



# The Orderly Resolution of Financial Crises – A G20-Led Initiative

*How could a Leaders' Level G20 make a difference?*

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## **BRIEFING NOTE**

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### **A Note on Improving the International Financial Architecture**

#### I. Introduction

If it takes a crisis to motivate a strengthening of the crisis prevention and crisis management infrastructure – or of what has come to be called, the international financial architecture (IFA for short), then one would think that the prominent crises of the past decade (i.e., Mexico in 1994-95, the Asian financial-crisis economies in 1997-98, Russia in 1998, Brazil in 1998-2002, Turkey in 1999-2002, and Argentina in 2000-2001) would have supplied more than enough motivation.

To be sure, some notable progress has been made in strengthening the IFA. Fewer emerging economies now maintain vulnerable currency regimes based on publicly-announced exchange rate targets; inclusion of collective-action-clauses in international sovereign bonds issued under New York law has accelerated following Mexico's lead in 2003; and transparency of macroeconomic data and policy –including operations of the IMF itself – has recorded a significant increase. Still, it is a contention of this note that

much remains to be done on IFA reform and that priority should be now placed in the following six areas:

- (i) controlling currency mismatches in emerging economies;
- (ii) agreeing on and enforcing stronger injunctions against currency manipulation;
- (iii) giving assessments of and policy prescriptions for debt sustainability a larger role in IMF surveillance, policy lending, and advice, and experimenting with the use of GDP-indexed bonds;
- (iv) improving the quality of compliance evaluations for international standards and codes;
- (v) shifting human resources within the IMF to give greater weight to the early warning of currency, banking, and debt crises in emerging economies; and
- (vi) limiting the extension of very large IMF loans – known as exceptional access – to country cases that are truly exceptional.

In the remainder of this note, I lay out briefly the rationale for each of these six priorities by summarizing the nature of the problem and of the proposed solution.<sup>1</sup> A final section offers some brief concluding remarks.

## II. Controlling Currency Mismatches in Emerging Economies

**Problem:** A currency mismatch exists when there is a difference in the currency composition of assets and liabilities such that an economy's (or sector's) net worth becomes sensitive to changes in the exchange rate. The control of currency mismatch merits high priority because serious currency mismatches have been a prominent feature of every major emerging-market financial crisis of the past decade. Currency mismatches increase the probability of getting into a financial crisis as well as the output cost of getting out of one. They make it harder to reduce interest rates during a financial crisis because authorities worry that an interest rate decline could set off a sharp fall in the currency that could initiate a wave of bankruptcies; likewise, research indicates that

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<sup>1</sup> A fuller analysis is given in Goldstein (2005).

currency mismatches engender a “fear of floating” in emerging economies that can deny these countries the benefits of greater exchange rate flexibility.

Proposed solution: Those emerging economies that are heavily involved with private capital markets should opt for a currency regime of (de facto) managed floating; this will produce an awareness of currency risk and an incentive to keep currency mismatches under control. A monetary policy framework of inflation targeting should be employed to provide a good nominal anchor against inflation; good inflation performance is crucial for developing a healthy, local-currency denominated 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 strengthen regulations and capital requirements on banks’ net open positions in foreign exchange. The IMF should regularly publish data on currency mismatches at the economy-wide and sectoral levels and should comment on those mismatches regarded as excessive.<sup>2</sup> Emerging economies that have a high share of public debt denominated in, or indexed to, foreign currency should adopt a medium-term objective of reducing that share, and countries with a poor track record on inflation would be better advised to use inflation-indexed bonds – rather than foreign-currency-indexed bonds – as a useful transition device to fixed rate, domestic-currency-denominated debt. Higher priority 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.<sup>3</sup> Cross-country experience indicates that currency mismatches can be reduced substantially over time periods shorter than a decade but only if the right set of policies is followed.

### III. Stronger Injunctions against Currency Manipulation

Problem: A key reason 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. The IMF’s charter in fact stipulates that each member country 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.” Unfortunately, very little has been done over the past 25 years either to identify serious episodes of exchange market manipulation or to enforce/encourage remedial action when such episodes have occurred.

Over the past two years, the problem of exchange rate manipulation has become harder to deny. According to the IMF’s surveillance guidelines on exchange rate policy, an important pointer of manipulation is large-scale, prolonged exchange market intervention in one direction. China has been engaging in just such behavior over the past two years:

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<sup>2</sup> Goldstein and Turner (2004) have introduced (for 22 emerging economies) a new measure of aggregate effective currency mismatch (AECM) that should prove useful as a shorthand “stress test” of the output effects of a large depreciation of the exchange rate; those AECM data are now available for 9 Asian emerging economies on the website of the Asian Development Bank.

<sup>3</sup> The action program to reduce currency mismatches set out above can be classified as emphasizing actions at the “national” level; in contrast, Eichengreen and Hausmann (2003) opt for a more “international” approach to reducing currency mismatches.

China's international reserves increased by roughly \$160 billion in 2003 and by an additional \$200 billion in 2004 – and this at a time when its real trade-weighted exchange rate has been depreciating and when its domestic economy has been overheating.<sup>4</sup> Japan intervened to the tune of \$200 billion in 2003 and another \$150 billion during the first quarter of 2004. Taiwan, Korea, India, Singapore, and Malaysia together added \$125 billion to their reserves in 2003. Sixty percent of global foreign exchange reserves are now held in Asia and studies suggest that reserve accumulation there has increased more since 2001 than warranted by fundamentals. The global adjustment process cannot operate effectively if countries use prolonged, large-scale exchange market intervention to hold down the value of their currencies so as to promote their own growth and employment objectives. The U.S. current-account deficit has grown (in 2004) to an all-time high of \$650 billion – or 5 ½ percent of GDP. A “sustainable” US current-account deficit would be roughly half as large. In addition to strong, medium-term action to reduce the US fiscal deficit, what is needed is a further 15-20 percent real depreciation of the dollar --beyond the depreciation that has already occurred (mainly against the euro, the Canadian dollar, and a few other currencies) since the dollar peak in February 2002. But it will be difficult to get the needed further depreciation of the dollar unless Asian economies (which have a 40 percent weight in the dollar index) scale back their intervention and allow their currencies to appreciate.

One consequence of lax enforcement of international guidelines on exchange rate policy is ill-designed policies on exchange rate manipulation applied at the bilateral level. There is already a group of bills before the US Congress that would impose a unilateral surcharge on China's exports to the United States unless bilateral negotiations to end China's (alleged) currency manipulation are 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.

Proposed solution: Emerging economies depend heavily for their future prosperity on good access to markets in industrial countries – an access that could 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. There is also the helpful example of the WTO. Through the rulings of its adjudication panels, a body of international law is unfolding that is making it clearer what is and what is not acceptable trade policy. International rules of conduct for exchange rate policy are no less necessary than those for trade policy. The IMF should respond to its mandate to exercise firm surveillance over the exchange rate policies of its member countries by evaluating complaints about exchange rate manipulation and by suggesting corrective policy actions. If member countries were to take the collective view that the existing guidelines on exchange rate manipulation are in need of revision, action to agree on a new set of guidelines should be taken as soon as possible. It is in nobody's interest to promote a free-for-all on exchange rate policy.

#### IV. Debt sustainability

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<sup>4</sup> See Goldstein (2004) for an analysis of China's exchange rate policies.

Problem: The last decade has witnessed not only a spate of currency and banking crises but also quite a few debt crises, including Argentina, Ecuador, Pakistan, Russia, Ukraine, and Uruguay – to say nothing of the close calls in Brazil in Turkey. It would be too optimistic to conclude that debt problems in emerging economies (and in some large industrial countries) are a thing of the past.

According to IMF figures, the ratio of public debt to GDP now averages about 70 percent in developing countries – reversing the progress made in reducing that ratio during the first half of the 1990s. Just as troubling, the IMF documents that over half of all public debt defaults occur at public debt ratios below 60 percent, that the typical emerging economy now has a public debt ratio about 2 ½ times as high as its track record on fiscal policy suggests is prudent, and that governments typically fail to take corrective fiscal policy actions when the public debt ratio climbs above 50 percent.

Proposed solution: 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 toward banks and other financial institutions, and to reduce, over time, the now excessive reliance on foreign-currency-denominated and foreign-currency-indexed 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 assessment of public and external debt sustainability. But problems remain: baseline projections for public and external debt have shown a bias toward over-optimism and the debt sustainability assessments have not yet become an integral part of the IMF staff's analysis in the staff report. Effort should be made to overcome these shortcomings. In addition, publication of the Fund's debt sustainability analysis should be made mandatory.

There is also scope for improving the cushioning of emerging-market borrowers against adverse shocks by making debt payments more contingent on the borrower's ability to pay. Perhaps the most straightforward way to do this would be to persuade both emerging-market borrowers and the financial institutions that lend to them to experiment with the use of GDP-indexed bonds.<sup>5</sup> Yes, such bonds would encounter the obstacles new financial instruments face along with the problems particular to the verification and revision of GDP figures. But GDP-indexed bonds offer potential advantages that should not be lightly 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 pro-cyclical 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 than bonds linked to commodity prices, and they contain some protections against manipulation and cheating aimed at lowering debt obligations (e.g., it is high

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<sup>5</sup> GDP-indexed bonds are in ones in which coupon payments on the bond vary in part with the growth rate of the debtor's economy, being higher in years in which growth or real GDP is higher than trend and lower in years of below-trend growth; see Borensztein and Mauro (2002).

growth outcomes – not low ones, that are considered a success and that get politicians re-elected).

## V. International Standards and Codes

Problem: Contrary to the projections of some pessimists, it has proven possible to secure within a relatively short time period international agreement on a set of international standards and codes of best practice. The Financial Stability Forum (FSF) has decided that 12 of these are crucial for sound financial systems and merit priority implementation. These 12 standards cover three broad areas: macroeconomic policy and data transparency, institutional market infrastructure, and financial regulation and supervision. The IMF and World Bank are actively involved in the key task of monitoring and evaluating countries compliance with many of the standards and an increasing share of these compliance evaluations (so-called Reports on the Observance of Standards and Codes, or ROSCs) are being published.<sup>6</sup>

All that is to the good. The rub is that we don't yet know very much about the impact of these standards;<sup>7</sup> in addition, some of the channels that were originally thought to increase the incentives for complying with the standards (such as offering complying countries more favorable risk weightings in the Basle II international capital standards and/or preferred access to IMF resources) have not been part of the official agenda. And there is a danger that the quality of the evaluation process will suffer if too many compliance reports are initiated.

Proposed solution: 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 ROSCs by limiting further 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. The quality of compliance reviews is crucial because the main incentive for implementing standards and codes is that doing so would reduce the country's cost of borrowing in international capital markets, and markets will not confer that cost saving on countries unless they can read the ROSCs and can conclude with confidence that such reviews are objective and of high quality. As a further way to improve the incentives for complying with standards and codes, the IMF should consider offering countries with good compliance records an interest rate discount when borrowing from the Fund.

## VI. Early Warning Systems

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<sup>6</sup> As of June 2004, more than 560 ROSCs covering more than 110 countries have been issued and almost three-quarters of those have been published. The main vehicle for conducting financial-sector surveillance has been the Financial Sector Assessment Program (FSAP), based on country missions conducted jointly by the IMF and World Bank; FSAPs are not published.

<sup>7</sup> See Goldstein (2005) for a brief review of some of the existing empirical work on the impact of standards and codes.

Problem: Investing in an early warning system for currency, banking, and debt crises should be attractive on at least two grounds. First, financial crises in emerging economies have been shown to be 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. 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. 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.<sup>8</sup>

The Fund introduced its own high-frequency vulnerability exercise in 2001. But of the IMF's roughly one thousand economists, perhaps only about a dozen (in full-time equivalents) work on the vulnerability exercise. This raises a question of whether the vulnerability exercise is receiving the resources and priority it merits relative to the Fund's other surveillance activities.

Proposed solution: Given the very large 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 placed on a lower-frequency cycle. Underlying this proposal is the judgment that Fund resources can make the greatest contribution and produce the most value-added (relative to research supplied by private financial firms) by gauging crisis vulnerability across countries and over time for the 25 or so largest emerging economies.

## VII. IMF Lending Policies

Problem: Debates over IMF lending policies have been a recurrent theme over the past few five years or so. On the plus side, the Fund has streamlined its previously bloated conditionality on structural policies while rejecting proposals for wholesale change that would make Fund lending decisions highly dependent on a small set of pre-conditions (a la the Meltzer Report [2000]). On the negative side of the ledger, the Fund has yet to 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").

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. The normal access limits under Fund programs are 100 percent of a country's quota annually and 300 percent of quota cumulatively. The normal access limits have been surpassed – and sometimes by large amounts – in the cases of Mexico (1995),

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<sup>8</sup> See Berg, Borensztein, and Pattillo (2004), and Goldstein, Kaminsky, and Reinhart (2000).

Thailand (1997), Indonesia (1997), Indonesia (1997), Korea (1998), Brazil (1998-2001), Turkey (1999-2002), Uruguay (1999-2001), and Argentina (2000-2001). One result of this de facto access policy has been a high concentration of Fund credit among a small number of borrowing countries; e.g., in January 2004, credit outstanding to the Fund's three largest borrowers (Argentina, Brazil, and Turkey) hit an unprecedented 70 percent of total credit.

Deciding when access to IMF loans should be exceptionally large is a judgment call. A loan that is too small would make the adjustment burden on the borrowing country in crisis too heavy and could impede a return of market confidence; on the other hand, a loan that is too large would discourage the borrower from taking adequate adjustment measures, could 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 unwilling or unable to repay the Fund on time. To date, the empirical evidence has not been decisive either on the influence of loan size on the effectiveness of IMF programs or on the direct and indirect effects of IMF lending on borrower or lender moral hazard. Some large IMF loans (e.g., Mexico, Korea) have produced very good results while others (Argentina) have fared very poorly.

The IMF's Executive Board approved a new framework on exceptional access in February 2003. The new framework set out four criteria that should be satisfied to qualify for exceptional access: (i) the country was experiencing capital-account pressures that could not be met within normal access; (ii) there was a high probability that the country's debt would remain sustainable; (iii) there were good prospects that the country would regain access to private capital markets during the time when Fund loans would be outstanding; and (iv) the country's policy program offered a reasonably strong prospect of success. In March 2003, the Fund's Board also strengthened the presumption that exceptional access in capital-account crises should be financed – at higher interest rates and shorter repayment maturities – under the IMF's Supplementary Reserve Facility (SRF). But by the IMF's staff own admission, access decisions taken for Argentina and Brazil in the aftermath of the new framework did not comply with it.

Proposed solution: One way of perhaps balancing the considerations that go into exceptional access loans would be to raise the normal lending limits somewhat but to then simultaneously put in place stronger criteria for activating exceptional access. Roubini and Setser (2004) have proposed, for example, that normal access limits be increased to 300 percent (annual) and 500 percent of quota (cumulative) to reflect the reality of the size of IMF loans during recent exceptional access cases and to recognize the size of today's capital markets. This could be counter-balanced by requiring: (i) that decisions to grant exceptional access should be subject to a supermajority – say 75 to 80 percent of voting strength (as recommended earlier in a Council on Foreign Relations (1999) report; and (ii) that the Fund's Managing Director sign-off explicitly that the decision to grant exceptional access met all the conditions of the new (February 2003) exceptional access framework. The aim of all this 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.

## VIII. Concluding Remarks

Some will no doubt say that the reform agenda outlined above is not bold enough. Maybe so. But the more ambitious schemes for IFA reform – ranging from restricting the Fund’s activities to surveillance with no lending, to turning the Fund into a lender of first resort that provides massive loans to countries that meet a few pre-qualification criteria – strike me as neither desirable nor feasible. As such, I vote for a more limited reform agenda. Three of the reforms proposed in this note (on currency manipulation, on debt sustainability, and on IMF lending facility) would come under the heading of getting the Fund to return to its roots; the three others (on currency mismatches, on international standards and codes, and on early warning systems) involve areas where the IFA needs to evolve – either to meet the changing characteristics of recent financial crises or to strengthen earlier efforts to improve crisis prevention and crisis resolution.

From the perspective of an L-20, the agenda set out may offer some attractions to participants. The United States, Canada, and the European Union are each interested in encouraging greater exchange rate flexibility in China and in the rest of Asia. The United Kingdom, Canada, and Germany have long been interested in a more discriminatory approach to exceptional-access loans in the IMF. The U.S. Treasury has regarded measures to control currency mismatches in emerging economies as deserving of higher priority. For their part, the emerging economies may be interested in increasing normal access limits in the Fund, in keeping the standards and codes exercise well focused on the core standards, in giving more serious consideration to use of GDP-indexed bonds, and in heading-off potential protectionist threats to their exports by agreeing on rules of the game for exchange market intervention.

We will see.

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