



*Inter-American Development Bank
Banco Interamericano de Desarrollo (BID)
Research department
Departamento de investigación
Working Paper #440*

The Redesign of the International Financial Architecture from a Latin American Perspective: Who Pays the Bill?

By

Eduardo Fernández-Arias*
Ricardo Hausmann**

***Inter-American Development Bank
Harvard University

December 2000

**Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library**

Fernández-Arias, Eduardo.

The redesign of the international financial architecture from a Latin American perspective : / by Eduardo Fernández-Arias, Ricardo Hausmann.

p. cm. (Research Department Working paper series ; 440)
Includes bibliographical references.

1. International finance. 2. Latin America--Foreign economic relations. 3. Financial institutions, International--Latin America. I. Hausmann, Ricardo. II. Inter-American Development Bank. Research Dept. III. Title. IV. Series.

332.042 F349-dc21

82000

Inter-American Development Bank
1300 New York Avenue, N.W.
Washington, D.C. 20577

The views and interpretations in this document are those of the authors and should not be attributed to the Inter-American Development Bank, or to any individual acting on its behalf.

The Research Department (RES) publishes the *Latin American Economic Policies Newsletter*, as well as working papers and books, on diverse economic issues.

To obtain a complete list of RES publications, and read or download them please visit our web site at: <http://www.iadb.org/res/32.htm>

1. Introduction

International financial liberalization and financial integration have not worked out as advertised. In the recent past, emerging markets have been rattled by financial turmoil. The degree of financial volatility and the frequency of panics, crises, and contagion have made the current state of affairs socially costly and politically disappointing in emerging economies. Political support for liberalizing policies in emerging countries is now harder to achieve. The prospect of long-run faster growth has not compensated for these new headaches. All this is especially true in Latin America, which after a decade of solid structural reforms fell prey to international financial turmoil at the time it most needed external finance and unexpectedly suffered a deep recession in 1998-99.

Industrial countries by contrast, and especially the G-7, face a different problem. They view with concern the increasing volume of official financial rescue packages that have been dished out in recent years, starting with Mexico 1995, for a total of almost \$200 billion. Fearing that the current strategy to deal with financial turmoil in emerging economies may involve a self-fulfilling explosion of their quasi-fiscal liabilities, both bilateral and to the International Financial Institutions, the industrial countries have reacted with an agenda to scale back the magnitude of official support and force private lenders to share the burden. In turn, the private sector claims that the burden-sharing push can easily lead to the arbitrary disregard of contracts and demands clear and fair rules of the game to engage in development financing in the future.

There is consensus that the international financial architecture needs reform, but there is little clarity and agreement as to how to fix it, or even what to fix.

What's wrong with world financial markets? Diagnoses abound. An overview suggests that views can be classified into three groups. First, some see the main problem as one of excessive capital flows to emerging markets, beyond what these economies can productively use. Second, others see the main problem as just the opposite: world financial markets fail because they fall short of delivering enough financing for productive projects. And finally, a third group sees the volatility and unpredictability of terms and availability of development financing as the main drawback of current financial markets.

There is no shortage of "solutions." Several reports have been, are being, and will be produced by multilateral organizations, think tanks, academics, and task forces. But the connection between proposed solutions and the problems that need to be resolved is not clear. If

the new architectural design does not address the key structural problems and lay new foundations, it will be no more than interior decoration.

All views on problems are complementary and own a portion of the truth. Initiatives to reform the international financial architecture will likely impact differently on the various distortions in international financial markets. From a policy point of view, it is key to pose the issue of reforming the international financial architecture as a second-best proposition, one in which reforms will have to endure the existence of unavoidable distortions. In the context of multiple distortions, the reduction of one of the distortions is not necessarily welfare improving. For example, the objective of eliminating excessive and volatile capital flows could be achieved by impeding the international financial integration of emerging markets, in an extreme case by closing these markets altogether, but at a potentially enormous cost in terms of economic growth. The question is what are the main problems to guide the trade-offs in this multifaceted issue?

Problems and solutions involve three main players: emerging countries, industrial countries (the official sector), and foreign investors with interests in emerging economies (the private sector). Unfortunately, the costs and benefits of addressing the problems of international financial architecture are very unevenly distributed among the players. This unequal distribution may underlie the wide range of diagnoses and initiatives, and help explain the alignments in the debate around the redesign of the international financial architecture. The need for positive net benefits for all players to ensure their voluntary participation in any change of the status quo severely restricts the set of feasible reform proposals and may leave out the most efficient new arrangements. In fact, our own set of proposals (see Fernández-Arias and Hausmann, 2000a), which we derive from efficiency principles, are likely to be more costly to industrial countries than the proposals encouraging official disengagement that are the core of the new doctrine currently being advanced by the official sector.

This article discusses this “political economy” side of redesigning the international financial architecture. It draws heavily from our previous work (Fernández-Arias and Hausmann 2000a, 2000b). The next section reviews the problems of international financial markets. We subsequently assess their importance in light of the evidence and discuss for whom they are crucial. The last section reviews the solutions that are being proposed and discusses the distribution of their costs and benefits. Concluding remarks follow.

2. Problems of International Financial Markets

The problems in international financial markets faced by emerging markets can be grouped under the headings of “Too Much,” “Too Little,” and “Too Volatile,” depending upon which characteristic of capital flows to emerging markets is emphasized.

Theories of Too Much

Theories of Too Much usually assume that moral hazard encourages excessive lending.¹ Resources are also misallocated because they are apportioned to risky projects without internalizing the costs involved.² Somebody is providing an implicit guarantee so that the parties to the transaction are not internalizing all the risks. Too much lending and too much risk-taking occur. Eventually, the guarantee is called and a crisis emerges. The various scenarios differ in the source of the implicit guarantee.

The most traditional scenario involves government guarantees of the banking system. The same logic will apply to a corporation perceived as being “too big to fail,” but banks remain the prime example because they play a critical role in the payments system. Governments cannot afford to let banks simply go broke because that would trigger a catastrophic sequence of defaults in which otherwise solvent, efficient firms go bust when their clients are unable to make payments from deposits frozen in problematic banking institutions. Counting on the protection provided by an inevitable government bailout, bankers may assume too much risk.

A variation of the theory of moral hazard views pegged exchange rates as an implicit guarantee (Mishkin 1996, Obstfeld 1998, Buiters and Sibert 1999). This form of moral hazard would reduce incentives for hedging exposure to exchange rate risk and would favor short-term foreign debt, which falls due in the period in which the guarantee would be more credible.

Another Theory of Too Much follows similar lines but blames the International Monetary Fund, bilateral creditors, and multilateral development banks for providing rescue packages that shield either foreign investors or governments from the fallout of excessive risk-taking. This kind of moral hazard is thought to lead to excessive lending by foreign investors who expect to be repaid from resources provided through future rescue packages if real returns on investment

¹ Excessive lending to the public sector may also be caused by political economy distortions, which may have contributed to the debt crisis of the 1980s. Here we focus on lending to the private sector, and therefore assume that returns pass the market test.

² Dooley (1997), Krugman (1998), and Corsetti, Pesenti, and Roubini (1998) provide formal models of this intuition.

do not materialize. Even if it is true that official rescue packages are quickly repaid, as is the experience so far, and do not provide a subsidy directly responsible for creating moral hazard, they would still make it possible for the government to extend a moral hazard-inducing bailout (an enabler of moral hazard, in the terms of DeLong, 1999). This theory has received much currency, especially among economists (see Sachs, 1998a), and Eichenbaum *et al.*, 1999).

Theories of Too Little

For all the impressive growth in capital flows to emerging markets, they are surprisingly low relative to what one would expect given the dominant trade theories and the way open economies are usually modeled. In fact, current capital flows are low compared to those observed prior to World War I and, more recently, to those in some particularly telling countries. In this section, we will review explanations of this anomaly based on commitment problems at the international level.

It is useful to start by focussing on problems of willingness to pay when the enforcement of financial contracts is limited. Loans are not self-enforcing contracts. After receiving a loan, only coercion or the promise of future loans makes debtors want to fulfill their obligations. In order to compensate for the risk, higher charges are made. But higher interest rates further increase repayment problems by eroding the borrower's ability and willingness to repay in full and by worsening risk through adverse selection in the pool of borrowers and moral hazard in the choice of projects (see Greenwald, Stiglitz and Weiss, 1984).

In order to address willingness-to-pay problems, loans are often secured by collateral, and courts adjudicate problems that arise during the life of the contract. When nonpayment occurs or is possible, bankruptcy procedures are set in motion. These allow ability-to-pay problems to be separated from willingness-to-pay problems. They also provide a mechanism to secure the cooperation of the different creditors, to remove management if creditors find it necessary, and to transfer the ownership of assets to creditors.³ The absence of an adequate bankruptcy law and court system can have deleterious effects on the financial system. It makes coercion less credible, worsening the willingness-to-pay problem. It also increases the cost of crises because it precludes concerted action to provide additional financing needed for the company's survival.

³ La Porta and López-de-Silanes (1998) provide an empirical analysis of creditor and shareholder rights for a large set of countries and establish their importance as determinants of the level of development of financial systems.

In cross-border finance, the willingness-to-pay problem is severely aggravated by the involvement of a sovereign government. Since sovereigns do not need to abide by the rulings of any foreign court, the problem may be serious and difficult to resolve. Sovereign risk may explain why cross-border lending is so small. In the standard model (Bulow and Rogoff, 1989) sovereigns will pay so long as it is not in their interest not to do so, given the “punishment” they may receive for nonpayment. However, the incentive not to pay goes up with the volume of debt owed. This theory, originally developed for public debt, can be extended to apply to private sector borrowing under the “protection” of the sovereign, which may suspend convertibility, nationalize assets, or otherwise interfere in the payment process if such action is perceived as increasing national welfare (Fernández-Arias and Lombardo, 1998a).

As a result, sovereign risk augments overall risk beyond the traditional commercial risk, and therefore, in the absence of financial enhancements, represents a floor for private risk. Sovereign risk will cause markets to impose a credit ceiling on countries so as to keep the volume of aggregate debt below the level that would create incentives for nonrepayment. The lighter the “punishment” the world can impose on the country, the lower the credit ceiling will be. Economies that are more integrated into the world are more easily “punished” and hence should get a higher credit ceiling.

Another aspect of sovereign risk concerns the so-called “original sin” affecting almost all emerging market currencies (Hausmann *et al.*, 1999, and Eichengreen and Hausmann, 1999): they cannot be used to borrow abroad and cannot be used even domestically to borrow long term. Original sin may be caused in part by sovereign risk. If a capital importing country could borrow in its own currency it would be able to improve its net worth by letting the currency depreciate.

This fundamental incompleteness of the financial market has important implications for financial fragility: It causes investments to be financed either in dollars or short term. If the funding is done in dollars, many projects, and the country as a whole, will have a currency mismatch, as cash flows would be denominated in a different currency from that of the debt. If companies try to avoid this problem by borrowing in pesos, they will have a maturity mismatch as only short-term loans are available in the domestic market. Hence, maturity and currency mismatches are endemic in countries with original sin.

Notice that sovereign risk is a commitment problem. If the sovereign could somehow tie its hands and mandate future payments with no tricks, irrespective of future conditions (including

a change in ruling faction), the problem would disappear. Lending would be more ample and stable. Yet even when the sovereign might well be better off making such a commitment, the binding technology to make the pledge credible once indebtedness is high may be difficult to find.

As a result, thus far, private markets have tried to insulate themselves from sovereign risk with relatively rigid contracts lacking clauses that could be exploited to justify nonpayment in legalistic ways. Yet a scheme like this tailored to a pure willingness-to-pay problem may make crises triggered by a reduction in ability-to-pay more difficult to manage and more costly. It usually makes debt workouts quite messy.

Theories of Too Volatile

Recent financial turmoil and unpredicted crises, frequently described as market panics, herd behavior and financial contagion, have reinforced the idea that this is a new phenomenon in international financial markets. In what follows we discuss liquidity crises and financial contagion, the two main factors underlying recent market volatility and unpredictability.

The traditional example of liquidity crises is a bank run. Banks typically have a term mismatch: They receive short-term deposits, even sight deposits, and lend them at longer maturities. Assume all borrowers are doing just fine. If there is no attack, the bank will do just great. But if suddenly depositors all want their money at the same time, the bank will go bust. In fact, in the bank's attempts to collect loans too quickly, even solvent borrowers may get into trouble due to the credit crunch. Hence, expectations may be self-fulfilling: both optimism and pessimism can be justified ex post.

More generally, capital account imbalances, especially in the presence of high levels of debt, raise the specter of bank-run-like payments crises if market financing dries up, whether or not an actual banking crisis develops. This market reaction may be based on a loss of confidence in a particular country or simply reflect global financial contagion. In fact, a temporary disruption in financial flows, due for example to a prolonged bout of contagion, may cause enough real damage to generate a full-blown crisis. Thus, countries may be subject to situations in which the roll-over of public debt is subject to multiple equilibria where, in the bad outcome, creditors will refuse to refinance debts, provoking a grave short-term liquidity problem. The ensuing credit crunch can cause a serious contraction, high real interest rates, and payments

problems in the corporate sector, thereby deteriorating the health of the financial system and justifying the attack.

Furthermore, the pressure on the exchange rate caused by the capital account shock may lead to depreciation, further contributing to the deterioration of the economic segments with net foreign currency exposure. In fact, currency devaluation alone may generate multiple equilibrium and a liquidity-like crisis (see, for example, Chang and Velasco, 1998 and Krugman, 1999). This occurs even in economies in good fiscal health, irrespective of the exchange rate regime and whether or not the currency was previously overvalued.

Aside from full-blown liquidity crises in specific instances, recent widespread financial turmoil has meant enormous volatility in terms and volumes of financing, and unreliable access to external financing, for most emerging markets. The explanation is the so-called “financial contagion.” The main inter-country linkages underlying the high degree of correlation among international financial prices in emerging markets do not appear related to world market conditions, trade relations among them, or other traditional transmission mechanisms. Instead, the linkage is that they share a common set of investment institutions making joint investment decisions (Fernández-Arias and Rigobón, 1998). The most notable example is the collapse of bond prices in Latin America following the Russian default of August 1998; Russia is a country with whom the region has very few economic ties of any kind.

One important explanation to account for the evidence is that investment institutions were hit by big losses in crisis countries, e.g., Russia, and became capital deficient to back their obligations (fulfill margin calls) and not creditworthy themselves, which forced them to shrink their portfolio and reduce risk bearing. The result was the kind of portfolio reallocation observed in practice. Because of the illiquidity of this market, perhaps because non-specialized buyers are less informed than specialized sellers (see Calvo, 1998), this reallocation requires fire-sale prices. The strong contagion in our region would be due to the fact that most of our investors are within a narrow field of institutions specializing in non-investment grade paper. In this sense, financial regulations in industrial countries prohibit very large institutional investors from holding non-investment grade assets and may therefore have caused the inefficient segmenting of the market and drastically reduced its liquidity.

A key implication is that bond spreads under contagion do not reflect country risk. Prices are misaligned but arbitrage opportunities are not exploited because the specialized, informed

investors are capital constrained. Over time, the pricing gap would be arbitrated as the constraints over our specialized investors ease and new financial intermediaries are established. Therefore, lack of liquidity resulting from contagion would be temporary, a prediction that also bodes well with the evidence. To a large extent, financial contagion is akin to a liquidity crisis in slow motion, whose ultimate outcome depends on whether the speed of recovery is enough to pull out the economy. It is clear that the possibility of financial contagion makes financial integration unreliable.

3. Assessing the Problems

Different types of problems affect different players in different ways. For example, problems associated with theories of too much hurt both emerging countries, which end up in crisis, and industrial countries, which may be required to come to the rescue. Industrial countries may have to provide financial help either bilaterally or through multilateral organizations such as the IMF. Other problems of international financial markets, however, have a lower potential for generating full-blown crises that may directly hurt industrial countries. Problems associated with theories of too little are for the most part suffered exclusively by emerging countries, which cannot enjoy the wealth they could appropriate if they had access to more financing. Similarly, the problems associated with the excessive volatility of flows, unless in extreme cases ending up in crisis, are also suffered mainly by emerging countries.

The assessment of the problems in international financial markets, i.e., the analysis of their relative relevance, is therefore important to draw an accurate map of how the status quo is differentially appreciated by emerging and industrial countries and the possibly contradictory implications that changes to the status quo may have. In principle, these asymmetries should not produce any disagreement about the objective assessment of the problems, only on policy preferences. In practice, however, it is more “correct” to couch different subjective perspectives as different assessments of objective reality. That is also an honest psychological tendency. In that case, discrepancies in the diagnosis of what is wrong in international financial markets can be interpreted as a reflection of discrepancies in interest. We now turn to the analysis of these discrepancies.

Confronting the Historical Evidence

It is well known that capital flows to developing countries are smaller than desirable under any reasonable standard. Taking into account the existing differences in capital/labor ratios, international flows across nations are way too small relative to flows within nations (Bayoumi and Rose 1993, Bayoumi, 1997), which underlies the strong correlation between domestic savings and investment first uncovered by Feldstein and Horioka (1980). This evidence implies that Theories of Too Much do not address some of the most important distortions present in the world. Hence, policy recommendations predicated on them, without reference to their impact on other important distortions, cannot be presumed to improve efficiency. At the same time, this evidence supports the Theories of Too Little and, indirectly, the Theories of Too Volatile.

The magnitude of capital flows under the Gold Standard, before World War I, clearly shows that international flows can be much larger than today. As De Long (1999) points out, the historical record of large flows in the Gold Standard period can also be interpreted as direct evidence against the moral hazard view. First, in that period there was no IMF or functional equivalent to create international moral hazard in developing countries, and yet flows were larger. And second, financial crises then were even more frequent and deep; the IMF is certainly not a requisite for crises!

Theories of Too Much imply that capital flows would be skewed in favor of the type of flows most likely to be covered by guarantees, as Eichengreen and Hausmann (1999) point out. Borrowing by banks and government borrowings would appear at the top of the list. Also, the moral hazard involved in currency risk would justify these flows' being skewed toward the short term. But the evidence from international banks that report to the BIS is that their cross-border lending to developing countries shows no evidence of these distortions relative to developed countries. Moreover, portfolio flows rather than international commercial banks have been the key players in this decade. The massive losses stock and bondholders have been subject to and the enormous political costs paid by governments in crisis countries make it hard to imagine that moral hazard alone could create such widespread financial havoc.

Therefore, there is strong evidence that moral hazard is not the dominant distortion in international finance to developing countries. The same holds true in the context of impediments to economic development. Even if moral hazard is a piece of the explanation of the East Asian crises, the fact that these countries have the most successful sustained growth record in known

history is countervailing evidence that should make us pause. Radical institutional reform of a financial system recently regarded as a development model in the name of moral hazard appears premature given the current state of knowledge (see Feldstein, 1998). Concerning Latin America, our region has made very significant progress in improving banking supervision and regulation, especially since the Tequila crisis in 1995. However, financial turmoil has been at a peak and access to world capital markets has been closed for long stretches.

What Went Wrong in Recent Experiences?

To unearth the causes of financial turmoil, it is important to review the salient features of recent crises. Starting with the Mexican crisis of 1994-95, financial turmoil in emerging countries has surprised analysts. A graphic way to view this is presented in Calvo and Fernández-Arias (1998). There, the six crisis countries of 1997-98 (Indonesia, Korea, Malaysia, Philippines, Russia, and Thailand) are compared with the six largest countries in our region (Argentina, Brazil, Colombia, Mexico, Peru, and Venezuela). If we classify these countries into low and high risk according to market risk spreads and ratings in mid-1997, right before the crises, we find that, except for Russia, crises occurred in the low-risk countries.

We believe that lack of predictability is largely rooted in problems of multiple equilibria rather than in a misunderstanding of the workings of economies. This means that the existence of a potentially “bad” equilibrium may trigger a self-fulfilling financial panic, in which the collapse validates the state of panic that causes it. These problems resemble bank runs and are associated with liquidity problems. In some of the recent crises, fundamentals were consistent with the required capacity to service the debt load, but a sudden lack of liquidity severely damaged the economy, leading to an unexpected change in sentiment. The unnecessary nature of the run that provoked the liquidity crunch can account for the failure of the market to anticipate the crisis.

And most surprising of all, and this is very important, the strong financial contagion associated with these crises infected countries enjoying strong fundamentals that had essentially no economic linkages with crisis countries. This was most notable in Latin America during the Russian crisis. Most emerging markets in the world have lost much of their access to external financing, even though their economies do not present any great inherent weaknesses. Recent

experience with financial contagion points to the importance of addressing distortions in the international financial system that lie beyond policy reform in emerging countries.

Finally, we shall also keep in mind the severe limitations of policy instruments in stopping a crisis once it has started, which puts a premium on prevention strategies. Once a crisis breaks out, the experience shows that it quickly develops into a meltdown with enormous output losses, even if rescue packages are quickly dished out (see Calvo and Fernández-Arias, 1998).

What Is Wrong?

The previous analysis suggests that serious distortions are present in international financial markets. They are behind the fact that flows are on average small, relative to the difference in capital-labor ratios and demographic trends in the world. They are also behind their unusually high volatility and co-movement of capital flows. However, the dominant view in industrial countries, as expressed in the Report of the Council on Foreign Relations and the G-7 Cologne communiqué, among other documents, is centered on concerns of moral hazard, the ones that may cost some industrial country taxpayers money. While much of the policy debate has assumed that the dominant distortion is moral hazard, the preponderance of the evidence suggests that other distortions are more binding.

4. Solution Proposals: Winners and Losers

In this section we attempt to identify the winners and losers of various proposals for the redesign of the international financial architecture. To do that requires us to: a) establish which are the problems of international financial markets that the proposals will solve or aggravate; and b) assess the corresponding implications for each player according to its specific perspective. If all perspectives were compatible, all parties would be either winners or losers and ranking proposals would be a purely technical, objective matter. If not, as we suspect, the evaluation of proposals depends on the perspective, and there may be winners and losers preventing consensus. In that case, agreement from losers would require a compensation mechanism, which may be difficult to find.

It is probably not feasible to change the status quo in a way that entirely satisfies all parties involved, because in that case solutions to the problems of the international financial

architecture, which have been debated for some time now, would have been agreed upon already. Lack of consensus on some key issues probably arises because it is not feasible to make progress uniformly on all fronts of the problem. Rather, as in any interesting issue in economics, proposed solutions involve trading off different problems in international financial markets which, as analyzed in the previous section, may produce winners and losers among blocks of countries. Emerging and industrial countries have sharply different perspectives on this matter.

Concerning private creditors, how are problems in international financial markets experienced by the private sector? To a first approximation, the private sector is not affected by problems in international financial markets because the market risk premium would incorporate whatever risks there are of not recovering investments. Ex-post private gains may be positive or negative, and the private sector naturally has a vested interest in actions that maximize recovery after a crisis event. But unless the private sector is systematically misled, which is an assumption difficult to justify either theoretically or empirically, problems should have no ex-ante or long-run consequences for private net returns. This argument also holds for “positive” risks such as public guarantees inducing moral hazard, whose beneficial impact on private returns would also be offset by the corresponding reduction of the competitive risk premium.

It is helpful to think of emerging countries as residual claimants, directly benefiting or suffering from the consequences that international financial markets have on their real economies. Under this interpretation, emerging countries with productive investment opportunities benefit from having access to foreign finance and suffer from access restrictions, and their attendant inefficiencies of underinvestment or crises. These inefficiencies directly accrue to emerging countries.⁴ From the perspective of emerging countries, the evaluation of changes to the status quo needs to balance their impact on the level of financial integration and investment outside crisis episodes with their impact on the crisis scenario, i.e., the trade-off between the two sources of inefficiency.

In principle, the perspective of industrial countries could be expected to coincide with that reflecting the direct interest of emerging countries for reasons of altruism, and perhaps self-interest. However, the likelihood of transfers from industrial countries in the form of crisis aid, especially if specific programs are designed to this effect, would tilt the balance in favor of

reducing the risk and depth of crisis. In other words, industrial countries can be expected to accept a lower level of productive financial integration as the price to pay for any given crisis tolerance. This gap in perspectives holds irrespective of whether industrial country crisis aid causes moral hazard or not. Even if all parties shared the view that moral hazard is highly relevant, the extent to which it is adequate to control moral hazard would be subject to the perspective gap. In the remainder of the section we will explore the implications of this gap for the subjective assessment of proposals to redesign the international financial architecture.

So far we have neglected the perspective of the private sector. As explained above, with competitive risk premiums, private investment and repayment can be viewed as a zero-sum game in expected terms, and therefore, as a first approximation, neglected when considering its impact on private returns and the country's welfare.⁵ In practice, private sector agents may be subject to agency distortions, large sunk costs in emerging countries, or other distortions that make them prefer proposed solutions leading to bigger and more stable markets. It may appear likely that these "second order" effects tend to align the private sector with emerging countries more than with industrial countries. In this piece we choose not to explore this ramification and neglect the private sector perspective.

Current Proposals under Consideration

We are concerned with the possibility that current proposals under consideration may have a negative developmental impact, because nearly all of them entail less capital flows to support development in emerging markets. This outcome comes as a result of fighting moral hazard or as an expedient to reduce financial instability. In what follows we show that this is the case in both initiatives under review and those under actual experimentation.

In our view, the single most important problem with the way the debate on reforming international financial architecture is being conducted is its partial, even unilateral, approach to the problems to be solved. We must remember that reducing any identified distortion (such as moral hazard) is not necessarily good policy and that successfully alleviating a specific

⁴ In the absence of good investment opportunities, access to foreign finance would be irrelevant, or even counterproductive if, due to distortions, it leads to overinvestment. This inefficiency would also accrue to emerging countries as residual claimants.

⁵ Nevertheless, it may be relevant for sectoral welfare, that is the internal distribution within the country. For example, a public guarantee in favor of the private sector in an emerging country leads to a gain of the domestic private sector offset by a loss of the domestic official sector, which may alter the sectoral distribution.

undesirable symptom (such as financial volatility) is not necessarily the manifestation of a welfare improvement. In the context of multiple distortions, policies need to be evaluated in a second-best framework, taking into account their interaction with remaining distortions. For example, the objective of reducing the moral hazard induced by implicit official guarantees to international private capital flows would be served by curtailing official financial support to countries in distress. However, such financial support would be extremely beneficial in the event of a liquidity crisis and financial contagion. The overemphasis on moral hazard would lead to counterproductive policies if the latter distortions are preponderant. Similarly, reducing the incidence of crises by impeding capital flows may be a counterproductive policy once the deleterious growth effects of lower capital integration are factored in.

There is a good chance that most of our reservations regarding the initiatives currently being advanced in international fora owe to our Latin American perspective. Our assessment is based on the efficiency losses that will occur if external capital does not flow to high-return investment opportunities in Latin America. It is clear, however, that an efficient architecture entails financial support from developed countries when things go wrong, which will happen from time to time. From the alternative perspective of developed country taxpayers, it may make sense to prefer reforms that limit financial risks even at the cost of efficiency. The current bias in favor of reforms that limit capital flows may be better interpreted in this way rather than on efficiency grounds.

In what follows we concentrate on a number of core initiatives under active consideration that characterize the main angles of the debate. We omit other initiatives, not because they are without use or importance but because they are either uncontroversial or propose changes that are more decorative than foundational, i.e., they take too many walls and windows for granted. For example, we do not discuss standards on transparency because we see them as uncontroversial but also of limited impact.

We group the initiatives examined in this paper into three sets and review them in turn. The first two sets of initiatives involve the provision of financial support triggered after an emergency arises. First, we consider initiatives concerning the unilateral provision of financial support by the official sector. Second, we consider initiatives in which the private sector is also given a role in providing financial support. Finally, the third set of initiatives refers to reforms to the financial institutional framework in which international capital flows to emerging markets

take place. They encompass standards and regulations applicable to financial systems, both national and international, as well as monetary and currency arrangements in emerging markets.

Official Financial Support

The main idea behind initiatives concerning official financial support relates to its function of lending of last resort at the international level. The basic argument for international versions of a lender of last resort is the same argument used in a domestic context: by promising in advance to provide financial support in case of unexpected need in which fundamentals are right or will be right, (liquidity) crises are prevented. In fact, financial panic rationalized by the damage in fundamentals that a massive financial withdrawal (a “run”) would generate cannot exist when there is a commitment of ample support that would avoid such damage. (Alternatively, in the case of insolvency, a lender of last resort could also intervene to facilitate the debt workout of reorganized entities at minimum cost.)

However, current official initiatives attempt to scale back the level of official intervention relative to the volumes involved in rescue packages in recent years. Not only are volumes expected to be much lower, but also, in the new doctrine, the conditions under which such support would be forthcoming will be more discretionary and less transparent, making use of the so-called “case-by-case approach” and “constructive ambiguity.” Furthermore, the extent of official support would be linked to the comparable treatment of private creditors, further limiting the scope of official support. The reason given for this official retrenchment is that large, unconditional, and unilateral support finances the bailout of private creditors, which promotes substantial moral hazard leading to overborrowing and crisis. As we will see, whether this is a good reason for retrenchment depends on the prevalence of liquidity or solvency crises.

In the case of liquidity crises, lending of last resort prevents crises at no cost, and is therefore beneficial all around. Successful lending of last resort reduces private default risk, but this is not a source of moral hazard. This is a legitimate reduction in risk obtained from removing an inefficient risk factor, i.e., the panic equilibrium. This does not open a gap between social and private risks. In fact, lower expected risks will give rise to more capital flows that will be applied efficiently. Liquidity crises call for large, unconditional, and unilateral official financial support.

The drawbacks of generous official financial support are associated with insolvency cases. In these cases unilateral official support is costly and relatively ineffective in terms of helping the real economy, because official financial support “leaks” to private creditors. It is precisely the anticipation of this “leakage” that leads to moral hazard.

In our view, the balance of crisis cases justify a rather automatic lending of last resort facility for eligible countries. First, our diagnosis indicates that in this era liquidity crises are prevalent and, therefore, the risk of wrong application of the lending facility and moral hazard would be correspondingly small. Therefore expected benefits would prevail. Second, there are ways to discriminate liquidity and solvency crises in order to reduce the risk of wrong application. The better the fundamentals before the crisis, the more likely it is that the crisis is of liquidity. Eligibility preconditions to qualify for membership to the facility based on sound economic fundamentals would play the role of screening out cases of insolvency. (In fact, the incentive to attain the required standards would induce “moral safety,” the opposite of moral hazard.)

An important case in which the above principles are fully applicable is international financial contagion. This case is similar to the case of liquidity crises in key dimensions. First, recent experience shows that, like liquidity crises, international financial contagion appears to be prevalent in this new era of international finance, and is in fact another distortion underlying the Theories of Too Volatile. Second, from the point of view of the country the basic problem is not weak fundamentals but lack of financing, i.e., distorted risk spreads and lack of access to market. And third, it can be treated with a purely financial solution: the provision of financing is efficient and prevents the crisis. In the case of contagion it works not because it removes the panic equilibrium but because it relaxes a temporary constraint distorting the normal equilibrium.

The above parallels justify a facility similar to lending of last resort but geared towards supporting countries victim of international financial contagion to counteract the cumulative effect of the credit crunch and prevent a full-blown crisis.⁶ Once again, the risk is to finance a country with weak fundamentals that will fall into crisis even after contagion ceases. However, the scope for accurately discriminating which countries should be supported is large. First, the widespread nature of contagion makes it quite apparent when countries are victims of this

⁶ This kind of initiative has been put in practice under the misleading name of emergency financing, e.g., the 1998 \$40 billion plus Brazil package.

phenomenon; non-systemic effects should not be attributed to contagion. Second, even distorted by contagion, relative market indicators across countries, e.g., spreads, continue to reflect relative fundamentals and are reliable pieces of information (see Fernández-Arias and Rigobón, 1998). An official contagion facility should stand ready to support countries meeting the eligibility conditions.

Our diagnosis of the relative lack of importance of moral hazard in causing recent crises, which is probably the majority view in the profession, can of course be challenged on technical grounds. The scope for implementing a set of eligibility preconditions to weed out most insolvency cases from benefiting from the facility is also debatable. However, there is a good likelihood that the official retrenchment being proposed is not mainly driven by technical discrepancies on these issues but by the asymmetric implications that such a facility has for crisis countries and industrial countries. Despite all of the efficiency gains that, in our view, such a facility would attain, clearly it will sometimes be a costly failure. The problem is that the gains obtained in most cases accrue to crisis countries, but the losses, when there is failure, are paid by taxpayers in industrial countries. This asymmetry can explain the announced official retrenchment. The same asymmetry can explain the timidity of the attempts to implement official mechanisms to prevent future crises, despite the fact that one of the main lessons from recent experiences of crisis resolution is that an ounce of prevention is worth a pound of cure.

The Contingent Credit Line (CCL) facility approved by the IMF is the main innovation in the provision of official support. In this facility, countries pursuing sound policy that also meet a number of financial and reporting standards would enjoy financial support in the form of a credit line that can be drawn on if they fall victim to panic or contagion. CCL can be seen as a variant or substitute for a lender of last resort for countries in which good collateral (which is difficult for a sovereign to produce) is replaced by the requirement of a healthy economy. Unfortunately, a hesitant, and perhaps reluctant, approach to the problem has rendered ineffective this well-inspired idea (see Fernández-Arias, Gavin, and Hausmann, 1998, for an early CCL proposal). At the time of writing, the CCL facility currently includes too many obstacles to make it attractive to benefiting countries.

One key problem with the IMF version of the CCL facility is that from the point of view of a country, the committed support may be too small and is not certain and its delivery may take time, any of which may render the mechanism ineffective against panic. The reason is that, as it

stands, delivery is mostly not automatic at the country's choice but requires final approval depending on the Fund's assessment of the situation. It is important to set country eligibility criteria on the basis of preconditions and allow automatic withdrawal. Uncertainty about effective protection defeats prevention and makes this facility somewhat similar to the traditional rescue package strategy. Once again, additional assurances about the financial safety of official support conspire against effectiveness in preventing crises.

Another problem with the CCL facility is that no individual country wants to be the first to apply and somehow signal the need for special protection. It is important to implement this facility in a way that eligible countries are regarded as the strongest and most prudent of the pack, rather than those seeking potential help for some dubious reason unknown to the market. Whether expectations are positive or negative depends to a large extent on the rules of the eligibility game. For example, if countries need to apply individually and run the risk of not being accepted expeditiously, interest will tend to be low. If, on the contrary, the IMF produced a list of eligible countries and allowed them to join in block (e.g., automatically extending the facility privilege as a matter of course), chances are that belonging to the club will be regarded as a prize.

The analysis would not be complete if we do not consider the case of solvency crises. Contrary to a liquidity crisis, in this case the solution does not involve only the provision of finance. In this case, reforms to strengthen fundamentals, including conditionality, are essential. In the absence of these changes, additional financial support would not re-establish confidence and would postpone needed reforms deepening the inevitable crisis, diluting the market discipline that would otherwise be exerted when fundamentals turn riskier. So it is clear that a lender of last resort is not the best answer and a different approach to official support ought to be applied.⁷ Furthermore, it is important to consider the involvement of the private sector in order to arrive at an efficient plan of financial support, because otherwise official support may end up being a bailout of private creditors with little benefit to the country.

⁷ Still, many of the lessons derived from recent experiences with liquidity crises are applicable. In particular, it would be desirable for a new generation of financial support programs to be put in place and be activated before crises erupt. Contrary to liquidity problems, presumably, fundamental solvency problems can be detected in advance and are amenable to early action. Otherwise there should be a strong presumption that liquidity is the key issue.

Private Sector Involvement

The new doctrine on private sector involvement (PSI) appears to feature non-voluntary, “forced” involvement. Forced participation is needed in extreme cases in which domestic adjustment and official international support are deemed insufficient to reestablish confidence. In that case, if confidence is not reestablished then the official money will be quite unproductive, since the private sector would exploit the opportunity to bail out of the country. But it is important to keep in mind that forced PSI is likely to be very costly in terms of future access to private capital unless it follows clearly agreed-upon rules of the game set beforehand. Therefore, forced PSI in general, and official discretion in particular, ought to be minimized.

It is important to notice that the number of cases that would qualify for PSI is not independent of the supply of official funding. Forced PSI may be required if official support is small, but such a situation ought to be avoided if sufficient official support can do the trick of re-establishing confidence. Unnecessarily forcing PSI to reduce official exposure, especially if it is discretionary and opportunistic, is likely to be counterproductive from a development viewpoint. Another implication of the previous principles is that PSI should not be used as a way to teach a lesson to the private sector with the purpose of reducing moral hazard, because such a strategy is likely to have very large social costs. In general, the traditional approach of domestic adjustment and official support with the private sector coming back on its own is superior and should not be limited by a stingier approach to official international involvement.

As explained above, the gap in the perspectives of industrial and emerging countries leads to excessive official preoccupation for moral hazard and excessive caution in putting official funds at risk. In this context, both biases imply excessive reliance on forced PSI. Our concern is that this approach to the coordination of official and private involvement may lead to eroding private capital markets for development.

In deep crisis, the country is unable to sustain its current debt level and, hence, additional official money per se is unlikely to reestablish confidence. Here, debt reduction may need to form part of the solution. Mechanisms to address these cases are now under experimentation. These include renegotiation with private bondholders as a prior condition for Paris Club rescheduling (e.g., “comparable treatment” requirement in Pakistan) or IMF support (e.g., default of Brady bonds in Ecuador). However, the experience in Ecuador clearly signals the dangers of a new doctrine of official retrenchment and forced PSI.

First, the official international sector should not lose sight of its fundamental coordinating role during crises. To request private sector involvement as a prior action before the official sector commits itself puts the cart before the horse. It demands the private sector to participate in a still non-existing program, thus reducing the informational content of the situation. Secondly, the delay involved in waiting for a private sector response may involve a dramatic deterioration of domestic economic conditions as economic activity collapses, aggravating fiscal and financial imbalances and further undermining confidence. Finally, the whole notion of comparative treatment may be the wrong paradigm. After all, during the last “orderly workout” that Latin America went through, i.e., the Brady plan, the roles of public and private sector were quite different, with the former putting in additional resources to generate the enhancements that allowed for debt reduction of the latter.

If forced burden sharing becomes part of the “implicit contract,” it will have a negative effect on the cost of capital and market stability. A case-by-case, secretive approach with weak coordination makes the worst of this approach to PSI. Furthermore, if forced PSI is used for anything other than extreme cases, it runs the risk of becoming a major destabilizing factor. In fact, up to now, if an economy got into trouble, the willingness of the government to call for an IMF agreement was seen as a way to signal its disposition to adjust and thus was a means to reestablish confidence. Under forced PSI, the private sector would interpret such an announcement as a reason to try to get out of the country before a stay or a debt reduction is forced upon them, making governments less willing to call on the IMF for assistance in a timely fashion.

By contrast, we favor the alternative in which official support is ample and PSI is demanded only when necessary, and then in a way in which the burden is shared according to clear rules not subject to abuse. This mechanism would define a standard of “excusable default” that would ensure flexibility when needed. An international bankruptcy court, for example, would fit this characterization. In that case, under insolvency conditions PSI would kick in according to international law, coordinated and supplemented by official support.⁸ The efficiency of this workout mechanism is likely to lead to lower, rather than higher, ex-ante financial costs and be highly beneficial from an emerging country perspective. At the same time,

⁸ At the same time, the country ought to adjust and reform. Ideally, the balance between private and official support would depend on how prudent the country’s policies are.

it will likely be more costly in terms of official financial risk exposure, and therefore less attractive from an industrial country financial perspective.

An international bankruptcy court could be modeled after the corresponding domestic institution. This court would authorize domestic borrowers not to repay when the country is deemed unable, rather than simply unwilling, to pay. This determination would stop legal action against borrowers, thus creating a real difference with respect to an equivalent unilateral sovereign action. By transferring the power to authorize nonpayment to an independent court that does not have a willingness-to-pay problem, this arrangement provides more flexibility while keeping sovereign risk under control. Obviously the sovereign could still decide to violate the decisions of the international court, but in doing so it would forego the protection against suit provided by the court. More importantly, it would allow those willing but possibly unable to repay to pre-commit to a more credible arrangement. Since an independent body will have declared the default to be “excusable” on the merits rather than a unilateral decision by a sovereign, trustworthiness in future dealings would be enhanced.

Finally, there is also scope for voluntary PSI leading to substantial efficiency gains if the official sector is willing to take more risks. For example, PSI in an official international financial contagion facility would also be quite useful in arriving at the kind of sums needed to effectively support countries. It is clear that financial enhancements are needed for the private sector to be willing to lend to countries during the period of contagion. The idea is therefore to provide official enhancements sufficient to spark private interest to resume lending in such a way that leverage is maximized. For example, official enhancements may take the form of partial guarantees of private credits, in such a way that the risk mix becomes acceptable for private lending.

It is worth noting that the use of official enhancements to spark private lending is a way of relaxing the sovereign risk constraint that private creditors face. In fact, official multilateral lenders face a much lower sovereign risk and may be able to leverage their lending by transferring that lower risk to private parties. The reason for their risk advantage is that their policy requires them to suspend operations in countries that run into arrears. Since they are a cheap source of future credit and are committed to stopping lending in case of arrears, sovereigns repay, giving these multilateral institutions their preferred creditor status. In a world where such binding devices are scarce, questions have been raised about whether these institutions are

making adequate use of their commitment technology. In the context of countries lacking access to private financial markets, there is no question that the official sector can be very effective in alleviating this distortion. But once again, efficiency gains come at the cost of additional official exposure to financial losses.

Financial Standards and Regulations

Recent crises have uncovered widespread weaknesses in financial systems and have prompted the elaboration of financial standards and regulations to strengthen them. Interestingly, the emphasis on the kind of fixing that needs to be done directly depends on which class of distortions is deemed more substantial. Those who think that moral hazard is the main problem emphasize the strengthening of the solvency of financial institutions to make sure that they do not play with other people's money. The main initiative in this field has to do with capital adequacy requirements for banks in the domestic system and strong supervision to ensure that they are enforced. Basle risk weights for bank lending are also being reformed along the same lines, ensuring that lending to higher risk countries faces a higher regulatory cost.

This agenda has moved forward very quickly in Latin America, especially after the Tequila crisis, and is behind the resilience of the banking systems in the region in withstanding the consequences of the recent financial turmoil and the deep 1998-99 recession. In fact, most Latin American countries have capital adequacy requirements that are above the Basle standards and supervisory systems have been thoroughly reformed. While this has made banks stronger, it has not translated into more stable flows of international capital. Hence, while these policies are quite uncontroversial in the region, it is unclear that they do much to limit international financial turmoil.

Other initiatives are designed to limit financial volatility. One class of initiatives is aimed at strengthening the liquidity of the banking system by setting high liquidity requirements. More generally, there is an emphasis on large international reserves, especially in relation to short-term obligations. To the extent that liquidity concerns are prevalent in recent experience, policies aimed at delivering high reserves and discouraging short-term debt make sense. At the same time, these policies have the drawback of imposing a higher cost of capital and reducing the domestic absorption of foreign savings.

Latin America is already doing much of what is being recommended. It is interesting to note that the most prudent Latin American governments have found it useful to have a liquidity policy while the OECD has explicitly eliminated liquidity requirements from its regulatory scheme. At present, international reserve levels relative to M2 are about 10 times larger in Latin America than in the typical industrial country. This radical difference must also reflect the presence of a fundamental difference in economic structure. Holding reserves makes sense if there are states of the world in which a country cannot access the international capital markets. For example, by being sufficiently liquid a country can avoid falling into the kind of self-fulfilling liquidity crisis that is associated with rolling over the foreign debt. This is the consequence of distortions other than moral hazard and is unlikely to be addressed by any of the initiatives to curb moral hazard that are on the table.

It is important to recognize that these kinds of prudential policies are second best. They achieve higher stability by impeding capital flows, rather than by solving or compensating the fundamental problems. The concern is that they are costly in terms of development. In this sense, the mechanisms of international last resort lending or a contagion facility can be viewed as another, superior way of addressing issues of liquidity since they involve actual insurance, rather than self-insurance. The problem, of course, is that these more efficient solutions pose a financial risk to industrial countries.

Finally, there is the important issue of how to reform financial regulations in developed countries in order to prevent problems that may affect emerging markets. A case in point is international financial contagion, whose main transmission mechanism, if not root cause, resides in how financial intermediation to emerging markets operates. Two interrelated problems have been identified in recent experience: first, the likelihood that financial intermediaries become over-leveraged as a result of market losses and are forced to sell off their positions; and second, the dependency of emerging markets on a select group of specialist financial institutions, which makes the market for paper quite illiquid. These problems lead to fire-sale prices in times of trouble and the collapse of the market.

The main initiative on the table to address these concerns is the tightening of regulation to discourage high leverage, which would therefore make over-leverage less likely. We are concerned that, as in the case of other initiatives on the table, this one seeks financial stability by simply reducing capital flows to emerging markets, thus aggravating one of the important

distortions to be fixed. This initiative may be beneficial from an industrial country perspective in relation to its own financial stability, but may be quite costly for development. In fact, from an emerging country perspective, it would be preferable to focus reforms in other directions that offer high efficiency gains at some minimal cost to industrial country taxpayers.

For example, regulatory forbearance in financial centers to be activated in the case of a systemic shock would help to diffuse the sudden jolt that over-leverage causes. In this sense, marking to market makes illiquid markets even more unstable when the asset price collapse is not based on fundamentals. Regulatory flexibility under these contingencies in order to impede the cascading collapse would be an effective circuit breaker under “peak” times, preferable to reducing the flow levels on a permanent basis. Potentially more promising would be a small relaxation of the regulations that prohibit important institutional investors from buying non-investment grade paper. This may represent a radical change in the structure of emerging markets, which have become overly dependent on a small group of specialized investors. This would permit higher flows and reduce the collapse during contagion episodes. Unfortunately, this efficiency gain comes with an additional risk of the regulated institutions. However small this cost may be, this is again an industrial country cost necessary to produce the emerging country benefit.

5. Concluding Remarks

Most current initiatives for reforming the international financial architecture are guided by two principles: a) constrain official financial support in order to avoid bailing out the private sector and create “moral hazard;” and b) increase stability in financial markets by limiting capital flows to emerging markets. We find these principles unsatisfactory as a basis for a solution to the problems of international finance for development and propose alternative ones. Even more, we fear that current initiatives may be developmentally counterproductive once their negative effects on the level of capital flows and growth are factored in.

Ours is a Latin American assessment of the initiatives, and therefore not a neutral viewpoint. In order to clarify the debate it is important to recognize that reforms to the international financial architecture have asymmetric effects for the parties involved. In particular, reforms that support deeper financial integration and faster growth in the region may also be more costly to industrial countries in terms of financial risks when disruptions occur.

The above principles minimize the financial costs of international cooperation, which may reflect the fact that the efficient integration of emerging markets may be too costly for industrial countries to embrace.

We have argued in favor of new institutions to address liquidity and contagion problems. We have expressed support for the creating the function of an international bankruptcy court. We find value in improving financial regulation and supervision but think that the greater additional payoff in Latin America is related to the improvement of institutions that solve commitment problems and manage liquidity risks.

We also find that many of the origins of liquidity crises and problems of financial fragility are caused by original sin, i.e., by the fact that the national currency cannot be used to borrow abroad or even domestically to borrow long term. This creates the mismatches that can easily come home to roost at the first sign of trouble. It also limits the ability of central banks to backstop the market unless they hold enormous amounts of international reserves. This calls into question the monetary architecture of the world.

Debate about the new financial architecture is spurred by dissatisfaction with the world as we find it. Financial turmoil is exacting enormous social costs in all emerging market countries. Contagion has made the problem more difficult and costly to address through the exercise of national virtue. It has transformed localized infections into an international disease that needs an international cure.

How much of current social suffering is attributable to an inadequate financial architecture is an open question. But it is clear that the costs of this inadequacy are borne mostly by emerging countries, while any decisions on how to change international institutions and their financial backing inevitably involve the industrial countries. One is reminded of Ortega y Gasset's remark that the pain of others is so much easier to bear than one's own.

References

- Bayoumi, T. 1997. *Financial Integration and Economic Activity*. Manchester, United Kingdom: Manchester University Press.
- Bayoumi, T. and Rose, A. 1993. "Domestic Saving and Intra-National Capital." *European Economic Review*. 37 (00): 1197-1202.
- Bagehot, W. 1873. *Lombard Street: A Description of the Money Market*. London, United Kingdom: William Clowes and Sons.
- Bergsten, C.F. 1998. "How to Target Exchange Rates." *Financial Times*. (20 November).
- Bergsten, C.F. and Henning, C.R. 1996. *Global Economic Leadership and the Group of Seven*. Washington, DC, United States: Institute for International Economics.
- Buiter, W. and Sibert, A. 1999. "UDROP: A Contribution to the New International Financial Architecture." Cambridge and London, United Kingdom: University of Cambridge and Birkbeck College, University of London. Unpublished manuscript.
- Bulow, J., and Rogoff, K. 1989. "Sovereign Debt: Is to Forgive to Forget?" *American Economic Review*. 79 (1): 43-50.
- Calomiris, C. 1998. "Blueprints for a New Global Financial Architecture." New York, United States: Columbia University. Mimeographed document.
- Calvo, G. 1998. "Capital Market Contagion and Recession: An Explanation of the Russian Virus." College Park, MD, United States: University of Maryland. Mimeographed document.
- Calvo, G., and Fernández-Arias, E. 1998. "The New Features of Financial Crisis in Emerging Markets." Presented at Conference on Crisis and Contagion in Emerging Financial Markets: The New Policy Agenda, Inter-American Development Bank, Washington, DC.
- Camdessus, M. 1998. "Toward an Agenda for International Monetary and Financial Reform." Address to the World Affairs Council, Philadelphia, United States, 6 November.
- Chang, R., and Velasco, A. 1998. "The Asian Liquidity Crisis." NBER Working Paper 6796. Cambridge, United States: National Bureau of Economic Research.
- Corsetti, G., Pesenti, P. and Roubini, N. 1998. "Paper Tigers? A Preliminary Assessment of the Asian Crisis." New Haven, Princeton and New York, United States: Yale University, Princeton University, and New York University. Mimeographed document.

- De Long, J.B. 1999. "Financial Crises in the 1890s and 1990s: We Remember History: Why Are We Still Condemned to Repeat it?" Berkeley, United States: University of California at Berkeley. Mimeographed document.
- Dooley, M. 1997. "A Model of Crisis in Emerging Markets." NBER Working Paper 6300. Cambridge, United States: National Bureau for Economic Research.
- Edwards, S. 1998. "Abolish the IMF." *Financial Times* (13 November).
- Eichenbaum, M., Burnside, C. and Rebelo, S. 1999. "What Caused the Recent Asian Currency Crisis?" in W.C. Hunter, G.G. Kaufman and T.H. Krueger, editors. *The Asian Financial Crisis: Origins, Implications and Solutions*. Boston: Kluwer Academic Publishers.
- Eichengreen B., 1999. "Toward a New International Financial Architecture." Washington, DC, United States: Institute for International Economics. Mimeographed document.
- Eichengreen, B., and Hausmann, R. 1999. "Exchange Rates and Financial Fragility." Paper presented at Federal Reserve Bank of Kansas City Conference, September.
- Eichengreen, B., Portes, R., Cornelli F. *et al.* 1995. "Crisis? What Crisis? Orderly Workouts for Sovereign Debtors." London, United Kingdom: Centre for Economic Policy Research, London.
- Feldstein, M. 1998. "Refocusing the IMF." *Foreign Affairs* 77 (2): 20-33.
- Feldstein, M., and C. Horioka. 1980. "Domestic Savings and International Capital Flows." *Economic Journal*. 90: 314–29.
- Fernández-Arias E., and Lombardo, D. 1998a. "Private Overborrowing in Undistorted Markets." Working Paper 369. Washington, DC, United States: Inter-American Development Bank, Research Department.
- . 1998b. "Market Discipline and Exuberant Foreign Borrowing." Paper presented at the symposium Banking, Financial Integration, and Macroeconomic Stability, Second Annual Conference of the Central Bank of Chile, September 1998.
- Fernández-Arias E., and Hausmann, R. 2000a. "Getting it Right: What to Reform in International Financial Markets." Development Centre Seminars, Global Finance from a Latin American Viewpoint. Washington, DC, United States and Paris, France: Inter-American Development Bank/OECD.

- . 2000b. "What's Wrong with International Financial Markets." Working Paper 429. Washington, DC, United States: Inter-American Development Bank, Research Department.
- Fernández-Arias, E. 1996. "Balance of Payments Rescue Packages: Can They Work?" Working Paper 333. Washington, DC, United States: Inter-American Development Bank, Research Department.
- Fernández-Arias E., Gavin, M. and Hausmann, R. 1998. "Preventing Crises and Contagion: The International Financial Institutions." Presented at the IDB Conference on Crisis and Contagion in Emerging Financial Markets. The New Policy Agenda. 7 October 1998.
- Fernández-Arias E. and Hausmann, R. 1999. "International Initiatives to Bring Stability to Financial Integration." Working Paper 402. Washington, DC, United States: Inter-American Development Bank, Research Department.
- Fernández-Arias, E., and Rigobón, R. 1998. "Financial Contagion in Emerging Markets." Working Paper, Inter-American Development Bank. Reprinted in E. Fernández-Arias and R. Hausmann, editors. *Wanted: World Financial Stability*. Washington, DC, United States: Inter-American Development Bank/Johns Hopkins University Press.
- Fischer, S. 1999. "On the Need for an International Lender of Last Resort." Washington, DC, United States: International Monetary Fund.
- Garten, J. 1998. "In This Economic Chaos, a Global Bank Can Help." *International Herald Tribune* (25 September).
- Government of France. 1998. "Facing International Instability: Twelve Proposals for a European Initiative." Paris: Government of France.
- Government of the United States. 1999. "Economic Report of the President." Washington, D.C. Government of the United States.
- Greenwald, B., Stiglitz, J.E. and Weiss, A. 1984. "Informational Imperfections in the Capital Market and Macroeconomic Fluctuations. *American Economic Review*. 74(2): 194-199.
- Group of Seven (G-7). 1998. "Declaration of G-7 Finance Ministers and Central Bank Governors." Washington, DC, United States: G-7.
- Group of 10 (G-10). 1996. "Resolving Sovereign Liquidity Crises." Washington, DC, United States: G-10.

- Group of 22 (G-22). 1998a. "Report of the Working Group on Transparency and Accountability." Washington, DC, United States: G-22.
- . 1998b. "Report of the Working Group on Strengthening Financial Systems." Washington, DC, United States: G-22.
- . 1998c. "Report of the Working Group on International Financial Crises." Washington, DC, United States: G-22.
- Group of 30 (G-30). 1997. *Global Institutions, National Supervision, and Systemic Risk*. Washington, DC, United States: G-30.
- Hausmann, R., Gavin, M., Pagés-Serra, C. and Stein, E. 1999. "Financial Turmoil and the Choice of Exchange Rate Regime." Working Paper 400. Washington, DC, United States: Inter-American Development Bank, Research Department.
- Hausmann, R. 1995. "On the Road to Deeper Integration with the North." *Crecimiento Económico*: 221-254.
- Inter-American Development Bank (IDB). 1996. *Economic and Social Progress 1996*. Washington, D.C.: IDB.
- . 1997. *Economic and Social Progress 1997*. Washington, DC, United States: IDB.
- . 1998. *Economic and Social Progress 1998*. Washington, DC: IDB.
- Jappelli, T., and M. Pagano. 1999. "Information Sharing in Credit Markets: International Evidence." Research Network Working Paper R-371. Washington, DC, United States: Inter-American Development Bank, Research Department.
- Kaufman, H. 1998a. "Preventing the Next Global Financial Crisis." *Washington Post* (28 January): A17.
- . 1998b. "Proposal for Improving the Structure of Financial Supervision and Regulation." Outline of remarks to Brookings Institution symposium, Limiting Moral Hazard in Financial Rescues, June 4, Washington, DC.
- Kenen, P. B., ed. 1998. *Should the IMF Pursue Capital Account Convertibility?* Essays in International Finance No. 207. Princeton, NJ, United States: Princeton University, Department of Economics, International Finance Section.
- Krueger, A. 1999. Panel Discussion at LACEA Conference, October 1999, Santiago, Chile.
- Krugman P. 1998. "What Happened in Asia." Cambridge, MA, United States: Massachusetts Institute of Technology. Unpublished paper.

- . 1999. Balance Sheet, the Transfer Problem, and Financial Crises. Paper presented at the IMF Conference in Celebration of the Contribution of Robert Flood, January 1999, Washington D.C.
- La Porta, R., and Lopez-de-Silanes, F. 1998. "Creditor Rights." Cambridge, MA, United States: Harvard University. Unpublished paper.
- Litan, R., *et al.* 1998. "Statement of the Shadow Financial Regulatory Committee on International Monetary Fund Assistance and International Crises." Statement No. 145. Washington, DC, United States: Shadow Financial Regulatory Committee.
- Meltzer, A. 1998. "Asian Problems and the IMF." Testimony prepared for the Joint Economic Committee, U.S. Congress, 24 February, Washington, DC.
- Mishkin, F. 1996. "Understanding Financial Crises: A Developing Country Perspective." In: M. Bruno and B. Pleskovic, editors. *Annual World Bank Conference on Development Economics 1996*. Washington, DC, United States: World Bank.
- Naciones Unidas. 1999. *Hacia una Nueva Arquitectura Financiera Internacional*. Washington, DC, United States: Naciones Unidas.
- Obstfeld, M. 1998. "The Global Capital Market: Benefactor of Menace?" *Journal of Economic Perspectives*. 12 (4): 9-30.
- Raffer, K. 1990. "Applying Chapter 9 Insolvency to International Debts: An Economically Efficient Solution with a Human Face." *World Development*. 18: 301-11.
- Rodrik, D. 1998. "Who Needs Capital Account Liberalization?" In: P.B. Kenen, editor. *Should the IMF Pursue Capital Account Convertibility?* Essays in International Finance No. 207. Princeton, NJ, United States: Princeton University, Department of Economics, International Finance Section.
- Rogoff, K. 1999. "International Institutions for Reducing Global Financial Instability." NBER Working Paper 7265. Cambridge, United States: National Bureau of Economic Research.
- Sachs, J. 1998a. "The IMF and the Asian Flu." *American Prospect*. 37: 16-21.
- . 1998b. "Global Capitalism: Making it Work." *The Economist* (12-18 September): 23-26.
- Soros, G. 1997. "Avoiding a Breakdown: Asia's Crisis Demands a Rethink of International Regulation." *Financial Times* (31 December):12.
- . 1998. *The Crisis of Global Capitalism*. New York: Public Affairs Press.

Stiglitz, J. 1998. "The Role of International Financial Institutions in the Current Global Economy." Washington, DC, United States: World Bank Group. Mimeographed document.

The Economist. 1999. "A Survey of Global Finance" (January 30).

Wall Street Journal. 1998a. "Mr. Rubin and Currency Stability." Unsigned editorial. July 1, 1998. A18.

Wall Street Journal. 1998b. "Sex, Lies, and the IMF." Unsigned editorial. 15 September 15. A22.