibits currency appreciation in Asia more widely and how this, in turn, adversely affects adjustment of the excessively large and growing US current account deficit.

monetary policy directed primarily at domestic objectives and of loose and episodic policy cooperation within the G-7.<sup>3</sup> Put in other words, even though it is widely acknowledged there is still much unfinished business to do on policy reform in the major industrial countries, it has proved easier over the past decade to forge international agreement on how emerging markets can reduce their crisis vulnerability than on how greater discipline can be brought to bear to correct policy weaknesses in the G-3.

As Jan Boyer and Edwin Truman argue in their chapter in this book, it is in the strong interest of the new US administration to recognize the increasing importance of the larger emerging economies in the global economic system and to make efforts to see that the closer integration of these economies into the global economy is successful. By a “successful” integration, I mean one where the emerging economies are able to sustain a healthy rate of economic growth, maintain good access to the large markets in the industrial world, and reduce the frequency and severity of currency, banking, and debt crises. Toward that end, I argue in this chapter that the new US administration should concentrate on *six priorities* in reforming the IFA:<sup>4</sup>

- agreeing on and enforcing *stronger injunctions against exchange rate manipulation*;
- *controlling currency mismatches in emerging economies*—a vulnerability that has been present in every prominent emerging-market financial crisis of the past decade;
- giving assessments of, and policy prescriptions for, *debt sustainability a larger role* in IMF surveillance, policy lending, and policy advice;
- improving the quality of compliance evaluations for *international standards and codes* so as to increase their impact on the market cost of borrowing for emerging economies;
- shifting human resources within the IMF to give greater weight to the *early warning of currency, banking, and debt crises* in emerging economies; and
- limiting the extension of very large IMF loans—known as *exceptional access*—to country cases that are truly “exceptional.”

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3. See the discussions of G-7 policy coordination in the chapters by C. Fred Bergsten and Michael Mussa.

4. I have excluded policies to alleviate poverty in the low-income countries since these are taken up—along with reforms at the World Bank—in William Cline and John Williamson’s chapter in this book. Some other issues related to reform of the IMF (e.g., chairs and shares at the Fund and the Bank, SDR allocations, and crisis resolution strategies) and to global governance (e.g., whether the G-7 should be replaced by a G-4 composed of the United States, the European Union, Japan, and China) are discussed in Boyer and Truman’s chapter in this book and in Kenen et al. (2004).

Of these six proposed reforms, the first three are the most important; the second three would also be useful but are likely to pay smaller dividends. Also, while several of the proposed reforms can be pursued simultaneously in a number of international organizations and groups, it is implicitly assumed in what follows that the IMF is the institution best placed to take the lead on this set of issues. In the first six sections of this chapter, I lay out the case for each of these policy recommendations. The last section offers some concluding remarks.

## Discouraging “Beggar Thy Neighbor” Exchange Rate Policies

One of the main reasons for establishing the IMF was to put in place a set of international rules or guidelines that would discourage “beggar thy neighbor” exchange rate policies. After all, the world had just gone through a troublesome experience with the competitive depreciations of the 1920s and 1930s, and there was widespread agreement that the new “rules of the road” should outlaw such policies for the future.

In addressing the general obligations of members (countries) regarding exchange rate arrangements, the IMF’s charter (i.e., its Articles of Agreement) stipulates (in Article IV, Section 1, paragraph iii) that each member shall:

avoid manipulating exchange rates or the international monetary system in order to prevent effective balance-of-payments adjustment or to gain unfair competitive advantage over other member countries.

The Fund’s charter (Article IV, Section 3) likewise delineates important obligations for the IMF in overseeing the operation of the exchange rate system, including the injunction that the Fund shall “oversee the compliance of each member with its obligations . . .” and “exercise firm surveillance over the exchange rate policies of members, and shall adopt specific principles for the guidance of members with respect to these policies.”

In 1977, the Fund laid out principles and procedures for its surveillance over countries’ exchange rate policies. In that document, a number of developments are identified that might indicate the need for discussion with the country. The first such development is “protracted, large-scale intervention in one direction in the exchange markets.” Other developments cover official or quasi-official borrowing, restrictions on trade and capital flows, monetary and domestic financial policies, and behavior of the exchange rate that appears unrelated to underlying economic and financial conditions.

A reasonable reading is that the Fund intended these developments to be a set of presumptive indicators or “pointers” of (inappropriate) efforts to “manipulate” the exchange rate or to maintain the “wrong” exchange

rate.<sup>5</sup> The interpretation of these pointers was not intended to be mechanistic but rather judgmental within the framework of a comprehensive analysis of the general economic situation and economic policy strategy of the country.<sup>6</sup>

Unfortunately, very little has been done over the past 25 years either to identify serious episodes of exchange rate manipulation or to enforce/encourage remedial action when such episodes have occurred.

Indeed, several fallacious arguments have often been put forward to rebut charges of currency manipulation. One such argument is that since the IMF rules allow countries to adopt the currency regime of their choice and since maintenance of a fixed exchange rate may involve exchange market intervention, there can be no manipulation for countries that opt for a fixed rate regime.

True enough, countries are free to pick fixed rates, floating rates, or practically any currency regime in between. Countries are also permitted to intervene in exchange markets, and indeed are expected to do so to counter disorderly market conditions. But what countries should *not* do is seek to maintain the wrong exchange rate by relying, inter alia, on large-scale, prolonged, exchange market intervention in one direction. Moreover, this injunction applies to attempts to maintain via intervention both an overvalued and undervalued fixed rate. In short, not all intervention is ruled out: only one particular kind of intervention (large-scale, prolonged, and in one direction) that is likely to be symptomatic of trying to maintain the “wrong” exchange rate.<sup>7</sup>

A second defense is that a country can't be manipulating if it has maintained the same fixed parity over an extended period. This claim fails to recognize that what counts for countries' competitiveness is the real effective exchange rate (that is, the average trade-weighted, nominal exchange rate corrected for inflation differentials among countries). And the

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5. By the “wrong” exchange rate, I mean a real exchange rate that differs from the equilibrium rate implied by economic fundamentals; see Goldstein (2004) for an explanation of alternative methodologies for estimating the equilibrium real exchange rate.

6. For example, in assessing a country's exchange rate and the development of its international reserves, one would want to take into account, inter alia, the size of the country's external debt burden, the adequacy of the level of its international reserves, and its ability to shift demand (after an exchange rate change) between external and domestic sources.

7. By the same token, the intention of the IMF guidelines is not to prohibit countries from building up reserves over time if the level of those reserves (say, after a crisis) is undesirably low. In the September 2003 IMF *World Economic Outlook*, the Fund examined reserve holdings in emerging economies. The main finding was that reserves in many emerging economies had increased more quickly since 2001 than warranted by fundamentals. In addition, that study concluded that from both the domestic and international standpoints, there would be advantages for growth in emerging economies of Asia to become more reliant on domestic demand accompanied by a steady reduction in current account imbalances over the medium term.

appropriateness of the real effective exchange rate has to be evaluated against the backdrop of the country's overall balance-of-payments position. Seen from this perspective, misalignment of the real exchange rate can come about just as easily from "nonmovement" of the nominal exchange rate as it can from excessive movement. In addition, a real exchange rate that is appropriate when the balance of payments is in deficit may no longer be appropriate once the balance of payments goes into substantial surplus.

Yet a third fallacious argument is that a country should be permitted to use whatever kind of exchange market intervention is necessary to hold down the real exchange rate if an undervalued exchange rate is needed to generate sufficient employment in the traded goods industries to ensure social stability. The rub here is that since practically all countries have full employment objectives, wholesale application of this line of argument would not provide the right incentives for discouraging currency manipulation in the international system as a whole; in fact, employment concerns were one of the motivating forces behind the competitive depreciations in the interwar period. If many countries believe they can manipulate their way to both an undervalued exchange rate and higher employment in their traded goods industries, the result is likely to be exchange rate instability, continued conflict, and greater resort to protectionist trade measures.

Even if international guidelines about exchange rate policy were better understood, they could not be expected to have much impact if both the IMF and its largest shareholder (the United States) were not prepared to *enforce* those codes of conduct. And the reality has been that neither of them has been very active or consistent in this area over the past 25 years—and not because there were plausibly no serious infractions (that is, instances of countries seeking to maintain wrong exchange rates via inappropriate policies).

The IMF's surveillance guidelines permit the Fund's managing director to initiate and to conduct a so-called ad hoc consultation with a country if there is concern about its exchange rate policies. Yet the Fund has conducted such special consultations only twice (Sweden in 1982 and Korea in 1987) since the surveillance guidelines were drawn up in 1979 and none during the past 17 years! The United States has been somewhat more activist over the past 15 years but without much consistency of approach; in addition, it has applied pressure almost exclusively on a bilateral basis. Since 1988, the Omnibus Trade and Competitiveness Act requires the US Treasury to report to the US Congress any countries engaging in "exchange rate manipulation." The Treasury named several Asian economies as "manipulators" in the 1988–94 period (China, 1992–94; Korea, 1988–90; and Taiwan, 1988–89), but no country has been cited since 1994—including in 2003 when there was perhaps the strongest evidence to date of manipulation by China and several other economies.

If efforts to date in enforcing guidelines against antisocial exchange rate policies have yielded little fruit, why should a push by the new US administration be any more effective? I see grounds for optimism on four counts.

The need to deal with the excessively large US current account deficit has made the US government more sensitive to the exchange rate and reserve policies of other countries, especially those in Asia. In brief, the story here is that a sustainable US current account deficit is at most half as large as the 5½ percent of GDP deficit forecast for this year, that the dollar has to depreciate at least another 15 to 20 percent in real trade-weighted terms to facilitate that adjustment, and that it will be difficult to obtain the needed further depreciation of the dollar unless Asian emerging economies and Japan—which together have a combined weight of 40 percent in the trade-weighted dollar—participate in this appreciation of non-dollar currencies. In the first round of dollar depreciation (from February 2002 to 2004), the larger Asian currencies either depreciated in real terms or appreciated only slightly.<sup>8</sup> Yes, if Asian economies reduced their exchange market intervention and acquisition of US Treasury securities, US interest rates—particularly at the short end of the yield curve—would be somewhat higher than otherwise. But with the US recovery now better established and with the Federal Reserve having recently begun a process of tightening US monetary policy, this is not as serious an impediment as in some earlier periods (say, in 2002) when the US economy was weaker and when the Fed was vigorously easing monetary policy.

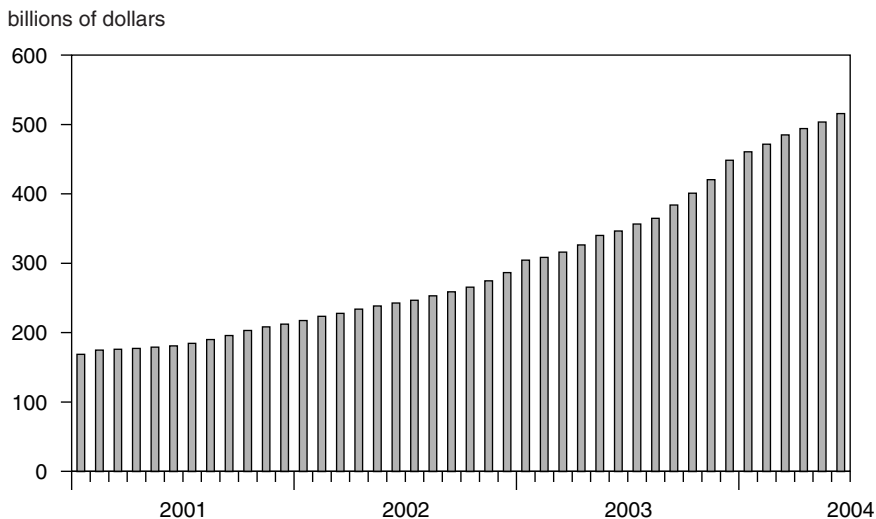
Exchange rate manipulation in Asia—on the part of both emerging and industrial economies—has also become more obvious over the past two years. As shown in figure 12.1, China has been engaging in large-scale, prolonged, one-way exchange market intervention during this period—and this at a time when China's overall balance of payments was in considerable surplus (particularly in 2003) and when China's economy was overheating.<sup>9</sup> Japan too intervened heavily—to the tune of \$200 billion in 2003 and \$150 billion more in the first quarter of 2004—before suspending that intervention in the second quarter of 2004. There has also been large-scale exchange market intervention in Taiwan, Korea, India, Singapore,

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8. See Bergsten and Williamson (2004) and Goldstein (2004). From February 2002 to November 2004, the real effective exchange rates of China, Hong Kong, India, Malaysia, Taiwan, and Thailand depreciated. There were small (less than 5 percent) appreciations for Indonesia, Japan, and Singapore. Korea was the only one with a significant (9 percent) appreciation.

9. China's current account surplus (adjusted for cyclical developments and for lagged trade effects still in the pipeline) is unlikely to be much smaller in 2004 than in 2003; there were, however, some preliminary signs of slowing in the Chinese economy in the second and third quarters of 2004. China's international reserves probably increased by over \$200 billion in 2004, and China's currency is still significantly undervalued (on the order of 15 to 20 percent); see Morris Goldstein and Nicholas Lardy, "Don't Hail China's Soft Landing Too Soon," *Financial Times*, October 6, 2004, for an interpretation of recent and prospective developments in the Chinese economy.

**Figure 12.1** China's foreign exchange reserves, 2001–04Q2



Source: China's State Administration of Foreign Exchange.

and Malaysia.<sup>10</sup> When economies with undervalued exchange rates are intervening heavily to prevent or severely limit exchange rate appreciation, the weakness of the present system (in promoting external adjustment) becomes apparent.

Recent experience has also shown that the alternative to lax enforcement of international guidelines on exchange rate policy is ill-designed policies on exchange rate manipulation applied at the *bilateral* level. For example, a group of bills are now before the US Congress that would impose a unilateral surcharge on China's exports to the United States if bilateral negotiations to end China's currency manipulation are not successful. But the definition of exchange rate manipulation in these bills is poorly framed—relying, for example, on bilateral current account imbalances rather than on the overall balance of payments. More generally, the treatment of alleged currency manipulation at the bilateral level is likely to be more politically motivated and less analytically sound than if it were done in a multilateral context at the IMF.

And fourth, there is now the helpful example of the World Trade Organization (WTO) to lean on. Through the rulings of its adjudication panels

10. Taken as a group, those five Asian emerging economies added about \$125 billion to their reserves in 2003—almost as much (77 percent) as China's reserve accumulation in that year. Note that (in contrast to China) economic growth and domestic demand were quite weak in 2003 in Taiwan, Korea, and Singapore; this was not so in India and was less so in Malaysia.

and in contrast to what has happened on exchange rate issues, a body of international case law is unfolding, which is making it clearer what is and what is not acceptable trade policy, on everything from bananas to steel to domestic tax systems.<sup>11</sup> International rules of conduct for exchange rate policy are no less necessary than those for trade policy.

To sum up, with a new managing director of the Fund just having assumed office, now is the time to agree on an operational set of guidelines on exchange rate manipulation and to bring cases of alleged manipulation within the purview of the IMF's executive board. With 40 percent of global international reserves now held by Asian emerging economies, with more larger emerging economies becoming international creditors rather than debtors, and with the United States seeking international financing on a large scale to fund its current account deficit, exchange rate and reserve policies of emerging economies now "matter" for even the largest industrial countries. By the same token, the emerging economies depend heavily for their future prosperity on good access to markets in the larger industrial countries—an access that could well be put in jeopardy if there were a growing perception that there was no one minding the store internationally on what constitutes a level playing field for exchange rate policy.

## **Controlling Currency Mismatches in Emerging Economies**

Given the frequency and severity of financial crises in emerging economies over the past decade, it is natural to ask whether the crisis countries shared any vulnerabilities. Research indicates that perhaps the most important such common vulnerability was "currency mismatch"—that is, a situation where there is a difference in the currency composition of assets and liabilities so that an economy/sector's net worth and/or net income is sensitive to changes in the exchange rate (Goldstein and Turner 2004).

Suppose an individual raises a mortgage to buy a vacation home in Acapulco, Mexico, and then rents it out. Suppose also that he borrows in dollars instead of Mexican pesos. He then is faced with a currency mismatch. The "stock" aspect of the mismatch is that his asset (the villa) is denominated in pesos but his liability (the mortgage) is denominated in dollars. The "flow" aspect is that the rental income from the villa is denominated in pesos, but the mortgage payments are denominated in dollars. The consequence of this currency mismatch is that the owner of the villa gains or loses as the dollar falls or rises against the peso even if the key parameters of his investment (the villa price and rent) do not change.

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11. See the discussion of WTO decisions in the chapter by Jeffrey J. Schott. Hufbauer and Wong (2004) analyze recent trade disputes between the United States and China.

In short, the net present value of his investment project has become sensitive to changes in the dollar-peso exchange rate.

Borrowers in emerging economies have at times faced currency mismatches on a massive scale.<sup>12</sup> These mismatches raise a number of concerns.

As hinted at already, there is strong empirical evidence that currency mismatches increase not only the probability of getting into a financial crisis but also the cost of getting out of one. Large currency mismatches have marked all the prominent financial crises of the past decade (Mexico in 1994–95, the Asian financial crisis of 1997–98, Russia in 1998, Turkey in 2000–02, Argentina in 2001–02, and Brazil in 1998–2002). Currency mismatch variables have proven to be one of the better-performing leading indicators of currency and banking crises in emerging economies, and output contractions in the 1990s have been deeper in emerging economies with large currency mismatches and large exchange rate depreciations.

Sizable currency mismatches also undermine the effectiveness of monetary policy during a crisis. Specifically, these mismatches make it harder to reduce interest rates after a deflationary shock because the authorities worry that an interest rate decline could set off a sharp fall in the currency that in turn could initiate a wave of bankruptcies. In contrast, when currency mismatches are small, interest rate cuts can be used to stimulate the economy.

Last but not least, currency mismatches can also severely constrain the operation of floating exchange rates in emerging economies. When currency mismatches are large, the authorities are apt to engage in heavy exchange market intervention and in interest rate management to keep the exchange rate from depreciating sharply. But such a “fear of floating” sacrifices the benefits of greater exchange rate flexibility for monetary policy independence and for better cushioning against external shocks.

The three key questions regarding currency mismatch are how to measure it, what causes it, and how best to control it.

A good measure of aggregate currency mismatch should consider the asset as well as the liability side of balance sheets; it should take account of the potential response of noninterest flows (like exports) to an exchange rate change; and it should reflect the ability to borrow domestically in the local currency—not just the ability to borrow abroad in that currency. The latter factor is particularly relevant since domestic bond markets in developing countries (denominated mainly in domestic currency) are now the largest single source of financing—larger (in flow terms) than domestic bank loans and far larger than international bonds. In many situations, it is also helpful to have a gauge of liquidity/maturity

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12. On the whole, industrial countries have found it easier than developing countries to borrow abroad in their own currencies.

mismatches as well as currency mismatches since the two often go together in emerging economies.

While there is no single measure that combines all these desirable attributes, several indicators can be used in tandem to measure currency mismatch. The ratio of short-term external debt to international reserves has proven itself to be a good leading indicator of the probability of getting into a currency crisis. Sectoral balance sheets (where available) are useful for determining how currency mismatches are distributed within an economy. And most recently, Goldstein and Turner (2004) have constructed (for 22 emerging economies) a new measure of “aggregate effective currency mismatch” (AECM), which should serve as a useful, shorthand “stress test” for an indebted emerging economy of the (negative) output effects of a large depreciation of the exchange rate.<sup>13</sup> While AECMs have shrunk significantly in most of the former Asian crisis countries since 1997–98, they are sizable in some other emerging economies.

Although some controversy still exists on the origins of currency mismatch in emerging economies, the most persuasive explanation is that these mismatches derive primarily from past and present weaknesses in macroeconomic, exchange rate, and institutional policies in emerging economies themselves.<sup>14</sup>

An action plan to reduce currency mismatches and keep them under control in emerging economies should encompass the following policy recommendations: Those emerging economies that are substantially involved with private international capital markets should opt for a currency regime of (de facto) managed floating. The de facto movement of the nominal exchange rate will produce an awareness of currency risk as well as an incentive to keep currency mismatches under control. Special care should also be taken to avoid overvalued exchange rates, since experience suggests that crisis vulnerability is highest when large currency mismatches persist against the backdrop of a significantly overvalued exchange rate.

A monetary policy framework of inflation targeting should be employed to provide a good nominal anchor against inflation (Truman 2003). Good inflation performance is crucial for developing a healthy local currency-denominated domestic bond market.

Banks in emerging economies should apply tighter credit limits on foreign currency-denominated loans to customers that do not generate enough foreign-currency revenues, and banking supervisors should

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13. The Goldstein-Turner AECM measure is now available for 9 Asian emerging economies; the web site [www.asianbondsonline.adb.org/asiabondindicators/default2.php](http://www.asianbondsonline.adb.org/asiabondindicators/default2.php) is monitored by the Asian Development Bank.

14. Network externalities and imperfections in global capital markets also play a role in the currency composition of external liabilities (that is, cross-border bank loans and international bonds).

strengthen regulations and capital requirements on banks' net open positions in foreign exchange.

To help harness the forces of market discipline, the IMF should regularly publish data on currency mismatches at the economywide and sector levels and should comment on those mismatches regarded as excessive; the IMF should also make reduction of currency mismatches a condition for IMF loans in cases where the actual or prospective mismatch is deemed to be too large. Although the IMF has put more emphasis within the past two years on "balance sheet" vulnerabilities in its surveillance work, the treatment of currency mismatches in data dissemination, early warning, and loan conditionality is still considerably short of where it needs to be.

Emerging economies that have a high share of public debt denominated in, or indexed to, foreign currency should adopt a medium-run objective of reducing that share; for countries with a poor track record on inflation, inflation-indexed bonds can serve as a useful transition device to fixed-rate, domestic currency-denominated debt.

Higher priority in emerging economies should be accorded to enlarging domestic bond markets, to encouraging the use of hedging instruments, and to reducing barriers to the entry of foreign-owned banks.

To sum up, crisis prevention in emerging economies covers a wide field. But no single source of vulnerability has been as consistently linked with past financial crises as currency mismatches. It is possible to make substantial progress in reducing and controlling currency mismatches in less than a decade but only if the right policies are followed in emerging economies themselves (Mexico's experience since its 1994–95 crisis represents a case in point).<sup>15</sup> The IMF and the US government should therefore take the lead in promoting a comprehensive policy agenda to address currency mismatches.

## Debt Sustainability

The last decade has witnessed not just a host of currency and banking crises but a spate of debt crises as well: Argentina, Ecuador, Pakistan, Russia, Ukraine, and Uruguay—to say nothing of the close calls in Brazil and Turkey.

One cannot presume that severe debt problems in emerging economies are now a thing of the past. Indeed, if one asks whether public debt in emerging economies taken as a group is too high, the answer would have to be an emphatic "yes."

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15. See Goldstein and Turner (2004) on Mexico's longer-term strategy for reducing currency mismatches.

According to the IMF's figures, the ratio of public debt to GDP now averages about 70 percent in developing economies, reversing the progress made (in reducing that ratio) during the first half of the 1990s and bringing the developing-economy average to a level higher than that in industrial countries (figure 12.2).

Equally if not more troubling, the IMF documents that over half of public debt defaults have occurred at public debt ratios below 60 percent, that the typical emerging economy now has a public debt ratio about 2½ times as high as its track record on fiscal policy suggests is prudent, and that governments usually fail to take corrective fiscal policy actions when the public debt ratio climbs above 50 percent.

To be sure, these averages conceal considerable cross-country variation. For example, because of their relatively high growth rates and high trade openness and their relatively low share of foreign currency-denominated debt, Asian emerging economies have overborrowed less than their counterparts in Latin America, the Middle East, and Africa. Still, the fiscal costs of bank restructuring have pushed public debt ratios up considerably in Asia since the mid-1990s, and that region's relatively high ratio of public debt to government revenues provides little ground for comfort.

Policymakers have in the past been too optimistic about the prudent level of public (and external) debt in emerging economies. Not enough attention has been paid to the foreign exchange constraint facing governments; to contingent liabilities that start out in the private sector but don't stay there; to spillovers among currency, banking, and debt problems; to the high volatility in many emerging economies; to the all-too-frequent resort to exchange rate-linked domestic debt; and to rising pension liabilities as populations age.<sup>16</sup>

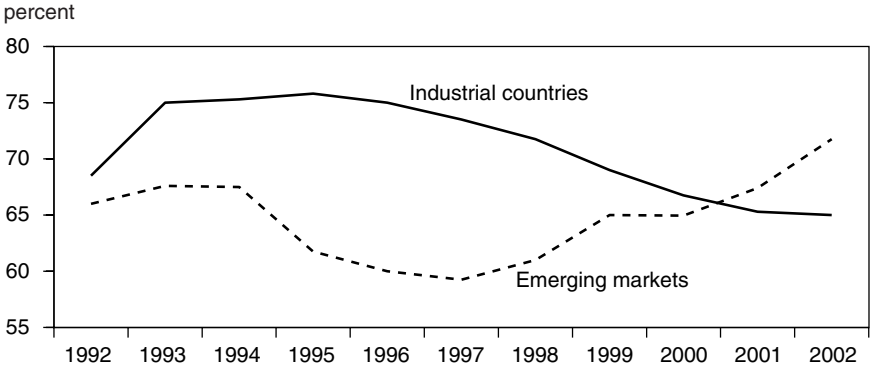
A crucial question is what can be done to reduce vulnerability to debt crises? At the individual-country level, much can be done to broaden tax bases, to shoot for fiscal surpluses during cyclical upswings, to limit the generosity of official safety nets directed toward banks and other financial institutions, and to reduce, over time, the now excessive dependence on foreign currency-denominated and on foreign currency-linked debt.

For its part, the IMF should be much tougher than in the past on making debt sustainability a key condition for IMF lending. To its credit, the IMF in June 2002 began implementing a common framework for more rigorous assessments of public and external debt sustainability. This debt sustainability assessment provides a historical decomposition of the country's debt dynamics and a five-year baseline scenario; in addition, sensitivity tests are conducted for the key parameters, including the interest

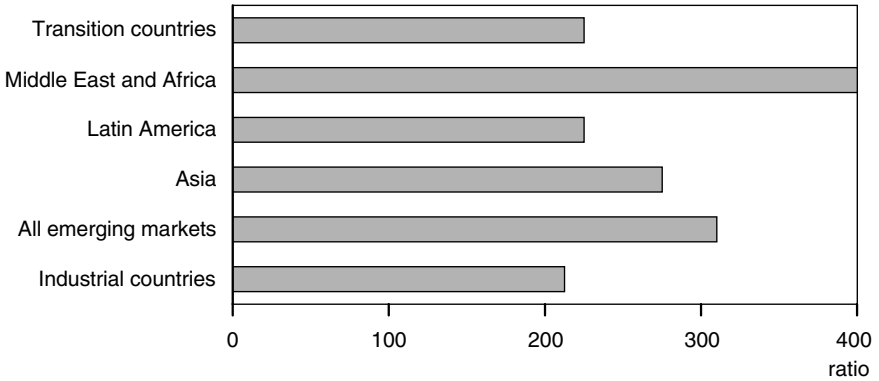
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16. Although industrial countries will be the first to encounter the problems that an aging population poses for fiscal policy, IMF First Deputy Managing Director Krueger (2004) has recently argued that the challenges facing industrial countries on this front—particularly from pension liabilities—pale beside those that emerging-market economies will encounter.

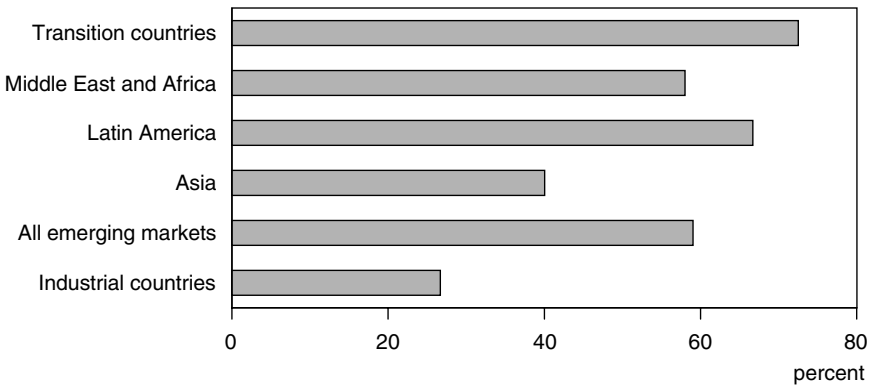
**Figure 12.2a Public debt as percent of GDP, 1992–2002**



**Figure 12.2b Ratio of public debt to revenue (average, 1992–2002)**



**Figure 12.2c External public debt as percent of total debt (average, 1992–2002)**



Source: International Monetary Fund staff estimates.

rate, the growth rate of the economy, the GDP deflator, the exchange rate, and the primary (noninterest current account) balance in the budget. This is a step forward. Nevertheless, as the IMF staff's first review of such debt sustainability assessments (IMF 2003b) indicates, problems remain. Baseline projections for public and external debt have shown a bias toward overoptimism; for example, it is notable that, at a five-year horizon, the external debt ratio is underpredicted by an average of more than 7 percent of GDP for countries with Fund programs. Also, the staff concludes (IMF 2003b, 12) that

in many, if not most, cases . . . the debt sustainability assessments have *not* yet become an integral part of the staff's analysis in the staff report. . . . With one or two exceptions, it is apparent that the sustainability analysis did not form a major part of the discussions between the staff and the [country] authorities.

While technical improvements in the framework (e.g., considering a less extreme set of shocks) may help to some degree, it looks like debt analysis is sometimes driven by the basic Fund lending decision rather than (as it should be) the other way around. As the case of Argentina—especially the decision to provide Fund financing in August 2001 in the face of both an unsustainable debt situation and an overvalued real exchange rate—amply demonstrated, this evaluation problem is sometimes compounded by a reluctance to withhold Fund financing even when the unfavorable debt dynamics are relatively clear.

Realistically, the best that can be done here is to continue to work toward making the Fund's debt sustainability analysis as objective and as competent as possible, to make publication of the Fund's debt sustainability analysis mandatory, and to require stringent approval and accountability requirements for exceeding normal access limits on Fund loans (discussed later in the chapter).

There is also scope for improving the cushioning of emerging-market borrowers against adverse shocks by making debt payments more contingent on the borrowers' ability to pay. Perhaps the most straightforward way to do this would be to experiment with the use of *GDP-indexed bonds*.<sup>17</sup> Although such bonds would encounter the obstacles that most new instruments face along with problems particular to the verification and revision of GDP figures, GDP-indexed bonds offer some significant advantages that should not be dismissed: they restrict the range of variation of the debt/GDP ratio and hence reduce the likelihood of debt crises; they reduce the likelihood of procyclical fiscal policy responses to adverse shocks; they should carry a low insurance premium; they would cover a much higher share of output fluctuations for a typical emerging economy

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17. GDP-indexed bonds are ones in which coupon payments on the bond would vary in part with the growth rate of the debtor's economy, being higher in years in which growth of real GDP is higher than trend and lower in years of below-trend growth.

than bonds indexed to commodity prices; and they contain certain protections against manipulation and cheating aimed at lowering debt obligations (e.g., it is high, not low, growth that is considered a success and that gets politicians reelected).<sup>18</sup>

To sum up, it has been said critically (albeit tongue in cheek) that IMF stands for “It’s Mostly Fiscal.” Yet an objective review of emerging-market debt developments over the past decade suggests that, if anything, the Fund hasn’t been fiscal enough. In contrast to monetary policy and inflation developments where progress in developing countries has been widespread, sizable, and (at least so far) persistent, public debt ratios have been rising not falling (since 1995) and now stand out as a clear source of crisis vulnerability. It is time to do something about it before crisis prevention turns into crisis management.<sup>19</sup>

## International Standards and Codes

One of the major growth industries in reform of the IFA has been the *promulgation and monitoring of international standards and codes of best practice*. Poor public information on Mexico’s international reserves in the run-up to the Mexican peso crisis provided the initial impetus for a data dissemination standard. Widespread financial-sector and disclosure problems in the Asian financial crisis—coming on top of increased recognition of the frequency and costs of systemic banking crises in both developing and industrial countries—motivated the extension of this approach to an international banking standard. Additional standards have since followed to deal with other institutional gaps in emerging economies that are thought to increase vulnerability to financial crises—ranging from poor corporate governance, to weak insolvency and creditors’ rights regimes, to inadequate safeguards against money laundering.

The Financial Stability Forum (FSF) has decided that 12 international standards and codes are crucial for sound financial systems and merit priority implementation. As shown in table 12.1, these 12 key standards cover three broad areas: macroeconomic policy and data transparency, institutional market infrastructure, and financial regulation and supervision. Each standard is issued by the appropriate standard-setting body; for example, the Basel Committee on Banking Supervision issued the core principles for effective banking supervision; the International Organization of Securities Commissions issued the objectives and principles of

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18. See Borensztein and Mauro (2002) and Williamson (forthcoming) on the properties of GDP-indexed bonds.

19. In 1994, the average rate of consumer price inflation in developing countries was 55 percent; after a decade of trend improvement, that average had fallen to less than 6 percent in 2004.

**Table 12.1 Key standards for a sound financial system**

Subject area	Key standard	Issuing body
<b>Macroeconomic policy and data transparency</b>	Code of good practices on transparency in monetary and financial policies Code of good practices on fiscal transparency Special Data Dissemination Standard (SDDS) and General Data Dissemination System (GDDS)	International Monetary Fund International Monetary Fund International Monetary Fund
<b>Institutional market infrastructure</b>	Principles and guidelines on effective insolvency and creditor rights systems Principles of corporate governance International accounting standards (IAS) International standards on auditing (ISA) Core principles for systemically important payment systems The forty recommendations of the Financial Action Task Force on money laundering	World Bank Organization for Economic Cooperation and Development International Accounting Standards Board International Federation of Accountants Committee on Payment and Settlement Systems Financial Action Task Force
<b>Financial regulation and supervision</b>	Core principles for effective banking supervision Objectives and principles of securities regulation Insurance core principle	Basel Committee on Banking Supervision International Organization of Securities Commissions International Association of Insurance Supervisors

Source: Financial Stability Forum.

securities regulation; the IMF issued the two data dissemination standards and the codes of good practices on transparency of monetary, fiscal, and financial policies; and so on.

The IMF and the World Bank have been assigned the key task of monitoring and evaluating countries' compliance with many of these standards. Since 1999, the main vehicle for conducting financial-sector surveillance has been the Financial Sector Assessment Program (FSAP), based on country missions conducted jointly by the Fund and the Bank. The main focus of FSAPs has been to analyze the strengths and vulnerabilities of the country's financial system, to assess the country's compliance with financial-sector standards, and to evaluate the governance of the country's regulatory agencies. Through August 2004, 70 FSAPs had been completed and another 42 were under way or agreed (IMF 2004b). FSAPs are not published. The Fund and the Bank also prepare Reports on the Observance of Standards and Codes (ROSCs); more than 560 of those covering over 110 countries have been issued (as of June 2004), and almost three-quarters of those reports have been published (IMF 2004b).

Countries' compliance with international standards and codes could be enhanced by three incentive channels: complying countries could obtain preferred access to IMF resources; they could receive more favorable risk weightings in the Basel II international capital standards; and because implementation of standards is assumed to improve creditworthiness, complying countries could be expected to benefit from a lower cost of borrowing in private international capital markets. The first two incentive channels never really made it on the official agenda, leaving only—albeit potentially—the most powerful channel of lower market borrowing costs.

Given the dismal longer-term track record of financial-sector crises in emerging economies, the standards initiative clearly does not lack for motivation. That said, empirical analysis on the impact to date of these international standards and codes is still in its early stages. The results of most studies are suspect because the authors failed to control for macroeconomic fundamentals and/or other standards in assessing the effect of a given standard either on the costs of borrowing (measured by interest rate spreads or credit ratings) or on financial-sector soundness (measured by capital adequacy ratios and nonperforming loan ratios in the banking system).<sup>20</sup> A recent IMF study by Christofides, Mulder, and Tiffin (2003) does

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20. For example, an IIF (2002) study reported that subscription to the IMF's Special Data Dissemination Standard was associated with a 300-basis-point reduction in an emerging economy's interest rate spread, but no allowance was made for the impact of other standards or of macroeconomic fundamentals on such spreads. The studies by Sundararajan, Marston, and Basu (2001) and Das, Quintyn, and Chenard (2004) look at only one subset of standards. Another set of cross-country studies done at the World Bank (e.g., Barth, Caprio, and Levine 2001) does not look at the impact of international standards and codes but rather seeks to assess the effect of the quality of financial supervisory regime on bank efficiency and on vulnerability to crises; they find little effect of the supervisory regime on these outcome variables.

not suffer from these pitfalls. Using a sample of 24 emerging economies, controlling for other determinants of borrowing costs, and employing a wide set of standards-related indicators, Christofides, Mulder, and Tiffin (2003) find that property rights and accounting standards matter (in the expected direction) for interest rate spreads and that accounting standards and measures of corruption affect credit ratings. This work can and should be extended—in particular, by using the results from ROSCs and FSAPs to get a better fix on the impact of the Basel Core Principles of Effective Banking Supervision and of other financial-sector standards.<sup>21</sup>

The way ahead on standards should be to concentrate on the core group of standards (rather than taking on new ones), to seek to raise the quality of FSAPs and ROSCs (by limiting the number done each year and by retaining the best financial-sector specialists), and to increase their influence in the marketplace by publishing more of the compliance results.<sup>22</sup> The Fund should also work harder to ensure that the objectivity of the FSAP process is even-handed across regional and country groups. In this connection, differences between industrial and developing-country groups and across developing-country regions seem to be smaller for FSAP compliance measures (on banking supervision) than for other indicators of bank quality.<sup>23</sup> To sum up, another prominent, shared characteristic of earlier financial crises in emerging economies has been fragile financial sectors. In addition, international capital flows cannot be expected to seek out the highest risk-adjusted rate of return and to discipline errant policies if the information base for those flows is seriously flawed.

As such, technical assistance to improve institutional capacity and international codes and standards to outline international good practice on policy and data disclosure, financial-sector regulation, and market infrastructure go in the right direction. The Fund and the Bank can make a valuable contribution to this process by providing timely, high-quality assessments of compliance with these standards. This is an area where less can be more—at least until such time as the ROSCs gain enough credibility to become part of the standard information kit of international and domestic investors. In contrast, if too many reports are done on too many

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21. Christofides, Mulder, and Tiffin (2003) use survey data from the World Economic Forum and an index of economic freedom developed by the Heritage Foundation to measure financial-sector regulation.

22. The Fund has started to move in this direction: The number of FSAPs has been reduced by about a quarter, and their scope has been streamlined.

23. Also, some of the reported differences in compliance results across regions are not in line with a priori expectations. Why, for example, should compliance with the Basel Core Principles of Effective Banking Supervision be higher (on average) in African developing countries than in East Asia, or South Asia, or Latin America—as the FSAP results seem to indicate. Such differences need to be explained if the compliance findings are to be credible in the marketplace.

standards without adding value to what already exists in the marketplace, the whole exercise may lose momentum and may be regarded by emerging economies as not worth the nontrivial compliance costs. The IMF can also improve the incentives for complying with standards by reactivating the proposal that countries with good compliance records receive an interest rate “discount” when borrowing from the Fund.<sup>24</sup>

## Early Warning Systems

Another official-sector response to the high incidence and severity of emerging-market financial crises has been to try to build better *early warning systems*. Investing in an early warning system is attractive on at least two grounds. First, banking, currency, and debt crises are extremely costly to the countries in which they originate, as well as to other countries that are affected by the spillover of the original crisis. For example, the IMF (1998) has estimated that the cumulative output losses for emerging-market banking crises and for (severe) currency crises averaged 12 and 8 percent, respectively. Another study found that a currency crisis somewhere in the world increased the probability of a second speculative attack elsewhere by about 7 percent—even after controlling for economic and political fundamentals of the country concerned. Second, empirical research strongly suggests that traditional market indicators of currency and default risks (such as interest rate spreads and credit ratings) frequently do not provide much advance warning of an impending crisis. This is not entirely surprising: If market participants expect an official bailout of a troubled borrower, then the market interest rate is going to reflect the credit-worthiness of the guarantor—not that of the troubled borrower. There were almost no credit rating downgrades for the most severely affected countries in the 18-month run-up to the Asian financial crisis. In contrast, early warning indicators like the ratio of short-term external debt to reserves, the appreciation of the real exchange rate (relative to trend), a fall in exports, and a decline in equity prices have shown themselves to be good performers, including in the Asian financial crisis. Berg, Borensztein, and Pattillo (2004) have tracked the performance of alternative predictors of currency crises in emerging economies for the period running from 1996 to 2000. They found that the early warning model outlined in Kaminsky, Lizondo, and Reinhart (1998) and Goldstein, Kaminsky, and Reinhart (2000) did a considerably better job (out of sample) in forecasting emerging-market currency crises than credit ratings, or interest rate spreads, or overall currency risk scores published by analysts.<sup>25</sup>

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24. Another option would be to make compliance with international standards an additional factor in determining the size of access to IMF loans.

25. Berg, Borensztein, and Pattillo (2004) also found that the model outlined in Kaminsky, Lizondo, and Reinhart (1998) and Goldstein, Kaminsky, and Reinhart (2000) outperformed the shorter-horizon models published by Goldman Sachs and Credit Suisse First Boston.

The Fund introduced its own high-frequency “vulnerability exercise” in 2001. According to the Fund, the inputs to its early warning system are the multilateral surveillance findings from the *World Economic Outlook* and the *Global Financial Stability Report*, individual-country surveillance feedback from Article IV and program missions, cross-country surveillance in specialist areas (e.g., financial-sector soundness), results from early warning models, and market intelligence. These inputs are then analyzed and presented to management at least once per quarter; some of these vulnerability findings are also shared (in summary form) with the Fund’s executive board.

A relevant question is whether the vulnerability exercise is currently receiving the resources and priority it deserves relative to the Fund’s other surveillance activities.

The IMF employs about 1,000 economists. I am told that the full-time equivalent of approximately a dozen economists works on the high-frequency vulnerability exercise. Given the much larger resources now devoted to Article IV consultations in the Fund, it would make sense to shift some resources from say, Article IV consultations for smaller industrial countries (e.g., Austria, Belgium, Denmark, Finland, the Netherlands, Norway, Portugal, Spain, Sweden, and New Zealand, among others) to the vulnerability exercise. Consultations for these countries could be put on a lower-frequency cycle. The issue here is one of where Fund resources can make the greatest contribution and produce value added relative to what is available from research supplied by private financial firms. I would submit that the payoff to additional resources is apt to be largest when applied to gauging crisis vulnerability across countries and over time for the 25 or so largest emerging economies. Of course, no amount of additional staff preparation on crisis vulnerability will be effective unless the Fund management is also fully committed to upgrading the early warning exercise and to giving it high priority in terms of their own time and attention.

To sum up, trying to gauge crisis vulnerability in emerging economies is an admittedly difficult task. Although empirical work shows that the better-performing leading indicators anticipate the lion’s share of currency and banking crises that subsequently occur, that research also finds that even the best indicators send a nontrivial number of false alarms (Goldstein et al. 2000).<sup>26</sup> This means that any vulnerability exercise will inevitably make some mistakes. But the cost of not doing it—that is, of missing the opportunity to spot impending crises early enough to take corrective action—is apt to be much larger. Also, as experience with the vulnerability exercise accumulates, the official sector should get better at predicting crises and at gauging vulnerability. Evaluating whether coun-

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26. See Abiad (2003) for a survey of early warning models and of the operational issues that have to be dealt with in constructing such models.

try A is more vulnerable today to a crisis than countries B and C, and whether country A is more vulnerable today than it was one or two years ago, carries in addition the advantage of forcing the IMF staff to ask the right analytical questions about member countries. Given the stakes involved, the high-frequency vulnerability exercise in the Fund should get more resources and higher priority among surveillance activities than it currently commands.

## IMF Lending Policies

Discussions over *IMF lending policies* have been a recurrent theme over the past five years in the debate on IFA reform. There have been both positive and negative developments.

On the plus side of the ledger, the Fund has streamlined its conditionality on structural policies while rejecting proposals for wholesale change that would make Fund lending decisions highly dependent on a small set of preconditions.<sup>27</sup> On the negative side, the Fund has not yet come up with a framework that can effectively discipline decisions about financing in amounts that exceed the Fund's normal lending limits (what the Fund calls "exceptional access").

There was a pronounced upward trend in Fund structural policy conditionality over 1985–2000, and this trend became steeper in the 1990s. In the late 1990s, it became typical for a one-year IMF stand-by program to have on the order of a dozen structural conditions and for a three-year (Extended Fund Financing) program to have on the order of 50 of them (Goldstein 2001). At the same time, obtaining compliance with these structural policy conditions was becoming progressively more difficult. After the experience of the Asian crisis countries, where the number and detail of structural policy conditions were very extensive, it became apparent to most observers as well as to the Fund itself, that IMF structural policy conditionality had become excessive in both scope and detail. As a result, the Fund's executive board in September 2002 agreed to new guidelines on conditionality. These new guidelines make it clear that all Fund policy conditions must be "critical" to achievement of the program's

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27. By "structural policies," I mean policies aimed not at the management of aggregate demand but rather at improving the efficiency of resource use and/or at increasing the economy's productive capacity. Structural policies are typically aimed at reducing or dismantling government-imposed distortions or putting in place the institutional features of a modern market economy. Such structural policies include, among others, privatization of public enterprises; liberalization of trade, capital markets, and the exchange rate system; tax and expenditure policies (apart from the overall fiscal stance); financial-sector policies; labor market policies; pricing and marketing policies; transparency and disclosure policies; poverty-reduction and social safety net policies; pension policies; corporate governance policies (including anticorruption measures); and environmental policies.

goals or to monitoring of the program's implementation. The new guidelines also emphasize "parsimony" in the number of policy conditions, and they underline that such conditions should normally stay within the Fund's "core" areas of responsibility and expertise, namely, monetary and fiscal policies, exchange rate policies, and financial-sector policies.

Fortunately, the Fund did not run all the way to the other side of the boat by jettisoning the essence of its "ex post" approach to policy conditionality in favor of an approach centered on "prequalification" for Fund loans. By "ex post" conditionality, I mean disbursing loans in stages or "tranches," after the borrowing country has satisfied the key macroeconomic and structural policy conditions laid out in the program. In contrast, prequalification means selecting a set of well-performing countries that had met a small set of preconditions and making them eligible immediately for large Fund loans; countries that did not meet these preconditions would not be eligible for any assistance. Recall that the majority in the Meltzer Commission (IFIAC 2000) favored just such a prequalification approach; they argued that freedom of entry and operation for foreign financial institutions, regular and timely publication of debt and off-balance sheet liabilities, adequate capitalization of commercial banks, and some (undefined) fiscal policy requirement would be sufficient to differentiate worthy borrowers from unworthy ones. Recall too that the Fund experimented briefly with prequalification when it established the Contingent Credit Line (CCL) in 1999. This was a special Fund lending window for countries that had demonstrated strong policies and that wanted a precautionary line of defense against a loss of market confidence linked to international financial contagion. But the CCL was allowed to expire at end-2003, after not a single country came forward to sign up for it (and this despite efforts to make the CCL more attractive by sweetening its terms).

There are fundamental conceptual and practical problems with prequalifying countries for large-scale Fund loans. To begin with, it is difficult to find a small, common set of macroeconomic and structural policy conditions that, agreed at the time of qualification, would provide a good test of creditworthiness at the time of activation. Not only do policies and external conditions change over time, but there is also a broad range of potential causes of crises. For example, the four preconditions set out in the Meltzer Commission Report (IFIAC 2000) say nothing about profligate monetary policies, and they leave undefined the proper fiscal policy requirement;<sup>28</sup> likewise, problems that surface in the financial sector often have their roots in deeper economic and structural weaknesses. It is instructive that although the CCL was often described as a prequalified line of credit, creditor countries were not prepared to agree to its creation without including the stipulation that a separate "activation" review take place just prior to disbursement. Another problem is that there are apt to

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28. See the minority report in the Meltzer Report (IFIAC 2000).

be strong political pressures against declaring countries ineligible if they originally met the preconditions—even where there is strong evidence of subsequent backtracking on performance.

It is also far from clear that prequalification would deter speculative attacks. In this connection, there are examples of economies with large reserves and with large pledges of support that nevertheless faced strong attacks (Hong Kong in 1997–98). Countries may worry additionally that signing up for such a line of credit might be interpreted by the private capital markets as a signal of impending “need” for external assistance; indeed, this adverse selection effect was one of the factors frequently cited in the unwillingness of emerging economies to apply for CCL eligibility.

In the end, warts and all, there is no practical alternative to evaluating program compliance on a regular, phased basis as a *quid pro quo* for continued financing under a Fund program. Recent calls for creation within the Fund of new large-scale, precautionary lending windows against adverse capital market developments are thus misplaced.

The bad news on the evolution of the Fund’s financing facilities is that “exceptional access” in Fund lending arrangements has been activated repeatedly over the past decade, without much agreement on what should determine eligibility for such exceptional treatment and with too little regard for the risks to the Fund’s financial position—to say nothing of any moral hazard effects (be they direct or indirect) on private creditors or on official borrowers. The normal access limits for loans under Fund programs are 100 percent of a country’s quota annually and 300 percent of quota cumulatively. Despite statements by both incoming US Treasury officials and new managing directors of the IMF about the desirability of limiting the scale of Fund financing, the normal access limits have been surpassed, often by large amounts, in the cases of Mexico (1995), Thailand (1997), Indonesia (1997), Korea (1998), Brazil (1998–2001), Turkey (1999–2002), Uruguay (1999–2001), and Argentina (2000–01); see table 12.2. One result of this *de facto* access policy has been a concentration of Fund credit among a small number of borrowing countries. Indeed in January 2004, credit outstanding to the Fund’s three largest borrowers (Argentina, Brazil, and Turkey) hit an unprecedented 70 percent of total credit—higher than even at the height of the Asian financial crisis; in 1980, by way of comparison, 16 debtors accounted for 70 percent of Fund credit outstanding.

Deciding when access to IMF loans should be exceptionally large is a judgment call (Roubini and Setser 2004). If IMF financial assistance is too small, the adjustment burden placed on the borrowing country in crisis could be too heavy. Likewise, if the borrower is solvent and if the private capital markets are unduly pessimistic about a country’s economic prospects, an IMF rescue package that is small relative to the country’s short-term external debt obligations might impede a return of market confidence. On the other hand, an IMF loan that is very large could discourage the borrower from taking adequate adjustment measures, could

**Table 12.2 IMF exceptional access arrangements**

Country and year	Amount agreed			Total disbursed		
	As percent of quota	In billions of dollars	As percent of GDP	As percent of quota	In billions of dollars	As percent of GDP
Mexico, 1995	688	18.0	4.4	500	13.1	3.2
Thailand, 1997	505	3.9	2.2	470	3.7	2.0
Indonesia, 1997	557	11.3	5.0	555	11.3	5.0
Korea, 1998 <sup>a</sup>	1,938	20.8	4.0	1,802	19.4	3.7
Brazil, 1998	600	18.4	2.3	436	13.4	1.7
Uruguay, 1999–2001	694	2.7	14.5	560	2.2	11.7
Argentina, 2000–01	800	22.1	7.8	461	12.7	4.5
Brazil, 2001	400	15.6	3.1	375	14.6	2.9
Brazil, 2002	752	29.3	5.7	567	22.1	4.3
Brazil, combined	900	35.1	6.9	770	30.1	5.9
Turkey, 1999–2001	1,560	20.7	10.4	1,218	16.2	8.1
Turkey, 2002	1,330	17.6	8.9	1,154	14.8	7.7
Turkey, combined	2,548	33.8	17.0	1,709	23.1	11.4

a. Korea's quota was unusually small in relation to its GDP.

Note: Combined programs = outstanding disbursement plus new commitment; however, some of the new commitment was intended to refinance the IMF's existing exposure. Special drawing rights (SDR) are converted into dollars at the SDR/dollar exchange rate at the time of the initial program.

Sources: Financial data from International Monetary Fund, [www.imf.org/external/fin.htm](http://www.imf.org/external/fin.htm); GDP data from Moody's Investor Service.

bail out private creditors from living with the consequences of poor investment decisions, and could put the Fund's financial position at risk if the borrower is unable or unwilling to meet its financial obligations to the Fund. If the Fund were to get into financial difficulties as a result of concentration of credit to a few large borrowers, access to Fund credit could be constrained for other potential borrowers, the Fund would have to increase its precautionary balances, and creditor countries could either be discouraged from providing additional resources to the Fund in the future or might be willing to finance increased quotas only under different conditions/safeguards than in the past. To date, the empirical evidence has not been decisive either on the influence that loan size has on the effectiveness of IMF programs or on the direct and indirect effects of IMF lending on borrower or lender moral hazard.<sup>29</sup>

29. See Roubini and Setser (2004). On the whole, they interpret the available evidence as suggesting that large IMF loans are more effective when the borrowing country has a low debt burden and is committed to corrective policy actions, and that IMF loans did not produce serious lender moral hazard, except in the cases of Russia (1998–99) and Turkey (2000–03). Benelli (2003) finds that large IMF loans did not improve the likelihood of success for IMF programs, where "success" is defined as meeting or exceeding the program's initial projections for private net capital flows; in contrast, policy adjustment did improve the likelihood of success. Mussa (1999) refers to "indirect" moral hazard as a situation in which international financial support facilitates moral hazard by national governments. Both Mussa (1999) and Jeanne and Zettlemeyer (2001) argue that the direct subsidy effect of IMF lending is not large enough to generate significant lender moral hazard. Dell'Ariccia, Godde, and Zettel-

In an effort to enhance the clarity and predictability of the Fund's response in crisis resolution and to strengthen safeguards on the Fund's resources, the Fund's executive board approved a new framework on exceptional access in February 2003. The new framework set out four criteria that would need to be met to justify exceptional access during a capital account crisis: (1) the country was experiencing capital account pressures that could not be met within normal access limits; (2) there was a high probability that the country's debt would remain sustainable; (3) there were good prospects that the country could regain access to private capital markets during the time when Fund loans would be outstanding; and (4) the country's policy program offered a reasonably strong prospect of success. On top of this, the new framework established tougher procedures for decision making on exceptional access, including a higher burden of proof in program documentation, ex post evaluation of programs with one year of the end of the agreement, and systematic board consultations on program negotiations through confidential informal briefings. In March 2003, the executive board strengthened the presumption that when exceptional access was granted in capital account crises, the funds would be provided under the IMF's Supplementary Reserve Facility (SRF), which carries higher interest rates (300 to 500 basis points higher) and shorter repayment maturities than the Fund's normal lending window. More recently, it was agreed that a country utilizing exceptional access would be required to publish the IMF staff report accompanying the request.

Designing a sensible framework for exceptional access is one thing. Implementing that framework is another. Even if one puts aside exceptional access decisions taken prior to agreement on the new framework that would have violated the new criteria (e.g., Argentina in 2001, Turkey in 2000, and Uruguay in 2002), it is troubling that access decisions taken for Argentina and Brazil in the *aftermath* of the new framework did not comply with it. As the IMF staff acknowledge in a recent paper, Argentina's public and external debt was not sustainable pending a debt restructuring. It is debatable whether there was a "high probability" that Brazil's public debt was sustainable. Brazil's balance-of-payments need was potential rather than actual; indeed, the Brazilians treated their recent Fund arrangement as a precautionary one. Argentina was not likely to reenter international capital markets during the time Fund resources would be outstanding.

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meyer (2000) show that the conditions are demanding for obtaining a good empirical test of moral hazard in international crisis lending. Goldstein (2000) maintains that the indirect moral hazard effects of IMF lending can be significant. Dooley and Verma (2003) argue that the timing of emerging-market financial crises and the scale of capital inflows leading up to a crisis are the anticipated outcome of private investors' incentive to exploit a pool of government insurance (including loans from the IMF).

Nor has the presumption been fulfilled in practice that countries obtaining exceptional access would finance all of it under the SRF. While the first large Fund programs that used the SRF (i.e., Korea in 1997, Russia in 1998, and Brazil in 1998) financed all the “exceptional” part of access using the SRF, the more recent (from 2000 on) exceptional access cases typically did not. After all, when emerging economies are under market stress, they want to minimize interest costs and to stretch out repayment schedules—especially if they are not confident about how long it will take to deliver a turnaround in private capital flows and a rebound in market confidence. These financing terms are the opposite of what the SRF offers. As such, there is a strong temptation to invoke arguments for why the SRF should not apply to a particular situation (e.g., it was never a capital account crisis, or it was at one time a capital account crisis but it no longer is, or the country is facing a potential not an actual crisis, or the country’s debt repayments or budget financing requirements present a special situation).

If there is no capital account crisis and the SRF is thereby judged not to apply, then exceptional access can still be approved under an undefined “exceptional circumstance” clause contained in earlier (1983) Fund access decisions, and it can be financed by recourse to the Fund’s regular lending windows; while here too there is an interest surcharge for large loans, it is lower than the surcharge for the SRF and, more significantly, the repayment periods are considerably longer than with the SRF. Even when exceptional access is funded under the SRF, the country can lengthen its repayment schedule (by switching from an expected payment date to an obligation payment date). And in early 2003, the Fund amended the repayment terms in the SRF window itself to make them more lenient on borrowers. All of this of course blunts the original purpose of limiting exceptional access. Also, as I have argued elsewhere, probably the best one can expect from higher interest charges related to exceptional access is that they would induce faster repayment to the Fund; countries that are badly in need of external funds and that can’t obtain those funds from private creditors are not going to be much deterred by higher interest rate charges from seeking exceptional access from the IMF.<sup>30</sup>

What might be done differently in the future to limit exceptional access cases and to give teeth to the new (exceptional access) framework? I would recommend two amendments.<sup>31</sup> First, as proposed earlier in a CFR

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30. Under the SRF, the interest rate increases with the length of the repayment period. In contrast, under the Fund’s normal lending windows, the interest rate increases (up to a cap) with the size of the loan.

31. Roubini and Setser (2004) propose that the Fund’s normal access limits should be increased to 300 percent (annual) and 500 percent (cumulative) to reflect the reality of the size of IMF loans during recent exceptional access cases. The rub, however, is that actual average access has been much below the access limits in nonexceptional access cases, and the actual average access might well increase by an unwarranted amount if the access limits were increased so substantially. Suffice to say that the Roubini-Setser proposal merits further study.

(1999) report, decisions to grant exceptional access should be subject to a supermajority—say 75 to 80 percent of voting strength. This would make it more likely that exceptional access decisions were truly viewed as meriting exceptional treatment by a wide swath of the IMF membership—and not merely regarded as “systemic crises” by the borrowing country, several of its neighbors, and one or two G-7 countries in that neighborhood. In this connection, it should be recalled that there have been a few exceptional access cases where a group of executive directors abstained from the voting—perhaps suggesting that a supermajority voting requirement could have an impact. One hurdle for a supermajority provision is that formal changes in Fund voting majorities would require an amendment of the IMF’s charter—a process that can be time-consuming.<sup>32</sup> An informal procedure might therefore be better. Specifically, the exceptional access framework could be amended to say that the managing director would not bring a request for exceptional access to the Fund’s executive board unless earlier consultations with the board indicated that at least 75 percent of the voting power was in favor of it.

A second useful amendment would require the Fund’s managing director to sign off explicitly that the decision to grant exceptional access met *all* the requirements of the new exceptional access framework.<sup>33</sup> In the spirit of the provision in the Sarbanes-Oxley law that requires CEOs to vouch personally for the accuracy of their firm’s financial statements, the purpose here is both to motivate more rigorous due diligence by the (Fund) staff and to give greater negotiating leverage to the Fund’s managing director to stand up against even the Fund’s major shareholders if he/she regards pressure to grant exceptional access as unwarranted.<sup>34</sup> The aim is not to make exceptional access impossible; it is rather to ensure that when exceptional access is granted, it meets a higher threshold of proof than in the past.

## Concluding Remarks

This year marks the 60th anniversary of the IMF. There should be little question about the overall contribution that the IMF has made to the international economic landscape: without the Fund and its conditional fi-

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32. The IMF’s charter sets out required voting majorities for various kinds of decisions.

33. There is already a strong presumption—laid out in the original conditionality guidelines—that the managing director will only take to the Fund’s executive board requests for loans that he/she believes can be implemented successfully; the proposed amendment would go farther for exceptional access cases.

34. Unlike Sarbanes-Oxley, the sign-off procedure would not subject the CEO (the managing director) to personal legal liability; the motivation instead is to increase the burden of proof for recommending exceptional access.

nancing, there would undoubtedly have been deeper recessions, more chaotic debt defaults, and greater resort to trade protectionism. But arguing that the world economy continues to need an IMF should not preclude a new US administration from pressing hard for further reform of the IMF and the IFA. Considerable progress in strengthening the IFA has already been made in moving most emerging economies toward currency regimes of managed flexibility, in increasing the use of collective action clauses in international sovereign bonds, and in making IMF operations and decisions more transparent.<sup>35</sup> That progress can and should be extended.

Three of the reforms proposed in this chapter come under the heading of getting the Fund to return to its roots.

A well-functioning exchange rate system cannot be concerned only with balance-of-payments deficits and with overvalued exchange rates. Balance-of-payments surpluses and exchange rate undervaluations have to be of concern as well—especially when they are being influenced significantly by large-scale, prolonged, one-way exchange market intervention. The IMF should not be ceding its responsibility to speak out against exchange rate manipulation to national governments, lest it risk the very kinds of conflicts on exchange rate policy that its founders sought to avoid. There have been cases when IMF advice to emerging economies on exchange rate policy has been influential, and it could be again.<sup>36</sup> Emerging economies now have a large enough weight in the global economic system that they too have to be part of the international adjustment process, including the appropriate adjustment of their exchange rates. In short, it is past time for the Fund to give substance to its obligation to exercise “firm surveillance” over the exchange rate policies of all its member countries—developing and industrial.

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35. See Goldstein (2002a) on the advantages of marrying a managed floating currency regime with a monetary framework of inflation targeting and with measures to reduce currency mismatching. Mexico’s embrace of collective action clauses in 2003 seems to have prompted other emerging economies to follow suit: 18 countries now include collective action clauses in their international sovereign bonds issued under New York law, and there has been no sign of higher issuance costs for debt issues with collective action clauses. The IMF now publishes three-quarters of its country reports, along with almost all Fund policy papers; it also releases the weekly calendar of executive board meetings. Less progress has been made in developing a voluntary code of conduct—laying out standards and responsibilities for debtors and private creditors during debt negotiations. The sovereign debt restructuring mechanism (SDRM), initially proposed by Anne Krueger (2001), the IMF’s first deputy managing director, seems to be on the back burner, at least until such time as the lessons are identified from Argentina’s ongoing debt restructuring saga.

36. To take one notable example, Lardy (1999)—drawing on Chinese sources—documents that the IMF had considerable influence both on China’s decision in January 1984 to abandon the internal settlement rate for the renminbi and on the decision in July 1986 to undertake a large (15.8 percent) one-time devaluation of the renminbi—rather than continue with a series of minidevaluations.

With the average public debt ratio (to GDP) in emerging economies now hovering at about 70 percent—nearly three times as high as the IMF (2003b) calculates would be sustainable for the typical emerging economy—debt sustainability and fiscal policy discipline are clearly a second area where the IMF should get back to basics. This means, among other things, trying to persuade emerging economies of the need to increase government revenues and control public expenditures (the latter especially during boom periods) and to reduce over time dependence on interest and exchange rate-linked debt.<sup>37</sup> It also means subjecting all IMF loans to more rigorous and more objective analysis of debt sustainability. Efforts should be made to eliminate the (optimistic) biases that have been evident in the Fund's earlier medium-run projections of public debt for emerging economies (especially those with IMF programs) and to make the analysis of debt sustainability a central element in Fund surveillance and program discussions with member countries. The introduction of GDP-indexed bonds should be explored seriously since they offer the potential to provide greater cushioning for emerging economies against unusually adverse outturns. No one wants to relive the emerging-market debt crisis of the 1980s.

The IMF has been providing loans to countries with a balance-of-payments need for more than 50 years. But the practice of extending loans way beyond the normal access limits has become less exceptional over the past decade than used to be the case. Yes, there have been some very good bottom-line results (that is, V-shaped recoveries, relatively quick return to private capital markets, and repayment to the Fund ahead of schedule) from several of these large loans, most notably Mexico (1994–95) and Korea (1997–98). And yes, no recipient of an enlarged access loan has so far defaulted on its obligations to the Fund. But there is a growing consensus that the use of exceptional access loans has not been discriminating enough. The Fund's recent experience with Argentina has demonstrated dramatically what happens when very large Fund loans are provided to a country with an unsustainable debt situation and an overvalued real exchange rate; when additional Fund loans have to be extended to coax repayment of earlier ones; and when the normal interpretations of Fund conditionality, "good faith" bargaining with private creditors, and "equal treatment" of countries are twisted beyond recognition to avoid a default to the Fund. There have also been other exceptional access cases (Brazil, Turkey, and Uruguay) where Fund repayment might have become problematic, had not earlier loans been topped up after the original programs failed or came under heavy strain. The fact that excep-

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37. Again, fiscal policy and public debt problems are by no means confined to emerging economies: witness, for example, recent criticism of the US fiscal outlook over the coming decade and the controversy about noncompliance by several EU countries with the fiscal policy guidelines laid out in the Stability and Growth Pact. See the analysis of fiscal policies in the chapter by Michael Mussa in this book.

tional access loans to three emerging economies (Argentina, Brazil, and Turkey) have brought the concentration of Fund credit to a historic high also rightly worries many observers.

Rodrigo de Rato, the Fund's new managing director, has argued (de Rato 2004, 4–5) that the international community clearly needs a Fund that “can say ‘No’ selectively, perhaps more assertively, and above all, more predictably than has been the case in the past.” He has also maintained that the prospect of the Fund declining to provide financial support would help strengthen the incentives to implement sound policies. The criteria set out in the Fund's new (February 2003) framework for exceptional access (especially the one stressing debt sustainability) provide in principle a way to make more sensible access decisions, but the initial experience with it already indicates that it is being honored in the breach. Something additional is therefore needed to stiffen the backbone of the Fund to say “no” when it is warranted and to return exceptional access policy to its earlier (pre-1994) norm. The supermajority and managing director sign-off amendments suggested above are intended to aid in that objective.

The other three reforms proposed in this chapter involve areas where the IFA needs to evolve—either to meet the changing characteristics of recent financial crises or to strengthen earlier official efforts to improve crisis prevention and crisis resolution.

Taking a “balance sheet” approach to the analysis of crisis vulnerability is warranted by the presence of serious currency mismatches in virtually all the prominent emerging-market financial crises of the past decade. A vital first step here is to obtain better measures of currency mismatch and to monitor those measures more carefully than in the past—including publication of mismatch indicators so that the private capital markets can bring disciplinary pressure to bear when these mismatches become too large. The other key recommendations in this sphere are to encourage more emerging economies to adopt the macroeconomic, exchange rate, and prudential policies that cross-country experience shows tend to reduce currency mismatches. While currency mismatch may sound like a narrow, arcane technical matter, it is at the heart of what makes large currency depreciations in many emerging economies so troublesome. The better emerging markets become at getting and keeping currency mismatches under control, the sooner will the benefits of exchange rate flexibility be more widely seen as outweighing the costs.

Another common characteristic of most emerging-market currency, banking, and debt crises of the past decade has been fragile financial sectors—hence, the global initiative on international standards and codes of good practice that seek to improve financial regulation and supervision, strengthen the financial infrastructure, and upgrade data and macroeconomic policy transparency. The initial skepticism about the feasibility of obtaining agreement on such standards has now been laid to rest. The

bigger challenge is creating sufficiently strong incentives to promote effective “implementation.” To this end, the Fund and the Bank have to convince private financial markets that their published reports on compliance with standards (ROSCs) are important for assessing countries’ credit-worthiness and thus should be reflected more strongly in market borrowing costs.

I have argued that prospects for meeting the market test of credibility will be advanced by focusing the standards effort on the existing core group of standards, by limiting the number of assessments done each year, and by seeking greater consistency across countries and regional groups. Giving countries with good compliance records on standards an interest rate discount when they borrow from the Fund would further increase the incentives for compliance.

Finally, it seems like every new managing director of the Fund and every new US Treasury secretary indicates that better early warning systems need to be developed so that the international community is not left with a menu of unpalatable choices after emerging-market financial crises have already occurred. The problem is that, in practice as opposed to rhetoric, early warning systems do not typically get the resources and priority within surveillance work that they need to become more effective. Part of this reflects a reluctance to be seen as precipitating a crisis by blowing the whistle on the most vulnerable cases; part of it is a reflection of the false alarms that will probably accompany the accurate signals; and part of it is the heavy call on staff resources to deal with crises that have already broken out. But the official sector will not get better at early warning until it invests more heavily in it and until it is prepared to accept the “price” of an occasional wrong call in exchange for the larger benefits of a higher number of well-founded early warnings.

It is neither necessary nor desirable to go to extremes in trying to strengthen the IFA. While some have proposed abolishing the IMF altogether (Shultz 1995), or restricting the Fund’s activities to surveillance with no lending (Rogoff 1999), or turning the IMF into a lender of first resort that provides (precautionary) loans on a massive scale to countries that meet a few prequalification criteria (IFIAC 2000), better results will be obtained within the existing institutional structure by returning the Fund to its roots and by having it focus on a small number of promising initiatives.

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