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# Global Finance from a Latin American Viewpoint

INTERNATIONAL DEVELOPMENT



OECD 

Edited by Ricardo Hausmann  
and Ulrich Hiemenz

INTER-AMERICAN



DEVELOPMENT BANK

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Development Centre Seminars

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*Edited by*

Ricardo Hausmann and Ulrich Hiemenz



INTER-AMERICAN DEVELOPMENT BANK  
DEVELOPMENT CENTRE OF THE ORGANISATION  
FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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Publié en français sous le titre :

MONDIALISATION FINANCIÈRE : LE POINT DE VUE DE L'AMÉRIQUE LATINE



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## Foreword

This publication was undertaken in the context of the International Forum on Latin American Perspectives, jointly organised by the Inter-American Development Bank and the OECD Development Centre. It forms part of the Centre's research programme on *Capital Flows, Financial Crises and Development*, and the Centre's External Co-operation activities. The Forum held its tenth meeting in Paris in November 1999. Contributions to that meeting are included in this volume.



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# Preface

Ten years ago, our institutions decided to create an effective platform for analysis and policy dialogue about issues of importance to both Latin America and the OECD area. The tenth joint International Forum on Latin American Perspectives was dedicated to the issue of improving the performance of the global financial system from the perspective of both parties.

No continent has been exempt from the fallout of the 1997 Asian financial crisis. Latin America was no exception, and the effects of the crisis highlighted weaknesses in the international financial architecture which may have restricted capital flows to and from the region, hurting both people and businesses. While volatility can be demonstrated in flows to Latin American countries, the root causes cannot be found only in inadequate national policies. There are also international causes, suggesting that while domestic reforms must be sustained, the international financial architecture is also in need of reform. A key question is how to get the balance right between capital-exporting and capital-importing countries.

The contributions to the Forum from Latin America and from European OECD Member countries reveal divergencies of views about the priorities for international reforms, but general agreement emerged about the need for continued concertation and policy dialogue. Bailing in the private sector and improving sovereign risk analysis are options that need to be further explored and refined, and will, no doubt, provide the theme of future meetings of the International Forum on Latin American Perspectives. Given the birth of the euro and popular interest in dollarisation, the discussion of exchange rate regimes appropriate to Latin America falls in the same category.

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January 2000



# Overview

*Helmut Reisen*

## **Introduction**

Global integration brings with it greater prosperity. If people feel excluded from or unfairly disadvantaged by reform, however, perceptions may be the opposite, especially in developing countries. In the wake of the emerging market crises of 1997-98, the new financial architecture should combine global unity with regional and national diversity. In his opening remarks, the new president of the OECD Development Centre mentioned the creation of the euro zone, as evidence of how difficult it is to combine unity with diversity, even among a fairly homogeneous set of mature democracies. The contributions to the Forum suggest that the analogy applies to what may be called post-crisis Latin American perceptions, insofar as there is an even greater diversity of views on what is to be done in the region than there are perceptions about the euro.

Part of the diversity in perceptions comes from the fact that in recent years an increasing amount of tax resources has been devoted to crisis resolution, not only through higher transfers to the international financial institutions, but also through loan-loss reserves by banks which lower their taxable profits. Bailing the private sector in to higher burden sharing should reduce the degree of moral hazard in global financial markets implied by public bail-outs. On the other hand, modifications to the global financial architecture might restrain private flows to the emerging markets. What are the consequences of current proposals on reforming the international financial system for developing countries? What are the effects of the proposals on the cost of private flows to emerging markets, particularly in Latin America, on their stability and on their magnitude?

Do current reforms of the global financial markets succeed in identifying and addressing major distortions to international capital flows between developed and developing countries, essentially, the moral hazard versus sovereign risk question. The Forum did not answer these questions. Nevertheless, a frank discussion shed light

on topics like: the bailing in of the private sector into crisis prevention and resolution, including under the Paris Club framework; the recently proposed revisions to the Basel Accord on bank capital requirements; and the appropriate exchange rate regime in Latin America. In the following three sections, an overview is provided, drawing on the contributions of all participants.

## **Distortions in Lending**

Participants felt the need to end the present uncertainties about the legal investment framework through burden sharing (including seniority claims) but the Tenth Forum was marked by a divergence of views between European and Latin American policy makers about where to set priorities in reforming global financial markets. The differences were found in analysing the predominant distortions in global financial markets. Europe views them as excessive risk taking by private market participants resulting from moral hazard created by the bail-outs in recent financial crises. Latin America finds them originating in sovereign risk that propagates sporadic panic among investors which contaminates emerging markets across the board. According to the European view, this results in global capital flows which are seen as too great, as far as short-term bank lending is concerned. From Latin America's viewpoint, however, there is too little global capital for developing countries, certainly by historical standards.

The integration of the emerging markets into global finance throughout the 1990s has gone along with a rise in the frequency, virulence and contagion of financial crises. Global financial integration has not worked as advertised. The initial promise was that good policies would be rewarded, and bad ones punished, by the financial markets. Yet, the shock waves of the Asian and Russian crises have been transmitted to Latin America, without proper differentiation of home-country policies, driving flows and growth to a standstill. The swings in private capital flows to the emerging markets over the 1990s have been enormous, often requiring sudden swings in absorption levels and balances of payments of up to 10 per cent of GDP. The volatility of flows has been mirrored by the volatility of emerging-market bond spreads over US Treasury bonds.

While we observe wild swings in the *absolute* levels of emerging-market bond valuations since Mexico's 1994-95 crisis, their *relative* levels have been remarkably stable across countries, suggesting that capital-flow volatility has market causes, not just national causes. Reform efforts aimed at the global financial architecture which arguably have been tilted towards strengthening financial and economic systems in the emerging markets, notably through global codes of conduct for bank supervision, data dissemination and corporate governance may therefore not be enough.

The volatility of capital supply to the emerging markets can in principle be explained by two distortions in lending, stemming respectively from moral hazard and from sovereign risk. According to the moral-hazard interpretation, past international

bail-outs and implicit guarantees due to currency pegs have encouraged excessive risk taking by private market participants. The interpretation is attractive to the treasuries of OECD governments that have been caught in rising quasi-fiscal cost of crisis resolution. The alternative view emphasises sovereign risk, that is the absence of a credible mechanism to enforce cross-border claims, and liquidity risk, as the absence of an international lender of last resort encourages global panics similar to bank runs in the domestic context. This view has appeal to emerging markets, as they are looking for a larger and stable flow of capital to further their development needs. Yet it would be simple-minded to identify the first view with Europe and the second with Latin America, or indeed with the OECD and non-OECD areas.

The discussion at the Forum stressed that, rather than the overall size of flows, their mix is decisive in balancing the severity of both distortions in each individual country or regional case. Just as some Asian countries have been seen to distort inflows towards the short-term through restricting foreign direct and portfolio equity investment inflows, prudential regulation in the developed countries has acted to tilt flows towards the short-term and to intensify contagion of emerging-market crises. Cross-border bank lending faces regulatory distortions through the 1988 Basel Accord, the capital adequacy regime imposing different risk weights by category of bank lending. For example, short-term bank credit to non-OECD banks carries a low 20 per cent risk weight, while the respective long-term credit is discouraged by a 100 per cent risk weight. Modern risk management systems, endorsed by industrial-country regulators, imply that market volatility in one country automatically generates an upward estimate of credit and market risk in any “correlated country”, triggering margin calls on leveraged investors and tightened credit lines. Risk control systems and prudential legislation require that institutional investors only hold investment-grade securities so that rating downgrades lead to immediate sell-offs.

Aside from the Basel Core Principles for Bank Supervision, there are other global codes of conduct, such as the IMF Data Dissemination Standards and the OECD Principles of Corporate Governance which attempt to increase transparency and decrease the misvaluation of assets due to lack of information.

The recently launched Financial Stability Forum closely examines the market behaviour of highly leveraged institutions, off-shore centres and short-term capital flows. It will make recommendations for the improvements of capital-flow statistics and prudential standards in both lending and borrowing countries aimed at stabilising financial markets.

Earlier Group of Ten recommendations for the resolution of sovereign liquidity crises are now being actively pursued. These include writing collective action clauses into bond contracts; IMF lending into arrears with private creditors; an IMF Contingent Credit Facility for pre-defined liquidity support; and the broadening of debt reduction by private creditors which the Paris Club requires before granting public concessions on debt principal and debt service payments.

## Policy Implications

In its attempt to correct distortions to global finance, the official community has so far focused on reducing moral hazard in international lending and, to a lesser degree, prudential distortions. The respective policy efforts aim at lowering excessive risk taking through reduced official support and enforced private burden sharing, while stabilising flows through raising the private cost of short-term risk capital. The regulatory challenges are complex and unprecedented. Reforms do not only meet resistance, as they involve a complex bargain on burden sharing between taxpayers, creditors and debtors, but they may also act to reduce financial integration between developed and developing markets and destabilise capital flows through lower liquidity and more pro-cyclical features. Recent changes in debt-reduction practices in the Paris Club (which unites official creditors) and new suggestions to revise the Basel Accord on bank capital adequacy are cases in point that were intensively discussed at the Tenth Forum.

### *Broadened Paris Club Comparability*

While the private creditors of Paris Club applicants have usually been commercial banks, the increasing importance of bond finance is forcing the Club to enlarge the comparability provision onto bonds. The Paris Club requires “comparable and equitable” treatment from the debtor country’s private creditors as a precondition for granting relief on official debt. Aside from Pakistan and Ukraine, Ecuador is a test case for Paris Club treatment. Because this is the first country to default on Brady bonds, it shows that comparable treatment of official and private creditors is hard to define when granting debt relief. Brady bonds result from restructured debt, a leftover from the 1980s debt crisis, and already imply major concessions on terms and principal by private creditors. Moreover, official Paris Club debt often reflects past export credits, driven by political considerations such as promoting exports in the creditor countries, reducing its comparability with private claims.

The Paris Club case sheds light on the larger issue of private sector involvement in crisis resolution. While the rising fiscal cost of public bail-outs has made it politically imperative in OECD countries to aim for higher private burden sharing, a simple across-the-board prescription for comparability will be counter-productive. Participants agreed that private-sector involvement should be guided by the following principles:

- a seniority principle is necessary to avoid private creditors having to re-enter burden sharing (fairness);
- burden sharing should be based on *ex ante* voluntary agreements between governments and private-sector participants rather than enforced *ex post* devices;
- any agreement should be guided by the principle that the debtor country will not find it harder to gain access to private foreign finance.

## ***Revisions to the Basel Accord***

The 1988 Basel Accord was seen as having distorted cross-border bank lending to emerging markets towards the short term in general and towards new OECD members in particular. The new framework now under discussion suggests substituting risk weights on minimum capital requirements based on external ratings for risk weights based on OECD membership, as opposed to non-membership. This is an improvement to the extent that risk weights will correspond more closely with creditworthiness of the borrowing entity and as the large jump in risk weights favouring short-term lending has been reduced.

The macroeconomic effects of the revised capital adequacy framework could be negative, however. Linking a rigid (8 per cent) ratio of bank capital to risk-weighted assets to external ratings which have been shown to lag markets and to contain pro-cyclical elements could intensify boom-bust cycles in emerging-market lending. If ratings intensified herd behaviour, they should only have a reduced, rather than a more important, role in prudential regulation. This hits emerging markets especially as they often cluster around the important divide between investment grade and “junk” status in sovereign ratings.

Banks’ internal risk assessment, by contrast, should be strengthened by placing the entire responsibility for asset allocation squarely on the banks themselves, not on external assessments that could be easily used as scapegoats if things go wrong.

## **Competing Agendas for Global Finance**

While the ongoing initiatives for a new financial architecture primarily seek to reduce moral hazard and regulatory distortions, many Latin American authorities are concerned about the impact of current reforms on the future size and liquidity of flows to the emerging markets. The concern is that the gains obtained in reducing volatility are obtained at a high price in terms of lower capital supply and, ultimately, growth. Research presented in this volume emphasises sovereign risk, liquidity crises and structural weaknesses in domestic capital markets as major culprits for the repeated emerging-market crises. This overview reflects the contributions and the discussion around the table, where divergence of perceptions was often more apparent than convergence of approaches.

## ***Official Financial Support***

Recent crisis episodes have been marked by liquidity crises; the rapid recovery of crisis victims, for example in Korea, underlines the prevalence of liquidity crises. Liquidity crises arise and are sustained in the international context, as there is no international lender of last resort who could credibly commit sufficient liquidity in

support of any country deemed fundamentally sound but illiquid. As there is little political support to create a powerful global lender of last resort, last-resort lending has been imitated by using existing international financial institutions, through facilities such as the IMF's Contingent Credit Line. Since the committed support is not certain, not immediate and hence not effective in warding off panic, it might be preferable to set country eligibility *ex ante* through predefined criteria (to include countries with sound fundamentals only) and to allow automatic withdrawal in case of liquidity crisis. In order to keep up resources and accountability, the lending of last-resort might be co-financed by the private sector.

Against this proposal, it was pointed out that the US Federal Reserve had played the lender-of-last-resort function quite effectively in 1998 and that co-ordinated action by the world's major central banks might add to that effectiveness in case of future needs. The discussion also centred on country eligibility. While a strong selection of emerging markets might overcome the current stigma of the Contingent Credit Line facility, any future change in eligibility might suffice to trigger the next crisis. It will also be difficult to insulate eligibility from political pressure and avoid cementing a two-class world of countries eligible and not eligible for last-resort lending.

### ***International Bankruptcy Court***

The creation of an international bankruptcy court along the lines of traditional domestic bankruptcy laws could avoid inefficient, lengthy and costly debt workouts. This would be a way to make cross-border debt contracts more flexible for countries that are signatories of the court.

Abuse by debtors could be minimised as sovereigns violating the decisions of the international court would forgo the protection against creditors' suits provided by the court. There was scepticism, however, about whether domestic bankruptcy legislation can ever be transposed into a cross-border context as non-performing sovereign debt will always be restructured. It was important to insulate the debt restructuring from policy makers' interference, in order to get quick results (as revealed by the Polish, Argentine and Mexican experiences).

### ***Monetary Arrangements***

Reforming the international monetary architecture may be a way to overcome emerging-market exposure to exogenous capital-flow volatility, large external shocks and their inability to borrow in domestic currency at long maturities. This exposure leads inevitably to the much-criticised maturity and currency mismatches that have been prominent in deepening the recent Asian crisis. Any devaluation is thus bound to exert heavy balance-sheet effects, just as would any attempt to prevent devaluation through raising interest rates. By contrast, industrialised countries developed long-term public debt markets before financial opening and floating; Latin America does



not have that choice anymore — the region is effectively open to capital flows. Floating in Latin America amplifies the domestic transmission of capital-market volatility by making both the exchange rate and the domestic short-term interest rate more volatile.

While floating rates are unattractive because of heavy balance-sheet effects, exchange rate pegs are difficult to implement, vulnerable to speculative attacks and costly to defend. A shared strong currency, along the lines of the European Monetary System, may be a way out of the dilemma. Drawing again on the opening remarks of Jorge Braga de Macedo, it may be said that the euro “did happen, in spite of the doomsayers, and European economies are coming along nicely. To adapt this case of successful co-operation to Latin America or to Asia might be seen as eurocentric”. He claimed that, “nobody in the room would be deterred by such a label as long as it promoted the broader objective of development which is in the name of both our institutions”.

While a shared Latin American (or Mercosur) currency would continue to suffer from the structural weaknesses discussed above, a monetary association based on the US dollar would not. Latin America is partly dollarised already, but full dollarisation is perceived to lower inflation, interest rates and currency mismatches as well as to strengthen domestic financial markets and foreign capital flows.

Moreover, an active fiscal policy capacity was a necessary prerequisite in order to deal with asymmetric shocks, for which dollarisation would not overcome original weakness in domestic capital markets when the underlying institutions were not in place. The euro zone, on the other hand, had been based on a lengthy preparation process to deal with fiscal control and stronger institutions, and remains difficult to manage. The African franc zone, while achieving price stability, has failed to deliver strong capital markets, private money inflows and growth as the fiscal and institutional requisites have not been in place.



**PART ONE**

**INTERNATIONAL FINANCIAL MARKETS  
AND LATIN AMERICA**



# What's Wrong with International Financial Markets?

*Eduardo Fernández-Arias and Ricardo Hausmann<sup>1</sup>*

Financial liberalisation and integration have not worked out as advertised and have generated disappointing results. They were supposed to set up a win-win situation: Capital would flow from capital-abundant, low-return, ageing industrial countries to capital-scarce, high-return, young emerging countries. Growth in receiving countries would accelerate, and both giver and receiver would be happier since everyone's diversification opportunities would be improved. As a bonus, emerging-market policy makers would be disciplined by losing access to a captive local financial market.

Instead, emerging markets have been rattled by financial turmoil, especially during the past two or three years. Depending on one's viewpoint as optimist or pessimist, financial integration and globalisation have either generated excessive volatility or run amok. In either event, political support for liberalising policies is harder to achieve, and the prospect of long-run growth has not compensated for these new headaches. While growth in Latin America has accelerated from 1 per cent per year in the 1980s to some 4 per cent in the 1990s, it has not reached the levels of the 1960s when capital flows were an order of magnitude smaller<sup>2</sup>. This perception is felt all the more strongly these days as Latin America is undergoing its worst growth year since the early 1980s, prompted by a sudden and large collapse in the volume of capital inflows. 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.

By contrast, industrial countries, and especially the G-7, view the increasing volume of financial rescue packages as a source of concern. Fearing that the current strategy to deal with financial turmoil may involve a self-fulfilling explosion of their quasi-fiscal liabilities to the International Financial Institutions, they have reacted with an agenda to scale back the magnitude of official support. As a result, reform of the international financial architecture has become a booming industry.

What's wrong with the world? There is no shortage of "solutions". Several reports have been, are being, and will be produced by multilateral organisations, think tanks, academics, and G- $n$  task forces, with  $n$  taking values between 7 and 33.

But the connection between proposed solutions and the problems that are important to solve is not as well developed. In fact, we would argue not only that the depth of the diagnosis is shallow but also that the implicit diagnosis underlying many of the most popular proposals is misleading.

This paper discusses different views about what is wrong with the world, or as an economist would say, the principal distortions that are present. The intent is to clarify the logic behind the proposals for reforming the international financial architecture and provide a means of assessing them. (The actual assessment is performed in the companion paper “Getting it Right: What to Reform in International Financial Markets”, p. 45 in this volume).

An overview suggests that these different views can be classified into three groups. The first identifies the main financial problem as an excess of capital flows due to moral hazard, which causes private returns to exceed social returns. This generates too much lending and distorts its allocation<sup>3</sup>. Proposed remedies involve limiting moral hazard whenever possible and, as a fallback when this is not possible, discouraging capital flows through sand-in-the-wheels policies. One can think of this cluster of viewpoints as “theories of too much”.

The second alternative cluster of views, which we label “theories of too little”, posits that the fundamental problem comes from distortions that limit the enforcement of cross-border contracts, which cause capital flows to be too small relative to certain desirable benchmarks. In turn, failures of enforcement lead to frequent crises. Theories under this heading would help explain a nagging puzzle in economic theory. The standard theory of international trade predicts that capital should move from capital-abundant to capital-scarce countries and tend to equalise capital-labour ratios. However, after decades of capital mobility, capital-labour ratio differentials remain enormous and there is scarcely any perceivable tendency toward equalisation. The volume of flows observed, e.g. 5 per cent of GDP in the recipient countries, appears small relative to what would be required to achieve equalisation in a reasonable time period. This puzzle has also appeared in a different context. Feldstein and Horioka (1980) found that investment is financed fundamentally by domestic savings in a manner inconsistent with the notion of an integrated world capital market.

Finally, the third class of theories emphasises the instability of financial market conditions available to emerging markets and the unreliability of external finance to support sustained development. These are “theories of too volatile”, which have rapidly developed as a way of explaining recent crises and financial contagion. According to this view, markets are prone to panic for no particular reason in such a way that economies with strong fundamentals are constantly subject to the risk of massive withdrawal of funds which, by bringing the economy to an unnecessary sudden stop, would self-validate a crisis outcome. Similarly, distortions in international financial markets may lead to financial contagion and the interruption of the supply of capital to creditworthy countries. In the extreme, international financial integration may entail the importation of too much instability to make it worthwhile.

The three classes of theories outlined above emphasise different distortions but are complementary in explaining crises. For example, theories of too volatile may be valid irrespective of whether capital flows are too much or too little. Similarly, theories of too much and theories of too little are not mutually exclusive because they do not start from the same benchmarks. The former point out distortions that make the volume of capital flows larger *than they would otherwise be*. The latter point to distortions that make them too small. Hence, each theory takes all other distortions as given.

One key question is what would the world be like in the absence of significant distortions. If that best of all worlds is one of smaller flows, restricting capital movements could be an effective shortcut. If, instead, it involves a radically larger flow of resources, then adopting policies that restrict the development of capital markets could be very inefficient. So the bottom line can be expected to depend on the relative importance of the various distortions. The emphasis on a particular set of theories in justifying policy proposals needs to match their relative relevance in the diagnosis of the problems of international financial markets in Latin America.

From a policy point of view, it is essential 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 such a setting, the reduction of one particular distortion may very well be counter-productive and a single-minded focus on one particular set of theories may be dangerously misleading. After all, the theory of second best clearly shows that when there is more than one distortion in the system the reduction of one is not necessarily welfare improving. Specifically, the fight against moral hazard may easily lead to an inferior situation.

This paper attempts to display a broad array of important distortions in the international financial markets of emerging economies. First, as explained above, the second best nature of the problem implies that a comprehensive diagnosis of the distortions is required in order to assess policies geared towards the alleviation of identified specific distortions. Second, this “zero-base” approach enables the detection of important policy areas that are not being addressed by current proposals on the table. In particular, this approach would allow reform proposals to tackle some of the permanent underlying impediments to financial integration that are generally taken as part of an immutable institutional framework. Recent financial crises and their associated intellectual crises among economists open the doors to ambitious new architectural plans to tackle some of the hard issues of external finance for development. If the new architectural design does not address the structural problems and lay new foundations, it will be no more than interior decoration.

In what follows, we review the theories of too much, the theories of too little, and the theories of too volatile. We then discuss their relevance in light of the evidence.

## Theories of Too Much

Theories of too much usually assume that moral hazard encourages excessive lending<sup>4</sup>. Some body is providing an implicit guarantee so that the parties to the transaction are not internalising all the risks. Too much lending and too much risk-taking occur. Resources are also misallocated because they are apportioned to risky projects without internalising the costs involved<sup>5</sup>. Eventually, the guarantee is called and a crisis emerges. The various scenarios differ in the source of the implicit guarantee.

### *Implicit Guarantees in the Domestic Banking System*

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 firms go bust when their clients are unable to make payments from deposits frozen in problem banking institutions. Counting on the protection provided by an inevitable government bailout, bankers may assume too much risk.

The lower a bank’s capital is, the more extreme its behaviour. If a bank is very highly capitalised, it will pay its losses with its equity. When the bank has no more capital, it will be tempted to adopt a strategy known as “gambling for redemption” in which depositors or the government will pay for any additional losses while the banker retains any upside potential for risky investments.

The standard solution to this problem is to impose, through regulation, a capital adequacy requirement and to check that it is being met. Since capital is the difference between many assets and many liabilities, proper valuation of each asset and liability is critical. Hence, accounting standards are also central to this strategy.

The cautionary tale of moral hazard in a national banking system can become international when domestic banks borrow abroad. Since financial liberalisation may exacerbate the problem, some would argue for restrictions on foreign borrowing by banks or for other forms of capital control until financial regulation and supervision is upgraded. We would argue that the principles of prudential regulation and supervision should be applied to international financial transactions, just as they apply to domestic intermediation. In particular, liquidity requirements may be imposed on the foreign borrowing of banks for the same reasons they are applied on domestic liabilities. This has become an increasingly common practice in the region.

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 favour short-term foreign debt, which falls due in the period in which the guarantee would be more credible.



## *Implicit International Guarantees*

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 do not materialise. Even if it is true that official rescue packages are quickly repaid, as it 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 DeLong (1999) terms).

Advocates of this explanation propose eliminating rescue packages from the arsenal of international financial institutions. This theory has received much currency, especially among economists (see Sachs, 1998; Eichenbaum *et al.*, 1999). Just as with nursery rhymes, its closure is reassuringly simplistic: The world would be a better place if not for these public sector interventions.

## **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 modelled. 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 crisis scenarios based on commitment problems both at the national and international level.

### *Commitment Problems at the National Level*

It is useful to start by focusing 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 people want to fulfil 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 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. In the simplest example, Mary lends John money to buy a house worth 100 quarks. The loan is for 80 quarks and the house is the collateral. So long as the value of the house

minus the judicial costs of repossession exceed 80 quarks, John will always be willing to repay, because he would lose more by not paying. The availability of assets with good titles and with liquid secondary markets that can act as collateral and the judicial costs of repossession are therefore important determinants of the ability of financial systems to address willingness-to-pay problems<sup>6</sup>. If the contract environment is not adequate and judicial enforcement is weak, borrowers may not want to repay, discouraging creditors from lending and leaving the credit market inefficiently small<sup>7</sup>.

When non-payment 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 co-operation of the different creditors, to remove management if creditors find it necessary, and to transfer the ownership of assets to creditors<sup>8</sup>.

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. This increases the social costs associated with bankruptcies and makes too-big-to-fail arguments relevant even for relatively small firms. This may prompt governments into providing rescue packages to the corporate sector, which has traditionally been the case in Latin America's public enterprises and as just happened in East Asia.

Bankruptcy law and the court system are important areas of domestic financial policy in which the region is still far from where it could be.

### *Sovereign Risk*

The previous enforcement problems affect both national and international investment. However, 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 non-payment. 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, nationalise assets, or otherwise interfere in the payment process if such action is perceived as increasing national welfare.

As a result, sovereign risk augments overall risk beyond the traditional commercial risk, and therefore, in the absence of financial enhancements, puts a floor to 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 non-repayment. 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.

The credit ceiling itself may be a source of crisis. First, the determinants of that credit ceiling might change, perhaps because of a deterioration in the country’s terms of trade, causing the current debt level to exceed the ceiling and triggering a sudden stop in new lending. Second, even if the credit ceiling does not move, it may be destabilising. As discussed in Fernandez-Arias and Lombardo (1998), an externality exists since the ceiling applies to the country as a whole but borrowing is decentralised. Every borrower will have incentives to get his or her loan before a neighbour does, prompting temporary over-borrowing followed by crisis.

Sovereign risk helps explain the experience of some economies that are fortunate “outliers” in the history of international capital flows. A first example is Puerto Rico, where capital flows averaged about 15 per cent of GDP between 1960 and 1994 and where payments to foreign capital account for 32 per cent of GDP (see Hausmann, 1996). These numbers are striking since crises have been touched off elsewhere long before capital flows reached these magnitudes. For example, in 1982 and again in 1994, crisis erupted in Mexico when the current account reached 7 to 8 per cent of GDP and when payments to foreign capital were less than 7 per cent of GDP. Puerto Rico’s peculiar political structure implies that it does not have a sovereign to restrict payments or suspend convertibility, thus eliminating sovereign risk. The other two exceptions are Australia and Ireland at the turn of the century.

Clearly, we are not proposing Puerto Rico as a political model. We are only using it to illustrate the magnitude of potential effects of sovereign risk on the volume of capital flows. These “outliers” in the history of capital flows all had peculiar political structures that significantly limited or eliminated sovereign risk. They also used the same currency of the country that constituted the principal source of capital, a point we shall return to below.

Notice that sovereign risk is a commitment problem. If the sovereign could somehow tie its hands and mandate future payments irrespective of future conditions (including a change in ruling party), 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.

From this point of view the, multilateral development banks such as the World Bank and the Inter-American Development Bank have something to offer. By charter, 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 stop lending in case of arrears, sovereigns have always repaid, giving these multilateral institutions their preferred creditor status. In a world where such binding devices are scarce, it may make sense for these institutions to expand the use of their technology for improving commitment, e.g. through guarantees.

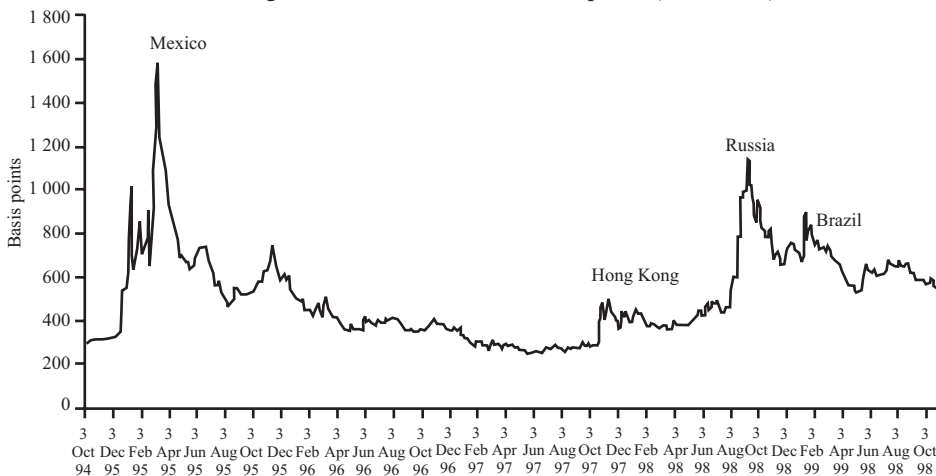
Thus far, private markets have tried to insulate themselves from sovereign risk with relatively rigid contracts lacking clauses that could be exploited to justify non-payment in legalistic ways. Yet a scheme like this tailored to a pure willingness-to-pay problem may make crises triggered by a reduction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

The current trend towards private sector involvement in financial crises, also known as burden sharing, is generally proposed as a way to limit moral hazard. However, to the degree to which it makes it easier or more acceptable for countries not to repay then it will aggravate sovereign risk and cause an inefficient reduction in the flow of capital across borders.

### Theories of Too Volatile

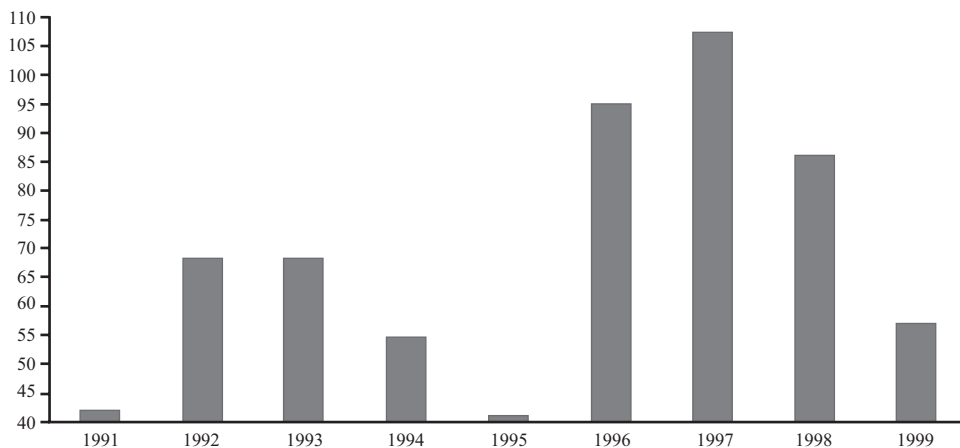
Financial terms and volumes of external financing are extremely volatile in our region. Figure 1 illustrates this volatility in terms of the average risk spreads of sovereign bonds in our region over the past five years. Spreads reached extremely high values after the Mexican and the Russian crises, enough to compensate a 50 per cent default rate, at which point countries lost access to credit. The counterpart of this price evolution is an extremely volatile evolution in the level of capital inflows to the region, illustrated in Figure 2.

Figure 1. Latin Eurobond Index Spread (1994–1999)



Source: J.P. Morgan.

Figure 2. **Private Capital Inflows**  
(Billions of dollars)



Source: IMF.

Markets did not predict either the Tequila or the East Asian crises. In fact, most of these economies appeared quite strong by conventional measures, certainly stronger than countries spared from crisis (see Calvo and Fernández-Arias, 1998). This surprise translated into a growing professional consensus that we were witnessing a new phenomenon, one in which there was ample room for the mood of expectations in the financial sphere to shape fundamentals and ultimately prevail<sup>9</sup>. International financial turmoil after the Russian crisis severely affecting Latin America, with which it has very little fundamental links, further reinforced the idea that the international financial system was too moody to be relied upon. Market panics, herd behaviour, financial contagion are some of the labels used to describe this new phenomenon in international financial markets.

In what follows we lay out some of the underlying theories behind market volatility. Nevertheless, it should be said from the outset that the anticipation of volatility, i.e. risk of financial turmoil, is in itself an explanation of why capital flows are too small. In this sense, the theories of too volatile can be regarded as a special chapter of the theories of too little.

### *Liquidity Crises*

The traditional example of a liquidity crisis 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*.

The traditional solution is to have a lender of last resort able and willing to provide liquidity on demand from fundamentally solvent banks victims of runs. In this connection, a central problem in the world may be that the globalisation of financial flows has overwhelmed the capacity of national central banks in emerging countries to credibly provide enough last-resort lending to prevent liquidity crises.

More generally, capital account imbalances, especially in the presence of high levels of debt, raise the spectre 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 (to be analysed below). 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. Countries may be thus 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.

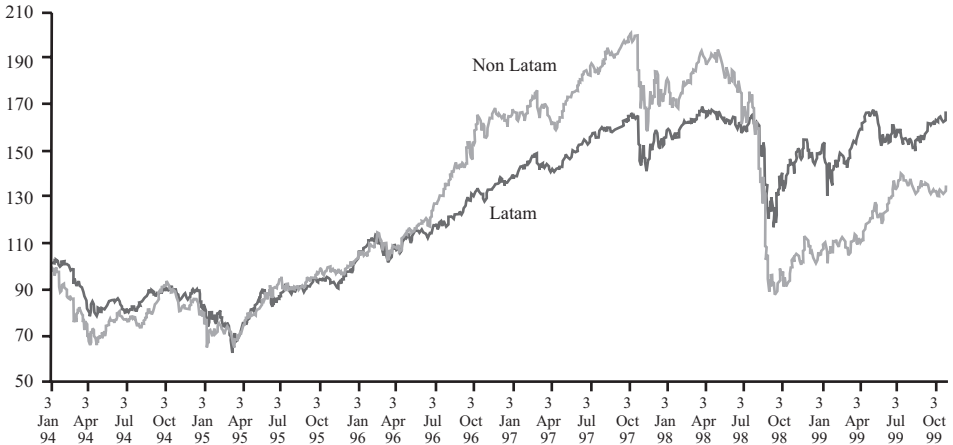
Furthermore, the pressure on the exchange rate caused by the capital account shock may lead to devaluation, further contributing to the deterioration of the economic segments with net foreign currency exposure. In fact, currency devaluation alone may generate multiple equilibria and a liquidity-like crisis (see for example Fernández-Arias and Lombardo (1998*b*), Chang and Velasco (1998), and Krugman (1999)).

Liquidity crises and solvency crises cannot be distinguished by their consequences: both manifest in crises. However, they differ in principle in two key respects. First, liquidity crises are not easily forecast because they arise from a movement to a bad equilibrium that is neither necessary nor inevitable. Second, liquidity crises are preventable with sufficient financing. Since in liquidity crises the financial interruption is not justified — with adequate financing the economy would be perfectly capable of servicing its debts — then these types of crises must be considered unnecessary and a major effort should be made to prevent them through the provision of finance. The same holds true for financial contagion. By contrast, additional funds injected into a solvency crisis would only postpone the moment of reckoning.

### ***International Financial Contagion***

There is a growing consensus that the main inter-country linkages underlying the high degree of correlation among international financial prices in emerging markets are not related to world market conditions, trade relations among them, or other traditional transmission mechanism, but rather to the fact that they share a common set of investment institutions making joint investment decisions (Fernández-Arias and Rigobón, 1998). This remarkable correlation is illustrated in Figure 3 for the evolution of bond prices in Latin America and other emerging markets over the past five years.

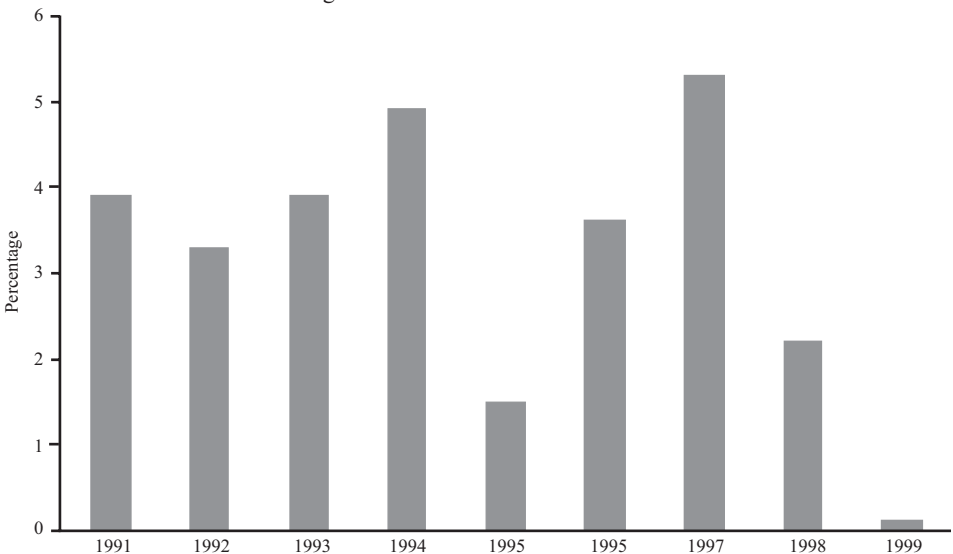
Figure 3. Bond Price Index (1994–99)



Source: J.P. Morgan Embi+ index.

This phenomenon, termed financial contagion, is especially worrisome at the time of large negative shocks triggered by exogenous events. The most notable example is the collapse of bond prices in Latin America following the Russian default of August 1998, a country with which our region has very limited economic ties. The corresponding jump in risk spreads and the drying up of external financing for an extended period of time denied the region the possibility of financing a series of temporary negative exogenous shocks to terms of trade and production. Foreign capital not only proved unreliable, but also actually imposed a severe liquidity squeeze relative to normal levels that led to the recession from which the region is recovering only now (Figure 4).

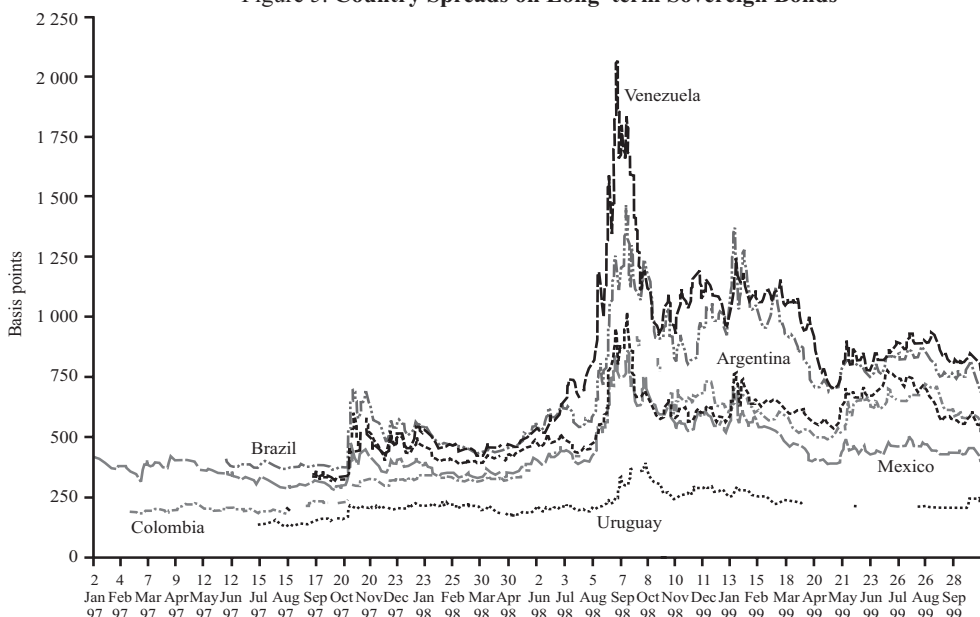
Figure 4. Latin America Annual Growth



Source: World Economic Outlook, IMF.

The possibility of financial contagion makes financial integration unreliable. 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 true that the market discriminates, in the sense that relative valuations in periods of contagion are consistent with the strength of fundamentals (as measured by prior market spreads; see Fernandez-Arias and Rigobón, 1998), which puts some of the volatility under the control of the policy maker. In fact, as shown in Figure 5, market relative valuations were preserved during the period. Furthermore, countries can try to prepare themselves to withstand contagion while it lasts. But, still, absolute valuations in countries with strong fundamentals suddenly collapsed in ways that constitute a worrisome puzzle.

Figure 5. Country Spreads on Long-term Sovereign Bonds



Source: Bloomberg.

One important explanation advanced 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 (fulfil 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-specialised buyers are less informed than specialised 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 specialising in non-investment grade paper. In this sense, financial



regulations in industrial countries, by prohibiting very large institutional investors from holding non-investment grade assets, may have caused the inefficient segmenting of the market and drastically reduced its liquidity.

It is useful to reflect on the fact that illiquidity is crucial for contagion. In this case the imbalance between sellers and buyers stems from the fact that there is a common shock affecting all specialised agents, which calls for liquidity support and/or regulatory forbearance to smooth the shock. More generally, the lack of liquidity of asset markets is usually a major contributing factor to liquidity crises. One important example is the market for asset collateral. If such markets are liquid, then in times of crisis a firm should be able to find someone willing to provide a collateralised (i.e. practically risk-free) loan. However, if the market for the asset is not liquid, then its use as collateral is severely limited. One important factor is the presence of large aggregate shocks to the economy, which by hitting most agents in a similar fashion tend to make the market unbalanced and hence illiquid. Agents are either all trying to buy or to sell, but since agents on both sides are needed to make a market, then very few transactions will take place and asset prices are likely to be very volatile, hence not very useful as collateral. In particular, falling asset prices during generalised downturns facilitate the occurrence of liquidity crises, by reducing the amount of collateral.

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 specialised, informed investors are capital-constrained. Over time, the pricing gap would be arbitrated as the constraints over our specialised 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. International policies of temporary support suggest themselves.

### *Original Sin*

Many of the problems discussed so far are related to or aggravated by a characteristic of almost all emerging market currencies: they cannot be used to borrow abroad and cannot be used even domestically to borrow long term. This fundamental incompleteness of the financial market is called “original sin” (Hausmann, 2000; Eichengreen and Hausmann, 1999).

From the point of view of this definition, all emerging market currencies suffer from original sin. Essentially, all foreign debt is denominated in foreign currency. With the partial exception of Chile, not a single country in Latin America has a liquid market for long-term bonds denominated in the domestic currency. Long-term debt to, the extent that it exists, is issued in dollars with the exception of Chile, the only country where there is a liquid long-term bond market in a price index.

These two characteristics are accompanied in many countries by a large de facto dollarisation of assets in the domestic banking system. In Argentina, Bolivia, Ecuador, Peru and Uruguay dollar liabilities account for well over half of the deposits of the banking system.

Original sin has important implications for financial fragility. It will cause investments to be financed either in dollars or short-term. If the funding is done in dollars, many projects 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.

Currency mismatches cannot be reduced, to any significant extent, through hedging in countries with original sin. This is so because external debt is in foreign currency, which in turn reflects foreigners' unwillingness to be long in the domestic currency. With imports more or less hedging exports nothing is left to hedge the net external debt. If hedging was possible, i.e. was a feasible market, international banks would offer peso loans and then hedge away their currency risk. After all, a peso loan is just a dollar loan plus a hedge. If hedging were possible we would see much more lending by major banks in local currency. The fact that this does not happen is an indication of the seriousness of this constraint.

This is important because it has been argued that floating exchange rates would reduce the incentives to leave unhedged foreign currency positions and thus limit the moral hazard in international borrowing. But if hedging is limited by original sin, then floating will reduce unhedged dollar borrowing by simply reducing dollar borrowings both domestically and internationally, leading to less investment and growth.

The currency and maturity mismatches interact through monetary policy, making the central bank's choices much riskier. When there is pressure on the exchange rate, the monetary authority may let the currency depreciate but this will cause serious balance sheet problems in those firms with currency mismatches. The reduction in net worth may limit their ability to pay both foreign and domestic obligations. Alternatively, the central bank may defend the exchange rate through non-sterilised intervention or by otherwise tightening monetary conditions, but this would make it difficult for those with maturity mismatches to roll over their short-term debt. Either way, the system may end up in a banking or currency crisis<sup>10</sup>.

This may be one reason why developing countries hold such high reserve levels in comparison to more developed countries. But avoiding this problem by holding sufficient reserves means essentially foregoing the importation of capital (in net terms). Similarly, restricting or taxing foreign investors that lend in foreign currency would amount to taxing capital inflows, reducing financial integration by increasing the domestic cost of capital<sup>11</sup>. This helps account for the puzzle of too little financing.

It is important in this context to ask what would happen to financial turmoil if countries were to abandon their weak domestic currencies in favour of a strong supranational currency<sup>12</sup>. One would expect the sudden elimination of significant currency and maturity mismatches throughout the balance sheets of households and firms in the economy to facilitate financial integration and lead to safer, deeper markets. As mentioned before, evidence supporting this hypothesis comes from the fact that capital flows were proportionally much higher prior to World War I than any time

afterwards. One explanation for this was the existence of a global currency system: the gold standard. Likewise, Panama, which uses the US dollar, has the deepest domestic credit market and is the only country in Latin America where the financial system offers 30-year mortgages and it does so at less than 9 per cent interest.

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. In anticipation of this risk, lenders would demand a higher rate of return, but this would trigger an adverse selection process as the only ones willing to pay such a premium would be those planning to devalue. Hence, the market could easily disappear. But then, why are some countries able to borrow abroad in their own currency?

One hypothesis is that the government would not be expected to let the currency depreciate if a broad cross-section of domestic residents holds much of the public debt. In that case, the median voter will be close to the median debt holder and it will not be politically expedient to devalue in order to dilute the real value of the domestic currency debt. If instead, much of the public debt is held by few voters, or even worse, by non-voting foreigners, then it will be hard for the government to establish credibility in its willingness to forego the benefits of devaluation. This means that original sin may have deep political economy causes that are unlikely to be reversed through pure and costly perseverance. A social security reform with the development of private pension funds may permit a better alignment of the interests of the median voter with those of foreign investors and thus give credibility to peso-denominated debt.

## **Confronting the 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/labour ratios, international flows across nations are way too small relative to flows within nations (Bayoumi and Rose, 1993, Bayoumi, 1997), which explains the strong correlation between domestic savings and investment first uncovered by Feldstein and Horioka (1980). This piece of evidence implies that theories of too much do not address the most important distortions present in the world. Hence, policy recommendations predicated on them, without reference to their impact on the other more important distortions cannot be presumed to be welfare-enhancing. 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 WWI, clearly shows that international flows can be much larger than today. In fact, the correlation between domestic savings and investment was much weaker in that period, on the order of 40 per cent relative to 80 per cent after WWII. Whether large flows were due to the international monetary arrangement or to limited sovereignty of the main borrowers relative to the major capital exporting centre is an open question. However, the case of Argentina, a country that received massive flows without having special political ties to the United Kingdom supports the view that the monetary arrangement was a critical ingredient.

As DeLong (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 favour of the type of flows more likely to be covered by guarantees, as Eichengreen and Hausmann (1999) point out. Borrowing by banks and government borrowing would appear at the top of the list. Also, the moral hazard involved in currency risk would justify these flows to be 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 (see Table 1). The pattern of lending to emerging markets by BIS-reporting banks is less short-term, less inter-bank and more non-bank than lending to other industrial countries. Hence, by the standards of developed countries, there is no evidence that BIS-reporting banks skew their flows to exploit moral hazard.

**Table 1. Structure of the Debt Owed to BIS Reporting Banks, 1998**  
(percentages)

	Banks	Gov't	Non-banks (percentages)	Short-term	Long-term
All Countries	35.34	14.34	49.51	52.43	47.57
Developed Country	39.60	13.83	46.30	54.19	45.81
Australia	41.72	7.18	50.86	55.03	44.97
Portugal	59.84	8.08	31.66	65.87	34.13
Eastern Europe	44.83	14.43	40.52	49.07	50.93
Czech Republic	53.87	6.09	39.82	56.15	43.85
Poland	35.79	22.78	41.23	42.92	57.08
Developing Countries	31.76	14.91	53.20	54.58	45.42
Latin America	23.71	20.13	55.90	55.22	44.78
Argentina	18.19	19.34	62.45	57.38	42.62
Brazil	31.34	17.48	51.01	63.12	36.88
Chile	15.08	7.06	77.38	45.51	54.49
Colombia	25.63	20.93	53.44	39.06	60.94
Mexico	18.64	29.22	52.04	44.81	55.19
Peru	34.23	5.51	60.26	77.31	22.69
Venezuela	10.27	40.77	48.89	39.81	60.19
Asia	37.00	9.04	53.90	53.03	46.97
Indonesia	13.69	15.65	70.66	54.07	45.93
Korea South	56.57	6.75	36.58	45.08	54.92
Malaysia	30.79	6.62	62.47	48.21	51.79
Philippines	45.05	12.61	42.31	56.39	43.61
Thailand	26.09	4.29	69.60	59.26	40.74
Hong Kong	53.70	0.72	45.01	75.23	24.77

Source: BIS Consolidated International Banking Statistics.

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.

Thus, 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).

Latin America, as a region, has made very significant progress in improving banking supervision and regulation<sup>13</sup>, especially after the Tequila crisis in 1995. During the past two years, Latin American banks withstood quite well a very adverse environment, given the Asian and Russian financial shocks, the decline in the terms of trade, and the effects of El Niño and of hurricanes Georges and Mitch. Domestic banks have been able to weather the storms without generating a banking crisis in any of the major economies of the region. Despite this performance, 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 puzzled analysts of all stripes. Surprise is perhaps the most striking feature of recent crises. A graphic way to view this is presented in Calvo and Fernandez-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.

Some crisis narratives attribute this lack of predictability to the fact that crises have come in a variety of flavours, each triggered by yet-to-be-discovered factors. In fact, many of these “flavours” have been quite novel. The Mexican Tequila crisis of 1994-95 came as a surprise because the key causal factor of the 1982 debt crisis — namely a high fiscal deficit — was not an issue. Eventually, many analysts came to blame a large current account deficit and low savings for Mexico’s crisis, but neither of these would play a role in the Asian crises that followed a few years later. Furthermore, the Asian crises would differ among themselves; for example, some

involved banking problems, others did not. None involved significant exchange rate misalignments and Korea had a very small current account deficit. Then the Russian episode changed the pattern of the kaleidoscope again, returning to a traditional script for a public debt crisis.

We are more persuaded by the argument 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. They are particularly likely in countries that suffer from original sin, as all the crisis countries did. 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 puzzling 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 notably so 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 of the international financial system that lie beyond policy reform in emerging countries.

We shall keep in mind some of these features when discussing the degree of relevance of different theories about “what is wrong in the world” and, consequently, how to fix it.

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. Some of the reasons may reside in the fact that in developing countries financial markets are incomplete and contracts hard to enforce. Experience suggests that such strategies are insufficient either to avoid enormous damage to the well-being of the countries involved or to prevent the contagion from spreading internationally. Crisis resolution based on official rescue packages is mired with difficulties. First, once a crisis breaks out, the economic fundamentals swiftly deteriorate, and contagion propagates, in ways that are not easy to reverse or repair. Second, the emergency nature of the situation produces support packages that tend to be uncertain. Moreover, the tranching and conditioned nature of the disbursements do not reverse the run by private sector creditors to the bad equilibrium. Third, for the same reason it is very difficult to implement effective private sector participation in a way that is not involuntary and counter-productive.

## What is Wrong?

The analysis just presented suggests that serious distortions are present in international financial markets. These are behind the fact that flows are on average small, relative to the difference in capital-labour ratios and demographic trends in the world. They are also behind their unusually high volatility and co-movement. 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.

The dominant view in industrial countries, as expressed among others in the Report of the Council on Foreign Relations and the G-7 Cologne communiqué is centred around concerns of moral hazard. Hence, it puts emphasis almost single-mindedly on measures to reduce moral hazard. Thus, it concentrates on policy initiatives such as better regulation and supervision of domestic banks to reduce moral hazard in banking; smaller rescue packages and more private sector involvement in them, to reduce the moral hazard caused by bail-outs; floating exchange rate regimes to reduce implicit exchange rate guarantees that foster unhedged foreign currency borrowing. But supervision is not a solution to problems of commitment in credit markets. The elimination of rescue packages is likely to aggravate liquidity crises. Floating regimes in the context of original sin are likely to reduce unhedged foreign currency borrowing by reducing borrowing, leading to less mobilisation of resources and less growth.

More broadly speaking, a single-minded focus on eliminating financial crises may well be achieved by eliminating finance altogether. A focus on eradicating surges in capital flows may lead to a dearth of capital mobility towards the developing world and foregoing the benefits of financial integration at a time when demographic trends would justify increased capital mobility. The challenge then is not just stability but stable growth and development.

## Notes

1. Eduardo Fernández-Arias is Lead Research Economist at the Inter-American Development Bank; Ricardo Hausmann is the Chief Economist of the Inter-American Development Bank.
2. Rodrik (1998) finds no relation between capital account liberalisation and growth.
3. Lack of transparency is often cited as a complementary distortion.

4. 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.
5. Dooley (1997), Krugman (1998), and Corsetti, Pesenti, and Roubini (1998) provide formal models of this intuition.
6. Notice that it is important for the collateral to have a liquid market. If it does not, the threat of repossession is unlikely to be credible. A banker will not want to repossess a widget-making machine from a borrower if not much can be redeemed for it. It's better to leave the asset with the borrower who can at least generate some cash flow out of it. We will study other effects of illiquid markets in the next section.
7. This problem is discussed in the domestic context in IDB (1998, Chapter 7). Japelli and Pagano (1998) present evidence on how the behaviour of institutions that affect willingness to pay has impacted credit markets for a selection of mainly Latin American and European countries.
8. 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.
9. In fact, the interpretation of the Tequila crisis as the manifestation of a bad equilibrium in a multiple equilibrium situation first advanced in Calvo (1995) found limited echo in the profession. The East Asian crises brought multiple equilibrium theories to the mainstream because most economists thought that traditional explanations did not suffice, including Paul Krugman who finally shared this viewpoint in Krugman, 1999.
10. This dilemma is at the root of the contradictory criticisms that IMF exchange rate policy advice in crisis countries has received, some for endorsing currency depreciation (e.g. *Wall Street Journal*, 1998, editorials) and some for defending the currency with high interest rates (e.g. Sachs, 1998).
11. This proposal has recently been advanced by Anne Krueger.
12. This issue is specifically addressed in another paper in this book "Exchange Rate Arrangements for the New Architecture", (Hausmann, 2000).
13. See IDB (1997) for a country-by-country assessment of how much progress has taken place and for an analysis of its contribution to growth in the region.



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# **The Paris Club and the Private Sector**

*Philippe de Fontaine Vive*

## **For Equitable Treatment of all Types of Private Creditors: the Paris Club's Experience**

The Paris Club was created in 1956 so that public creditors could find a common solution for Argentina's debt problem. Since then it has negotiated debt rescheduling agreements with developing countries. During these negotiations, the Paris Club has had to deal with other creditors, first banks, and then recently with new non-bank investors and new financial instruments.

This means that the issue of possible relative seniority of different types of creditors in the public and private sectors is not new. Since its inception, the Paris Club has taken a common-sense approach: "no type of debt should be considered to have a preferential status compared to other debt in a similar situation". This was reiterated by the G-7 Finance Ministers in September 1999. In no way is this a new principle: it is only a statement of common sense so that the market can operate efficiently:

"As long as private lenders feel that public institutions will come to their aid, the resulting moral hazard will induce them to take excessive risks. Only when the real risks are made clear ... will private creditors change their excessive risk-taking which contributes to the crises" (Lex, comment in the Financial Times, 20 September 1999).

## **The Paris Club and its Operating Principles**

For those of you unfamiliar with the Paris Club and how it functions, let us note briefly a few aspects:

- The Paris Club has been an informal international grouping of the 19 most important creditor nations for the developing world since 1954;

- It treats sovereign debt (or debt having a sovereign guarantee) owed to the 19 member states. The founding idea was to assure an orderly treatment of this debt;
- Despite its informality, the Paris Club is nonetheless based on principles which determine and explain its action:
  - 1) consensus, which means that the Paris Club makes no decision that is not approved by all participating creditor countries;
  - 2) solidarity, between creditors which means that no creditor seeks more favourable treatment from a debtor country than granted to other creditor countries of the Paris Club;
  - 3) conditionality, which implies that the Paris Club only deals with the debt of a debtor country if it has first adopted an economic adjustment programme with the International Monetary Fund; and finally
  - 4) comparable treatment.

### **Comparable Treatment, a Constant Principle in a Changing Environment**

The principle of comparable treatment means that debtor countries negotiating an agreement with the Paris Club undertake not to seek a deal on their debt from their other creditors more favourable to these creditors than that which was negotiated with the Paris Club. Thus the aid granted by the Paris Club will not replace aid the other creditors should provide and enable the latter to obtain payment on their credits by countries suffering from severe balance-of-payments constraints.

The principle of comparable treatment applies to all types of creditors, public or private, except of course multilateral creditors, who enjoy a privileged status which would not be in anyone's interest to call into question.

Of course, at the time when foreign financing of developing countries mainly came from public sources (either bilateral donors or international financial institutions) with limited flows of private capital from banks, the importance of comparable treatment as regards the private sector was limited. The development of banking activities has enlarged the principle's application but without ever calling into question the legitimacy of the Paris Club to request that banks meet in the framework of the London Club.

Since the beginning of the 1990s, the conditions of financing developing countries have changed with the increased access to capital markets in the context of lower interest rates in developed countries and increased liquidity of more remunerative (riskier) segments of debt. The volume of sovereign bond issues has thus risen from \$6 billion in 1992 to more than \$40 billion in 1997 and 1998. This rise in debt by market instruments is reflected today in a significant growth of maturities of bonded debt in coming years.

This new financing situation of developing countries inevitably has led to the principle of comparable treatment being applied to bonds. In this context, it should be understood that the Paris Club has not changed its approach to comparable treatment. What has changed is the situation in which comparable treatment is being implemented.

With the principle of comparable treatment, the Paris Club has contributed to recent efforts by the international community to improve the involvement of the private sector in preventing and in dealing with crises. As a major actor in the financing of emerging economies, the private sector should be involved in the prevention and resolution of crises. The principle of comparable treatment contributes to this objective by assuring equitable treatment of all creditors.

### **How the Paris Club Implements the Principle of Comparable Treatment**

The Paris Club takes a pragmatic and efficient approach, taking into account each individual situation with a case-by-case analysis of the economic and financial situation of each debtor country. In particular, this analysis takes into account:

- the level and structure of debt service;
- the debtor country's balance-of-payments constraints based on the dynamic analyses prepared by the International Monetary Fund;
- the extent and type of financial support provided by the international community.

In the case of Pakistan, an analysis of all these factors led the creditors of the Paris Club to ask the Pakistani authorities to seek comparable treatment from all their private creditors, including bondholders.

While there can be no doubt of the validity of the principle of comparable treatment implemented by creditors of the Paris Club, or of their desire to achieve effective results, the creditors of the Paris Club are certainly aware of the difficulties of restructuring bonds. We have never said that such restructuring would be easy. We know the difficulties involved in such restructuring, but we do not doubt that they can be overcome by common efforts and better education of private investors. It is in everyone's interest, and Pakistan's successful offer to exchange its bonded debt in December will lead to a rapid change in thinking on this subject. In this respect, we can only applaud the recent positive reactions of some international credit rating agencies after this success.

### **Progress is in our Common Interest**

The most common argument against any involvement of the private sector in preventing and especially for resolving crises is that such involvement will endanger future financial flows to the emerging economies.

Such an argument appears to contradict the lessons of economic and financial theory: economically, capital flows should invest where the marginal return is the best. That assumes, however, that the decision is based on a real analysis of risk and thus a real evaluation of the risk/yield ratio of a given investment. Lacking that, the allocation of resources by markets will be inefficient and, moreover, will encourage excessive lending, a source of crisis and increased volatility, allowing lenders to avoid the consequences of their decisions when the risk comes true.

The international community is seeking burden-sharing between donors and all creditors to assure a better allocation of resources, which could reduce the frequency and intensity of crises, and thus improve the conditions of growth and development. The principle of comparable treatment contributes to that objective. We do not deny that this objective has a price, but this price is also justified to some extent, if only because we all should one day deal with the consequences of our errors.

# Getting It Right: What to Reform in International Financial Markets

*Eduardo Fernandez-Arias and Ricardo Hausmann<sup>1</sup>*

Several reports on reforming the international financial architecture have been, are being, and will be produced by multilateral organisations, think tanks, individuals, and G-n task forces, with  $n$  taking values between 7 and 33<sup>2</sup>. The question is whether any of the initiatives will solve the important problems in international financial markets and be implemented before a temporary cease-fire on the financial battlefield is misinterpreted as the end of the war.

This paper provides an overview and assessment of reform initiatives, both those currently on the table and those that are not but we think should be. The intent is to clarify the logic behind these proposals and assess them from a Latin American perspective. Our discussion is based on the extent to which reform initiatives alleviate the problems we identified in the companion paper “What’s Wrong with International Financial Markets” (p. 19 in this volume). The overall conclusion is that the current approach to reforming the international financial architecture is not apt to the task and requires a paradigm shift.

An initiative may obtain a bad grade for many reasons. First, it may have a negligible impact on the workings of the international financial architecture, i.e. it fails to address a substantial problem. Second, it may have a significant impact on financial markets but narrowly fit the interests of capital-exporting countries, as opposed to the needs of emerging markets. In both cases, proposed reforms would miss a historic opportunity to shape international financial institutions to support economic development. Finally, and most importantly, proposals may be counter-productive from a developmental perspective.

We are concerned with the possibility that an initiative may have a negative developmental impact because nearly all of the proposals currently under active consideration or experimentation 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 terms of the clusters of distortions identified

in our companion paper, we are concerned that some alleviation of the distortions underlying the “theories of too much” may severely aggravate the distortions behind the “theories of too little” or “theories of too volatile”.

There is a good chance that our reservations about the initiatives currently being advanced in international fora owe more to our Latin American perspective than to purely technical differences in their assessment. Our assessment is based on the efficiency of the proposed reforms: the deeper the financial integration supporting high returns in capital-scarce emerging markets, the better. It is clear, however, that an efficient architecture entails financial support from developed countries from time to time when things go wrong. From this alternative perspective, it would make sense to prefer reforms that limit financial risks, even at the cost of efficiency. The current bias in favour of reforms that limit capital flows may be better interpreted in this way rather than on efficiency grounds.

In this paper, we analyse the degree to which the initiatives effectively address the distortions in each one of the three clusters of theories. In the case of conflicting effects across this three-way typology, we refine the ambiguous assessment that would follow by weighing the tradeoffs involved. This evaluation methodology demands the consideration of the relative importance of each type of distortion for the problem at hand, for which we use the conclusions of the above-mentioned companion paper.

A key advantage of this joint analysis across distortions is that it makes explicit what economists refer to as the second-best theorem: the elimination of any one specific distortion may fail to improve welfare in the presence of remaining distortions. In fact, 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. But we must remember that reducing any identified distortion is not necessarily good policy and that successfully alleviating a specific undesirable symptom is not necessarily the manifestation of a welfare improvement. This is always the case when there are multiple distortions.

For example, the objective of reducing the moral hazard induced by 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 counter-productive policies if the latter distortions are preponderant. Similarly, reducing the incidence of crises by impeding capital flows to a sufficient extent may be a counter-productive policy once the deleterious growth effects of lower capital integration are factored in.

In this paper, we concentrate on a number of core initiatives that characterise the main elements 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.



For each core initiative examined in this paper, both currently on the table and those that we propose for consideration, we first identify which of the main distortions identified in the companion paper it addresses. This correspondence between initiative and distortion provides a clear relationship between the problems diagnosed and the solutions reviewed. We then assess the initiatives by weighing the benefit concerning the distortion they are designed to alleviate and the possibly unintended effects concerning other distortions<sup>3</sup>.

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 is the need for lending of last resort at the international level. The cleanest case for such an initiative is that in which crises in emerging markets result from a sudden lack of liquidity, i.e. liquidity crises. Liquidity crises are usually addressed through the provision of last-resort lending. In fact, simply the existence of such a lender may be sufficient to prevent destructive runs and panics. 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 rationalised 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.

We have argued in Fernandez-Arias and Hausmann (1999) that liquidity crises have been prevalent in recent crisis episodes, which would explain the unpredictability of the collapse in fundamentals, a key problem to address for the future. From this point of view, a central problem in the world may be that the globalisation of financial flows in the context of original sin (i.e. the inability to borrow long term in a country’s own currency) has overwhelmed the capacity of national central banks in emerging countries to provide credibly enough last-resort lending to prevent liquidity crises. Therefore, to us international lending of last resort suggests itself.

What are the effects of this initiative on other distortions? Successful lending of last resort reduces private default risk, but this is not necessarily 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. Therefore, this initiative in the context of liquidity crises would be good all around.

If, on the contrary, a lending of last resort facility is available to insolvent countries, i.e. countries unable to pay even after all liquidity constraints are removed, then the crisis will not be avoided and the facility may incur losses. Moreover, critics who argue that the recent financial turmoil is not associated with liquidity crises think that the provision of last-resort lending would only serve to bail out private creditors, exacerbating moral hazard problems and thereby aggravating rather than resolving the situation.

It is worth keeping in mind this distinction between liquidity and solvency crises, which is key for the evaluation of this and other initiatives (for a formal analytical framework, see Fernandez-Arias, 1996). We begin by analysing the liquidity crisis case, which is the central case in our diagnosis, and then discuss the solvency crisis case.

### ***Lending of Last Resort***

Lending of last resort would be perfect in liquidity crises. The challenge then is to recreate the function of lending of last resort at an international level in the real world. The obvious move is to create a global lender of last resort or, more specifically, to reform the IMF so that it could better play this role. Making the IMF a global lender of last resort is an idea that was discussed at the time of the Bretton Woods conference in 1944. In spite of the eloquence of John Maynard Keynes, the American representatives were not willing to provide the institution with the ability to print money. After all, the world was adopting a dollar standard and the United States was not about to renounce sovereignty over the management of its own currency.

Since then the political-economy problems of providing a global lender of last resort have been insurmountable, but for other reasons. First, there is reticence to create a powerful global institution that may not be fully accountable. Second, there is the fear that taxpayers in industrial countries would be asked to pay for bailouts in emerging countries. These fears could probably be addressed through the right governance structure and the use of collateral to protect taxpayers from undue risk, although in the international context collateral always remains limited by sovereign risk. The idea has gained the support of Stanley Fischer (1999), the second in command at the IMF. However, as *The Economist* (1999) concluded in its recent review of global architectural initiatives, there is very little support for anything this ambitious at the global level. But we must remember that appetites may change as the costs of the alternatives become more obvious.

A second best is to mimic last-resort lending by using existing institutions. In the absence of a global lender of last resort, the IMF and the other International Financial Institutions (IFIs) face a daunting task in dealing with potential liquidity

crises<sup>4</sup>. Current rescue packages may not be adequate because, unlike last-resort lending, they are not committed *ex ante* but are negotiated after a crisis has occurred. In fact, to a large extent the debate has moved towards crisis prevention and lending of last resort because of the dissatisfaction with crisis resolution through rescue packages tried in recent crises. It is useful to recapitulate the reasons why rescue packages had problems in order to discuss the advantages of an alternative facility closer to the idea of last resort lending.

It is necessary to have financial support available before the crisis. Once a financial crisis erupts, experience shows that it quickly develops into a meltdown with enormous output losses. Reasons for this may reside in the incomplete financial markets and hard-to-enforce contracts in developing countries (see Calvo and Fernandez-Arias, 1998). For example, inadequate bankruptcy laws can lead to socially costly disruptions when activity is suspended until property rights are re-established. These distortions are intensified by the breakdown of “implicit” contracts across firms (inter-firm credit and supply/demand relations when there is asset specificity) and between employer and employees at times of crises.

Interestingly, this diagnosis implies that a financial crisis sets off a chain of destructive events that would not be undone if financing returned to its original level. Hence, even though the provision of emergency support would be beneficial, it would not restore the unbroken network of relations that the market requires. This pessimistic outlook may help explain the relative failure of the rescue packages for most of the crisis countries in recent years. Although these packages generally were very large, coming close to offsetting in size the initial negative financial shocks, they did not come close to erasing the devastating real impacts.

Part of the problem may be caused by the fact that support is tranching and conditioned on the achievement of some future changes. This makes support contingent on actions that investors may consider uncertain. This may explain why in the case of Mexico the ample commitment to provide liquidity did not in itself stop the run. In fact the support was fully disbursed and the private sector withdrew, thereby disrupting the specificity involved in credit relations and in private information.

This failure calls into question the traditional rescue package strategy. Experience with recent crises, from Mexico to East Asia, suggests that this strategy is insufficient to prevent enormous damage to the well-being of the countries involved or the contagion from spreading internationally.

The following principles for an alternative strategy mimic the classical principles of lending of last resort (Bagehot, 1873) in an international context within the institutional constraints (for details, see Fernandez-Arias, Gavin, and Hausmann, 1998). The first and governing principle is to strengthen mechanisms designed to prevent a liquidity crisis or lack of financing. To work, these programmes must be applied only when the economic fundamentals are sufficiently sound for there to be reasonable expectation that market confidence and access can be restored and held. This will also require that financial support be of sufficient critical mass to dampen or forestall a liquidity crunch capable of triggering a crisis.

Second, there must be certainty that the support provided — whether a guarantee, a loan, or a line of credit — will be available immediately when funds are needed. Otherwise the prevention capability of the facility is diluted. Access should be automatic, either on demand or on the basis of immediately verifiable criteria. Consequently, the conditionality applied in such operations must not impede timely disbursements; and disbursement conditions must be replaced by conditions of approval.

Third, these “conditions of approval” mean that support should be offered selectively to countries able to meet a series of preconditions. Importantly, this selectivity would translate into positive incentives for policy, an extra benefit of this facility. Their economic fundamentals and their economic policy commitments must be compatible with warding off a crisis and conform to prudential standards and efforts to reduce financial vulnerability. Regular review by the IMF will be needed to ensure compliance over time. If conditions are not met, a delayed exit mechanism must be implemented in order to ensure that it does not trigger a crisis. Such an exit strategy may involve the negotiation of a traditional support programme such as a stand-by programme or an extended financing facility (EFF).

Fourth, IFI support will be more effective if it is supplementary to market mechanisms and can be leveraged through the private sector. In other words, this initiative is designed to *bail in* the private sector<sup>5</sup>. To do so, official international co-operation is essential for achieving the necessary critical mass.

Finally, disbursed loans, including guarantees that have been called, should be relatively short-term and repayable early without penalty. They should carry sufficiently high interest rates to ensure they will be drawn upon only when there is a financing shortfall. On the other hand, the loans’ commitment fee, whether a guarantee or a line of credit, should be priced to reflect the financial cost of such commitment since low fees would provide further incentives not to draw down the loan unless a real need exists. These facilities should be designed as prudential planning tools: abstention from disbursement would be normal and should not be discouraged through artificially high commitment fees.

For concreteness, it is useful to compare the facility we just outlined with the contingent credit line (CCL) facility recently approved by the IMF, which Mr. Camdessus has described as a Copernican revolution in the IMF because it inverts the model from after-crisis support to crisis prevention. 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. Like in our proposal, 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.

One key problematic issue with the IMF version of the CCL facility is that from the point of view of a country, the committed support is not certain and its delivery may take time, either 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 IMF’s assessment of the situation. There

are also problems related to the transition into the new Copernican world as the current rules make ineligible those countries with active traditional programmes such as stand-by agreements with the IMF. We favour setting country eligibility criteria on the basis of preconditions and allowing automatic withdrawal.

Another important difference is that in the IMF's CCL there is no involvement of the private sector, while in our proposal the private sector would co-finance. The absence of the private sector means less resources and, perhaps more importantly, less accountability. In fact, co-financing with the private sector introduces market discipline through eligibility and pricing to ensure that the facility does not become a subsidy in disguise. (Broader implications of private sector involvement are discussed in the next section.)

Finally, it is important to implement this facility in a way that eligible countries are regarded as the strongest of the pack, rather than those seeking potential help for some good reason unknown to the market. Otherwise, even an objectively good facility may be in low demand, a problem reminiscent of the Groucho Marx joke about not wanting to belong to a club that would have yourself as a member. Whether expectations are positive or negative depend 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 a block (e.g. automatically extending the facility privilege as a matter of course), the 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 and deepen the inevitable crisis, diluting the market discipline that would otherwise be exerted when fundamentals turn riskier. Furthermore, it is important to consider the involvement of the private sector in order to arrive at an efficient plan of financial support; otherwise official support may end up being a bail-out of private creditors with little benefit to the country. The anticipation of such a bail-out would in turn create moral hazard. 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<sup>6</sup>. We discuss mechanisms to deal with this more traditional type of crisis in the following section, after reviewing the role of the private sector. Here, it is important to discuss whether the risk of applying last-resort lending to solvency crises is so large as to make this initiative undesirable to deal with liquidity crises.

There are three main reasons why the initiative for official lending of last resort to prevent liquidity crises as outlined above is resistant to the risk of application to situations of insolvency. First, our diagnosis indicates that in this era liquidity crises are prevalent and, therefore, the risk of wrong application is small. Therefore the extent of moral hazard generated by this facility is small and benefits would exceed

costs. Second, there are ways to discriminate between 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 conditions to qualify for the facility based on sound economic fundamentals play the role of screening out insolvency and picking a pool of countries in which the likelihood of crises being of solvency is quite small. These conditions, as well as the private sector participation in our proposal, serve to control moral hazard.

The third reason why official last-resort lending is desirable even if there is the risk of lending into insolvency is simply that the alternatives are worse. The realistic, and possibly best, alternative is some version of rescue packages. We already discussed their limitations and inefficiencies. While this lender-of-last-resort role may be risky for IFIs, responding to crises with rescue packages is a costly and ineffective alternative. The merits of preventive operations are best judged when weighed against this benchmark. Yet another initiative currently under experimentation is to make rescue packages conditional on the private sector sharing the burden in order to eliminate the moral hazard that would be created by unconditional support. In the next section, we discuss this initiative and propose an alternative approach to traditional solvency crises.

## **International Financial Contagion Facility**

Finally, the case of international financial contagion is also a key area for initiatives of official financial support. This case is similar to the case of liquidity crises of critical 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 concerned, the basic problem is not weak fundamentals but lack of financing, i.e. distorted risk spreads and lack of access to the market. Over time financial contagion weakens fundamentals and may end up as a real (solvency) crisis. 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 that are victims of international financial contagion to counteract the cumulative effect of the credit crunch and prevent a full-blown crisis<sup>7</sup>. Once again, the risk is of financing 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 phenomenon; non-systematic 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 Fernandez-Arias and

Rigobón, 1998). An official contagion facility should be ready to support countries meeting the eligibility conditions. Finally, participation of the private sector, discussed in the following section, would be a desirable feature.

### *Private Sector Involvement*

Thus far, private markets have tried to insulate themselves from sovereign risk with relatively rigid contracts lacking clauses that could be exploited to justify non-payment. Yet a solution tailored to a willingness-to-pay problem may make crises triggered by an ability-to-pay problem more difficult to manage and more costly. It usually makes debt workouts quite messy and unnecessarily extends the period during which countries are cut off from international financial markets, a second problem underlying the theories of too little. Hence, some authors have been proposing mechanisms to make such workouts more orderly without worsening the sovereign risk problem or requiring the use of new public resources to take previously exposed creditors off the hook (see Eichengreen and Portes, 1997; Eichengreen, 1999).

If flexible contingent contracts are best, why is it that we seldom see them in the marketplace? One answer to this question is that their virtue is not fully internalised at the individual level, with the implication that a specific contingent contract offered would be too expensive for the borrower to accept. In a situation in which sovereign risk imposes an aggregate cap to payments to creditors, flexibility in one contract would shift payments to other contracts without contributing to flexibility in the aggregate. Whatever the reason for the market failure, it appears clear that any reform on this front will have to provide for very tight co-ordination among creditors. The mechanism for collective action is likely to be fundamental in any initiative involving private sector involvement.

In this section we review three classes of initiatives. The first class involves making private debt contracts more flexible, by changing the economic structure of the contracts to make them contingent or by softening the provisions relevant for renegotiation. The second class involves the international implementation of the function of a bankruptcy court, to which every private contract would be subject. Finally, we review a third class of initiatives in which the official and the private sector would share financial support.

#### *More Flexibility in Private Debt Contracts*

There are two main types of proposals involving the incorporation of contractual provisions in private debt contracts. One proposal would include an option in favour of the debtor to reschedule payments at a premium (for example, as explained by Buiter and Sybert, 1999). The other proposal would include collective action clauses and other loan restructuring provisions in debt contracts that would facilitate renegotiation with bondholders (for example, as explained in Eichengreen, 1999, for bond contracts).

In both cases, debt restructuring is achieved bilaterally between debtor and creditors, without the official sector intervening in any way. In the first case, the debtor obtains financing within the provisions of the contract (as opposed to a bankruptcy law or other higher order framework). In the second case, flexibility is achieved with collective loan restructuring provisions that facilitate contract renegotiation (once again without the interference of the official sector), such as majority voting, as opposed to unanimity, and sharing clauses, as opposed to collective representation.

The basic argument behind these proposals is that debt contracts are too rigid and make countries prone to crises: the creditors' right not to roll over debt leads either to very inefficient adjustments or, frequently, contract breaching with uncertain consequences. Flexible contracts in which creditors can be forced to roll over debt under conditions in which they would otherwise not like to provide financing, as in the first type of proposal, can alleviate the costs of adjustment and, in the event of a potential liquidity crisis, prevent the problem altogether. Even if contracts are rigid, easy renegotiation as in the second proposal (flexible implicit contracts) can achieve a similar payment outcome and, if so, achieve the same objective. This point is particularly important for bonds, whose typical contract does not limit the suing rights of individual (or small sets of) bondholders and, consequently, leads to rigidity (either full payment or full default). The increasing importance of securitisation in the 1990s has brought this concern to the forefront.

Not surprisingly, the best case for making private debt contracts more flexible is that of a liquidity crisis: the liquidity ensured by flexibility reduces or eliminates the potential for such a crisis and, therefore, has advantages both *ex post* and *ex ante*. The problem arises when the crisis is not of liquidity and flexibility simply means that creditors forego payments. The main concern is that flexible payments (either in the explicit contract or through renegotiation) may result in lower average payments, exacerbating the sovereign risk distortion, in which case the flexibility proposals entail an *ex ante* financial cost that may more than offset the *ex post* advantage of flexibility. In particular, a key issue is the extent to which flexibility will be subject to abuse by the debtor and used to the creditor's disadvantage.

The premium for exercising the rollover option in the recent proposal by Buiters and Sybert is meant to control for opportunism, but it clearly has limited value because it would only screen marginally bad risks: those who do not plan to pay will not be discouraged by a premium. Easier renegotiation appears to have an ambiguous effect on expected payments: on the one hand, it may avoid complete default because it solves the collective action problem preventing a settlement for a partial payment, but on the other hand it allows the debtor to pay less than full payment by exercising the bargaining power granted by the new provisions. The balance is not clear: *ex post*, it is better to have flexibility; but lack of flexibility may provide better terms *ex ante*. This may become a serious problem if there is room to opportunistically manipulate flexibility *ex post*.



The pro-renegotiation proposal makes bonds similar to loans. It is interesting how conventional wisdom is changing in this regard. It was once widely believed that too much flexibility to renegotiate bank debt during the 1980s debt crisis had spawned endless renegotiations. Now, in the face of a different kind of crisis, many analysts favour the reintroduction of flexibility.

The above favourable arguments assume that all debt contracts are modified somehow exogenously. In practice, there are serious implementation issues to coordinate the collective actions of creditors. First, if only one set of contracts is modified, then it would become a second class of instruments, encumbered by options or right limitations without any specific redeeming benefit<sup>8</sup>. In particular, if only future contracts are treated, that would amount to adding adverse conditions to new financing, at least during a transition period. This comprehensiveness requirement extends to all classes of contracts because otherwise those exempted would ride free and drive flexible instruments out of the market, rendering the initiative ineffective; for example, if only loans were modified, bonds would be at a relative advantage and would tend to dominate the market. Second, there are difficulties with each emerging country unilaterally redesigning its contracts along these lines. Just as a prenuptial agreement would, a unilateral change might be interpreted negatively as a signal of lack of commitment. A more collective approach would provide governments and fiancées alike with cover about their honourable intentions. This would call for an international agreement on loan restructuring provisions.

So the bottom line is that we find these initiatives interesting in their attempt to make workouts more efficient, but have serious doubts about their potential. First, even under ideal implementation, they are risky propositions because they may aggravate the sovereign risk distortion. Second, the collective action problems that need to be solved for their successful implementation, especially the comprehensiveness of treatment across instruments, appear quite severe<sup>9</sup>.

### *International Bankruptcy Court*

Another proposal is to create an international bankruptcy court, which would be modelled on the equivalent domestic institution. This court would authorise sovereigns not to repay or to prevent domestic borrowers from repaying when the country is deemed unable, rather than simply unwilling, to pay. This decision would stop legal action against the borrower in member countries, thus reducing the transaction costs and creating a real difference between unilateral sovereign action and an independent court decision. By transferring the power to authorise non-payment 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 it would forego the protection against suits provided by the court. More importantly, it would allow those willing but eventually unable to repay to commit themselves 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.

One question about this initiative is whether it is possible to gather sufficient political support from sovereigns to effectively empower the court. It is clear that, unlike a domestic bankruptcy court, the international version would not be able to replace management. It has also been argued that, realistically speaking, such a court would not be able to go beyond imposing a stay on payments, which the sovereigns can already achieve by simply not paying. Nevertheless, unilateral default carries penalties of many kinds, explicit and implicit, private and official, as well as costly negotiations, which a legally binding stay on payments would eliminate.

To some extent, this proposal duplicates some of the functions the International Monetary Fund already performs. When a country gets in trouble, the IMF determines the amount of adjustment that is feasible or reasonable, calculates a financing gap, and co-ordinates with official creditors and commercial banks a financial plan to make the programme consistent. By deciding how much the country can pay, it differentiates between ability and willingness to pay, thus solving the problem in a way similar to a bankruptcy court. However, there is a key difference in that rulings by the court would have a legal bearing on creditors’ claims, who would not be able to press for payment if the country is under bankruptcy protection. Like in domestic bankruptcy, the legal protection should have a major impact on the efficiency of the workout.

Like more flexible debt contracts, this initiative addresses the problem of inefficient workouts, in this case by imposing order along the lines of traditional bankruptcy law, and would automatically address liquidity crises. All cross-border contracts, no matter how rigid, in countries that are signatories of the international bankruptcy court would implicitly become more flexible. Importantly, this initiative goes a long way towards solving the two main difficulties we saw in the previous class of initiatives. First, the comprehensiveness across instruments that is required is naturally achieved by the court’s jurisdiction over all cross-border obligations, rather than constructed transaction by transaction. Second, it also provides a natural solution for the collective action of countries seeking to benefit from the initiative. Therefore, we support this initiative and favour it over the previous class of initiatives.

### *Official-Private Co-ordination*

The initiatives reviewed above are not mutually exclusive, and would in fact work better in combination. For example, it would be a good idea to implement official support through lending of last resort and an international contagion facility with an international bankruptcy court in place. Still, the question arises whether there should be more active co-ordination or interaction between the official and the private sectors, or in other words, how should the official sector promote private

sector involvement (PSI). In this section, we first review some constructive means of facilitating PSI through voluntary means and then discuss compulsory PSI, in which official support is made conditional on private burden sharing.

In the previous section we mentioned two instances in which voluntary PSI was useful to leverage official support. First, we noted that official lending of last resort would be more effective if it were co-financed by the private sector and that the failure to address PSI in the Fund's CCL was a weakness. Private involvement in official last-resort lending would be important to ensure achieving critical mass to prevent crises and also to ensure accountability through pricing and private sector eligibility. These arrangements with the private sector have to be conducted in normal times when there is a private interest to provide this kind of insurance to countries, and should be high on the agenda once market conditions return to normal<sup>10</sup>.

Second, PSI in an official international financial contagion facility would also be quite useful in arriving at the kind of sums needed to support countries effectively. 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 enough to spark private interest to resume lending, in such a way that leverage is maximised. For example, official enhancements may take the form of partial guarantees of private credits, in such a way that the risk mix becomes acceptable to private lending<sup>11</sup>.

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, IFIs 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 stop lending in case of arrears, sovereigns have always repaid, 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.

Therefore, we strongly support voluntary PSI in the context of official support facilities, both arranged at normal times at market terms and arranged at emergency times with financial enhancements. However, we think that compulsory PSI, which appears to be the basis of a new doctrine on official sector policy, can very easily become counter-productive unless it is done in a manner more like a bankruptcy process or a Brady plan. In the rest of the section we review this case.

For reasons that we argue below, compulsory PSI is likely to be very costly and should only be considered in the extreme cases in which domestic adjustment and official international support are deemed insufficient to re-establish confidence. If confidence is not re-established then the official money will be quite unproductive

since the private sector would exploit the opportunity to bail out of the country. But compulsory PSI should not be used as a way to teach a lesson to the private sector and thus reduce moral hazard because it is likely to have very large social costs. Moreover, the number of cases that would qualify is not independent of the supply of official funding. 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.

Nonetheless, there are at least two distinct reasons why the traditional approach would not work. One involves a remaining liquidity problem, the other concerns solvency. The liquidity problem can arise because even if the domestic adjustment and the official support are sufficient to re-establish solvency, the private sector may face a multiple equilibria situation in which the decision to stay or leave depends on what each investor thinks others might do. To ease this problem, the IMF has recently used “moral suasion” or cajoling (e.g. veiled pressure on banks to refinance or maintain credit lines in Korea and Brazil) as a co-ordinating device.

When the concern is over solvency and the traditional approach is perceived as inadequate because the country is unable to sustain its current debt level, additional money *per se* is unlikely to re-establish confidence. In this case, debt reduction may need to be 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).

Obviously, in a crisis any financial room for manoeuvre is very valuable. However, the disastrous experience of Ecuador should teach us some important lessons about the perils involved. First, the official international sector should not lose sight of its fundamental co-ordinating role during crises. To request private sector involvement prior to commitment by the official sector puts the cart before the horse. It demands the private sector to participate in a programme that does not yet exist, 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 providing additional resources to generate the enhancements that allowed for debt reduction by the latter.

If compulsory burden sharing becomes part of the “implicit contract,” it will have an effect on the cost of capital. This need not be a bad trade-off if the conditions for burden sharing are clear and not subject to abuse; in that case, they would define a standard of “excusable default” that would ensure flexibility when needed. An international bankruptcy court would fit this characterisation. In that case, when there

is insolvency PSI would kick in according to international law, co-ordinated and supplemented by official support<sup>12</sup>. The efficiency of this workout mechanism is likely to lead to lower financial costs, rather than higher.

However, the case-by-case, secretive approach with weak co-ordination that has been followed so far makes this proposition doubtful. In this case financial costs will increase. Perhaps more importantly, if compulsory PSI is used for anything other than extreme cases, it will end up being destabilising and worsening the situation. 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 re-establish confidence. Under compulsory PSI, the private sector would take such an announcement as one reason to try to get out of the country before a stay or a debt reduction is forced upon them. This would aggravate the situation and provide less liquidity and opportunity to get the needed adjustments done in time. Under these conditions, governments will be less willing to call on the IMF for assistance.

In sum, compulsory private burden sharing should be a very exceptional situation. It should only be used for cases in which the level of debt is unsustainable. But the current effort to try to use it to teach a lesson to the private sector is quite unhelpful. After all, if Ecuador has become insolvent again, in spite of the analyses that led to its last debt reduction during its Brady plan of 1994, it is not because of moral hazard. Instead, it is due to a sequence of massive real shocks such as El Niño, the decline in oil and other commodity prices and the volatility of international capital flows. Under these conditions, it became impossible to reach domestic political consensus before substantial additional damage was done to the fundamentals.

Hence, to use compulsory private sector involvement as a way to limit moral hazard is the wrong approach. Instead, more forceful and faster official intervention and a clearer officially sponsored private debt reduction is critical. The world cannot afford another case of a country that is forced to default on the private sector as one more condition to reach an IMF agreement and then is left to linger on without any official support.

More generally, making official involvement conditional on PSI implies that official support is not provided or, in the best case, that it is delayed. It is necessary to recognise that this conditionality entails a very substantial foregone benefit, and therefore a very substantial cost to these moral hazard-based initiatives. If applied to cases other than those of true insolvency the results would be disastrous. Given the prevalence of liquidity crises and financial contagion, the availability of official support is likely to be quite beneficial despite moral hazard. Moreover, the difficulty in stopping a crisis once it started, argues in favour of speed, not of convoluted, slow co-ordination with hundreds of anonymous bondholders. Even if support is finally provided, a delay in the provision of official support greatly complicates crisis prevention. Furthermore, delay is quite detrimental even in the context of a non-preventive, rescue strategy.

The conclusion is that the broad application of these initiatives as the basis for official intervention would have serious adverse side effects on financial integration and market volatility. Furthermore, in our view the importance of moral hazard is grossly exaggerated relative to other distortions in the international financial markets that emerging countries face. Most of the workout co-ordination can be obtained by other means without risking delays. Therefore, we do not favour initiatives based on the doctrine of (compulsory) PSI to control moral hazard and consider it as a last resource in exceptional cases.

## **Financial Institutional Framework**

In this section we review initiatives that address the institutional framework in which capital flows take place. They include the financial standards and regulations in financial systems, both national and international. We also address the issue of monetary and currency arrangements in emerging countries, a key area within international financial architecture which thus far has received surprisingly little attention.

### *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. It is interesting to note that the emphasis on the kind of fixing that has to be done directly depends on which class of distortions is deemed to be more substantial.

Those who think that moral hazard is the main problem emphasise 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. Basel 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 during the recent financial turmoil and the deep 1998-99 recession. In fact, most Latin American countries have capital adequacy requirements that are above the Basel standards and supervisory systems have been thoroughly reformed. While this has made banks stronger, it has not led to 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.

There is also the question of how to measure risk to determine Basel weights in industrial countries for cross-border lending. One idea that has been floated is to use the ratings of credit rating agencies for this purpose. As proposed at present, the new initiative would increase the cost of capital for all Latin American countries except

Chile. This in itself would aggravate the dearth of capital flows to emerging markets and increase the distortions associated with sovereign risk. Moreover, to the extent that ratings follow market developments, it appears that this method will introduce further instability in the market and may, in the extreme, cause self-fulfilling panic crises. This idea appears ill-conceived.

The initiatives inspired by the theories of too little focus on how to improve the commitment to repay, including issues such as a clear definition of property rights, the legal ability to attach collateral, the efficiency of the judicial system in enforcing contracts, the efficiency of domestic bankruptcy law, and the existence of credible credit bureaus. We believe that these areas are not receiving all the attention they deserve. They all would lead to more finance and growth and impose no trade-offs.

By contrast, new initiatives to reduce mismatches through regulatory schemes involve a more serious trade-off between growth and stability. The crises in East Asia increased the magnitude of currency and maturity mismatches so that the system became much more visible and hence raises new regulatory concerns. Some have argued in favour of stricter regulation of these mismatches. Others (Krueger, 1999) have proposed taxing foreign currency borrowing. Our main concern is that these mismatches are the consequence of “original sin”, i.e. of the inability to borrow abroad in domestic currency and the inability to borrow long term, even domestically in domestic currency. If mismatches are restricted without solving the original sin problem, it will lead to a drastic reduction of financial intermediation, both domestic and cross-border. We view this as justifying a different approach to currency arrangements.

Finally, those who focus on the theories of too volatile emphasise initiatives that protect the financial systems against sudden changes in market sentiment. One class of initiatives is aimed at strengthening the liquidity of the banking system by setting high liquidity requirements. 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. Hence, high liquidity requirements must be seen as a second best, given the presence of some other distortion that is much more prevalent in emerging markets. We believe that two problems are involved here. The first one is original sin, which makes currency and maturity mismatches take on a more important role, while it limits the ability of the central bank to use fiat money to backstop the system (given the presence of net dollar liabilities). The second is the general illiquidity in asset markets which severely limits the universe of assets which can be used as sources of secondary liquidity.

In our view, high liquidity requirements for the banking system are useful, but it is important to allow these liquidity reserves to be remunerated in order to minimise the increase in the cost of capital and the reduction in financial intermediation.

The other side of the coin of high liquidity requirements for banks 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 keeping high reserves and discouraging short-term debt make sense. At the same time,

these policies have the drawback of imposing higher capital costs and reducing the domestic absorption of foreign savings. We must recognise that present reserve levels relative to M2 are about 10 times higher 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 world conditions 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 recognise that these kinds of prudential policies are second best. For example, Australia's international reserves are about 5 per cent of M2, but they average over 35 per cent of M2 in Latin America. Also, the short-term debt of Australia represents 50 per cent of total foreign debt and is about five times the level of international reserves, while in Latin America reserves cover 107 per cent of short-term debt. Clearly, Latin Americans are concerned about avoiding situations that do not seem to arise in Australia. One explanation is that Australia does not suffer from original sin and hence can borrow abroad in its own currency. This means that the central bank can act as lender of last resort because it can provide liquidity through fiat money to reach a critical mass of the foreign debt, and it does not need international reserves to do this. Hence, liquidity problems may be closely related to currencies that suffer from original sin. Interestingly, the country in Latin America with by far the lowest level of international reserves is Panama, the only dollarised country. Here it is interesting to note that the banking system does not fear periods of illiquidity in spite of the absence of a central bank. Its integration in the international system and the absence of original sin does away with the liquidity problem, even in a country that has a relatively low credit rating.

In this sense, the mechanisms of international last-resort lending or a contagion facility can be viewed as another and superior way of addressing issues of liquidity since they involve, not self-insurance, but actual insurance.

The question of how to implement financial standards and regulations in emerging countries is open to debate. Specifically, if recommended standards and regulations are not adopted by countries once advised to do so, how far should international organisations go in encouraging their implementation and enforcement? For example, it has been proposed that IMF and other IFIs include the compliance with standards in their conditionality, in the pricing of their loans or as a factor relevant for eligibility in selective facilities (e.g. CCL). In the same vein, compliance could also be a factor in Basel weights or other international regulations. Given our degree of ignorance about the merits of different models of financial organisation for development — e.g. the five Asian tigers suddenly became five basket cases and are now recovering strongly in the course of a few quarters — it pays to be cautious in making global



guidelines. As argued by Rodrik (1999), there are too many development puzzles and too many different and unique roads to success to warrant the imposition of a globally standardised approach.

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 in emerging markets operates. Two main 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. 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 a tightening of regulation to discourage high leverage, which would therefore make over-leverage less likely. We are concerned, as in the case of other initiatives on the table, that this seeks financial stability by simply reducing capital flows to emerging markets, thus aggravating one of the important distortions to be fixed. In our view, it would be preferable to orient reforms in other directions. For example, regulatory forbearance to be activated in the case of a systemic shock like international financial contagion 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 in “peak” times, preferable to reducing the flow levels on a permanent basis.

Much more promising would be a 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 set of specialised investors. By allowing institutional investors to hold some very small fraction of their portfolio in non-investment grade emerging country paper (say 1 per cent) instead of the current prohibition would have a negligible impact on portfolio risk but would be very helpful in providing stability and liquidity to the market. It would also permit higher flows and reduce the collapse during contagion episodes.

## **Concluding Remarks**

Most current initiatives for reforming the international financial architecture are guided by two principles: *i*) constraining official financial support in order to avoid bailing out the private sector and creating “moral hazard”; and *ii*) increasing 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 counter-productive 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 recognise 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 minimise the financial costs of international co-operation, which may reflect the fact that the efficient integration of emerging markets may be too costly for industrial countries.

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

We also find that the origins of liquidity crises and problems of financial fragility are largely 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. Can a world of over 100 currencies achieve financial integration? This question is left for a companion paper (Hausmann, in this volume).

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 localised 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.

## Notes

1. Eduardo Fernández-Arias is Lead Research Economist at the Inter-American Development Bank; Ricardo Hausmann is the Chief Economist of the Inter-American Development Bank.
2. Eichengreen (1999) provides an interesting survey of the main proposals on the table, and *The Economist*, (1999) gives a very useful summary discussion on the topic. To name some of the initiatives on the table: Bergsten (1998), Bergsten and Hennig (1996), Calomiris (1998), Camdessus (1998), Edwards (1998), Fischer (1999), Garten (1998), Government of France (1998), Government of the United States (1999), G-7 (1998), G-10 (1996), G-22 (1998*a, b, c*), G-30 (1997), Kaufman (1998*a, b*), Kenen (1998), Lita *et al.* (1998), Meltzer (1998), Naciones Unidas (1999), Raffer (1990), Rogoff (1999), Sachs (1998), Soros (1997, 1998), Stiglitz (1998).
3. We also compare initiatives that are mutually incompatible.
4. We will later consider the possibility of a regional lender of last resort as an alternative possibility.
5. Private sector participation is a non-essential but highly desirable feature. The issue of private sector involvement is discussed at length in the following section.
6. Still, many of the lessons derived from recent experiences with liquidity crises are applicable. In particular, it would be desirable that a new generation of financial rescue programmes were put in place that would 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.
7. This kind of initiative has been put into practice under the misleading name of emergency financing, for example, the 1998 \$40 billion plus Brazil package.
8. Cross-default clauses across bonds would also imply that renegotiable bonds would be held hostage to any co-existing rigid bond.
9. Furthermore, the evidence available on countries that issue renegotiation-friendly bonds under English law does not support the notion that this kind of flexibility would yield a significant advantage.
10. Argentina and Mexico secured private credit lines of this kind before the crisis. The IFIs recently supported the extension of Argentina's programme in the middle of financial contagion, another good example of official-private co-ordination.

11. The World Bank recently extended a partial guarantee that allowed Argentina to obtain an investment grade three notches above its regular rating.
12. 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.

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# Revisions to the Basel Accord and Sovereign Ratings

*Helmut Reisen*

## **Introduction**

During the 1990s, the rise in private capital flows and the stagnation of concessional finance have significantly increased the influence of sovereign ratings on the terms at which developing countries can tap world financial markets. In June 1999, the Basel Committee on Banking Supervision (1999*a*) issued a proposal (henceforth: the Basel II Accord) for a new bank capital adequacy framework to replace the Capital Accord of 1988 (Basel I Accord). The first pillar<sup>1</sup> of the new framework, minimum regulatory capital requirements, proposes a system for sovereign risk that would use the credit assessments of the leading rating agencies for determining risk weights. If this proposal survives the broad consultation process now under way, the importance of sovereign ratings for future emerging-market finance is set to increase significantly.

This paper provides a first attempt to assess the impact of the Basel II Accord on the volatility and size of foreign lending to emerging markets. It will first present the most pertinent changes moving forward from Basel I to Basel II, with particular attention to recent OECD entrants and emerging markets. It will then report the results of a recent study by Reisen and von Maltzan (1999) on the interaction between sovereign yield spreads and respective rating events during the Basel I period. This will provide the basis for the final section, which presents theory and evidence to suggest that the more important role for sovereign ratings in setting regulatory bank capital under Basel II will destabilise foreign lending to the emerging markets.

## From Basel I to Basel II

While the proposed revisions to the Basel Accord on bank capital adequacy will maintain the 8 per cent risk-weighted capital requirement, the new proposals intend to rely on external credit assessments for determining risk weights. Risk weights determine the banks' loan supply and funding costs, as banks have to acquire a corresponding amount of capital relative to their risk-weighted assets. Table 1 provides an overview of the proposed changes for selected bank assets. The proposed revisions to the calculation of risk weightings will substitute credit ratings for a split between OECD and non-OECD as the main determinant.

**Table 1. Basel Capital Accord: Risk Weights by Selected Category of On-Balance-Sheet Assets**

Risk weight	Old framework	Category	New framework <sup>1</sup>
0 per cent	Claims on governments denominated and funded in national currency  Other claims on OECD central governments and central banks		Moody's Rating: Aaa to Aa; S&P and Fitch IBCA: AAA to AA- required for claims on governments
20 per cent	Claims on banks incorporated in the OECD  Claims on banks outside the OECD with a residual maturity of up to one year		Claims on banks and corporates if country (bank) is rated Aaa to Aa (Moody's) AAA to AA- (S&P, Fitch IBCA)  Claims on governments rated A (Moody's); A+ to A (S&P; Fitch IBCA)
50 per cent			Claims on governments rated Baa (Moody's); BBB+ to BBB- (S&P; Fitch IBCA)  Claims on banks in countries rated A (Moody's); A+ to A (S&P; Fitch IBCA)
100 per cent	Claims on banks outside the OECD with a residual maturity of over one year  Claims on corporates  Claims on governments outside the OECD		Claims on banks in countries rated Baa to B (Moody's); BBB+ to B- (S&P; Fitch IBCA)  Claims on corporates if claims less than Aaa (Moody's); AAA to AA- (S&P; Fitch IBCA)  Claims on governments rated Ba to B (Moody's); BB+ to B- (S&P; Fitch IBCA)
150 per cent			Claims on governments, banks and corporates rated below B (Moody's) and B- (S&P; Fitch IBCA)

1. The setting of risk weights for claims on governments denominated and funded in national currency is left to national supervisors. Claims on banks of a short original maturity (less than six months) would receive a weighting that is one category more favourable than the usual risk weight.

*Source:* BIS, A New Capital Adequacy Framework, Consultation Paper Issued by the Basel Committee on Bank Supervision, Basel, June 1999 ([www.bis.org](http://www.bis.org))

It is widely agreed that cross-border lending has faced regulatory distortions through the 1988 Basel Accord (see, e.g. Reisen, 1999; IMF, 1999). Most importantly, short-term bank lending to the emerging markets has been encouraged by a relatively low 20 per cent risk weight, while bank credit to non-OECD banks with a residual maturity of over one year has been discouraged by a 100 per cent risk weight. This has encouraged short-term cross-border interbank lending, which has been described as the “Achilles’ heel” of the international financial system. Last but not least, OECD-based banks and governments have received a more lenient treatment in the Basel I Accord, even if they constitute sovereign risks equivalent or inferior to non-OECD emerging markets.

Since the 1988 Basel Accord has been in effect, five countries have joined the OECD, hence enjoying lower risk weights on bank loans to their governments (from 100 to 0 per cent) and to their banks (from 100 to 20 per cent with a residual maturity of over one year). The Basel Committee on Bank Supervision (1999*b*) finds some evidence, albeit only weak for lack of data and observations, that the OECD-based distinction in setting risk weights has raised the maturity of loans to new OECD members.

Pairwise comparisons for countries that shared very close or identical ratings supported the proposition that non-OECD countries had a higher share of short-term loans than their OECD benchmark countries. It was also found that OECD members experienced a higher proportion of lending to their governments than similarly rated non-OECD countries. Finally, the entry to the OECD was found to raise significantly interbank lending; this may have resulted from a change in demand for lending rather than supply, however, as OECD membership implies capital account liberalisation.

Table 2. **New OECD Members since the 1998 Basel Accord**

Country	OECD signature	Average interest rates of new debt			
		Basis points		In per cent of benchmark group <sup>1</sup>	
		Year before	Year of signature	Year before	Year of signature
Mexico	4/1994	660	520	92	75
Czech Republic	11/1995	760	770	109	115
Hungary	3/1996	630	510	94	68
Poland	7/1996	780	640	116	85
Korea	10/1996	680	660	106	93

1. Benchmark groups are Latin America and the Caribbean for Mexico; Europe and Central Asia for Czech Republic, Hungary and Poland; East Asia and Pacific for Korea.

Source: The World Bank, Global Development Finance, Country Tables, 1999, for average interest on new commitments to private creditors.

The Basel Committee did not investigate the impact of new OECD membership on the interest rates for bank loans, as it was concerned with addressing the high rate of interbank and short-term lending that led to crisis vulnerability in Asia. Table 2 supports the proposition that the lower funding cost that arises for private bank lending to new OECD countries as a result of lower risk weights translate into lower interest cost on new loan commitments. The table compares the average interest rates on new debt to private creditors for the year before OECD membership with the year when OECD membership began. When comparing interest rates of new OECD members with their regional benchmark group (hence correcting for world interest rate

developments), it stands out that except for the Czech Republic the new OECD members enjoyed significantly lower interest cost after entry. Note that the benefit of lower interest cost materialised despite higher loan demand by new OECD members.

**Table 3. Implications of the New BIS Risk-based Framework on Latin American Sovereign Bonds**

Country	Ratings mid-99 (Moody's/S&P/Fitch IBCA)	New risk weights	Old risk weights
Argentina	Ba3/BB/BB	100%	100%
Bolivia	B1/BB-	100%/100%	100%
Brazil	B1/B+/B	100%	100%
Chile	Baa1/A-/A-	50%/20%/20%	100%
Colombia	Baa3/BBB-/	50%/50%	100%
Ecuador	Caa2/	150%	100%
El Salvador	Ba2/BB+/	150%/100%/	100%
Mexico	Ba1/BB/BB	100%/100%/100%	0%
Paraguay	B2/B/	100%/100%/	100%
Peru	Ba3/BB-/	100%/100%/	100%
Uruguay	Baa3/BBB-/BBB-	50%/50%/50%	100%
Venezuela	B2/B+/BB-	100%/100%/	100%

*Source:* BIS, A New Capital Adequacy Framework, Consultative Paper Issued by the Basel Committee on Banking Supervision, Basel, June 1999 ([www.bis.org](http://www.bis.org)); [www.fitchibca.com/sovereigns](http://www.fitchibca.com/sovereigns); [www.moodys.com/repldata/ratings](http://www.moodys.com/repldata/ratings); [www.standardandpoors.com/ratings](http://www.standardandpoors.com/ratings).

In turn, OECD countries currently rated below Aa (Moody's), comparable to AA- (Standard & Poor's; Fitch IBCA) have most to lose under the Basel II proposals. Table 3 focuses on the implications of the suggested Basel II Accord for Latin American sovereign bonds. As sovereign ratings usually provide a floor for private sector ratings of any given country, their influence stretches far beyond government securities. The table shows for Latin America that risk weights for claims on Mexican sovereigns would jump from 0 to 100 per cent<sup>2</sup>, probably imposing considerably higher borrowing cost on the country in the future. By contrast, Chile, Colombia and Uruguay would with their current ratings benefit from lower risk weights if the Basel II proposals were adopted.

Chile's case, which currently is rated differently by the leading agencies, raises the question on how the Basel II Accord will deal with split ratings that are quite common for emerging markets. From a supervisory perspective, there may be concern that the more lenient rating agencies would determine risk weights.

Another potentially important impact of the Basel II proposals are the two options for claims on banks<sup>3</sup>. Option 1 would base risk weighting on the sovereign risk weighting of the country in which the bank is incorporated. Option 2 would base risk weighting on the individual rating of the respective bank. Oddly, under option 2 unrated emerging-market banks would have a light 50 per cent risk weight, and short-term borrowing of banks would have a reduced risk weighting relative to claims on banks with longer maturities. From the perspective of developing countries, option 2 seems preferable unless their sovereign rating is on an A level. From a supervisory and macroeconomic perspective, however, option 1 would correct the distortion towards short-term and interbank lending provided by the Basel I framework.

To prepare the ground for an evaluation on how the Basel II Accords might impact on the volatility of capital flows to developing countries, the next section will present evidence on the interaction of sovereign ratings and bond yields over the Basel I period.

## **The Market Impact of Sovereign Ratings Over the 1990s**

As far as sovereign ratings are concerned, there are several reasons why a significant market impact could not be easily established so far. First, sovereign-risk ratings are primarily based on publicly available information (Larraín, Reisen and von Maltzan, 1997), such as levels of foreign debt and exchange reserves or political and fiscal constraints. Consequently, any sovereign-rating announcement will be “contaminated” with other publicly available news. Rating announcements may be largely anticipated by the market. (This does not exclude, however, that the interpretation of such news by the rating agencies will be considered as an important signal of creditworthiness.) In the absence of a credible supranational mechanism to sanction sovereign default, the default risk premium — unlike in national lending relationships — is determined by the borrower’s willingness, rather than ability, to pay (Eaton, Gersowitz and Stiglitz, 1986). Again, it is not easy for the rating agencies to acquire an information privilege in this area that could be conveyed to the market through ratings.

Even the Basel Committee on Banking Supervision (1999*b*) has argued that there are reasons to have less confidence in sovereign ratings than in, say, agency ratings for US corporate bonds. The Committee notes more disagreement (split ratings) for low-quality sovereigns than for low-quality corporate credits, resulting from a higher degree of subjectivity in sovereign ratings. As most emerging-market economies have been rated only for a few years, and as their number is comparatively small, there is little confidence in estimating the link between sovereign ratings and default cases. Pricing in the markets reflects the low degree of confidence: the correlation between ratings and yields is lower for sovereigns than for corporate bonds, and sovereign bonds have higher yields than similarly rated corporate bonds.

Reisen and von Maltzan (1999) have recently examined the link between sovereign rating “events” and bond yield spreads. To investigate the size and duration of the market impact, they collected the press releases by the three leading rating agencies — Moody’s, Standard & Poor’s and Fitch IBCA — over the period 1989-97. The market impact was measured by movements in relative dollar bond yield spreads, with the 10-year US treasury bond as the “risk-free” benchmark for the computation of spreads. The objective of their study was to find out whether the leading agencies fulfil a necessary condition to dampen boom-bust cycles: to exert a significant market impact of their rating announcements above and beyond other yield determinants. They also investigated whether the market impact was temporary, possibly indicating a rating-induced reinforcement of herd behaviour among market participants, or whether the impact of rating “events” could be sustained over several weeks, possibly indicating that the rating agencies have been able to reveal new information to market participants. Their empirical analysis first featured an event study with an observation

window spanning 30 trading days both before and after each sovereign rating announcement. Then, they investigated the monthly bivariate Granger causality relationships between sovereign ratings and yield spreads after correcting for other yield determinants.

With all warranted caution, three results emerge from the event study which deserve to be emphasised:

- While generally rating “events” from each of the three leading rating agencies do not produce a statistically significant response in sovereign yield spreads, the aggregated rating announcements of the three agencies can produce significant effects on yield spreads in the expected direction, notably on emerging-market bonds.
- Implemented rating downgrades widen yield spreads on emerging-market bonds. While the rise in yield spreads precedes the downgrades, it is sustained for another 20 twenty trading days after the rating “event”.
- Imminent rating upgrades (when ratings are put on positive outlook) of emerging-market bonds are preceded by significant yield convergence. Subsequent to the rating “event”, however, there is no significant market response.

In principle, therefore, sovereign ratings might be able to help attenuate boom-bust cycles in emerging-market lending. During the boom, early rating downgrades would help dampen euphoric expectations; during the bust, early positive rating outlooks would re-attract foreign money. The interpretation of these findings is complicated by several considerations. First, to the extent that the rating “event” is anticipated by the market, the subsequent response in yield spreads will understate the effect which can be attributed to ratings. Second, both rating “events” and yield spreads may be jointly determined by exogenous shocks; this calls for analysis which corrects yield determinants for fundamental factors.

Reisen and von Maltzan (1999) then employ a Granger causality test in order to establish the extent to which sovereign ratings lead or cause changes in yield spreads beyond and above other observable yield determinants. The test is based on a monthly balanced panel data with end-of-month data for ratings and yields over the period January 1988 to December 1997. The Granger test, by correcting for joint determinants of bond yields and sovereign ratings, suggests that sovereign ratings by the three leading agencies do not independently lead the market, but that they are interdependent with bond yield spreads once ratings and spreads are corrected for “fundamental” determinants. While the results suggest that rating announcements are considered as a significant signal of creditworthiness, their impact may be due to prudential regulation and internal guidelines of institutional investors which bar them from holding securities below certain rating categories. The two-way causality between ratings and spreads observed over the past decade may also suggest that the criticism of the agencies in the wake of the Mexican and the Asian currency crises is still valid when it is based on more observations than just those surrounding these prominent crisis episodes. While the event study suggests that rating agencies do seem to have the potential to moderate

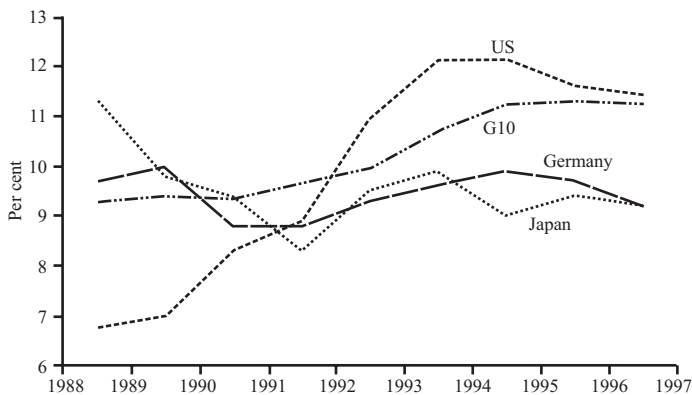
booms that precede currency crises, the Granger tests may justify the concern that this potential has not yet been productively exploited by the agencies through independently leading the markets with timely rating changes.

### Linking Regulatory Capital to Sovereign Ratings Might Destabilise Private Flows to Developing Countries

Both theory and evidence suggest that the Basel II Accord will destabilise private capital flows to the developing countries, if the current proposal to link regulatory bank capital to sovereign ratings is maintained. This hypothesis contains two elements: First, theory suggests that linking bank lending to regulatory capital through a rigid minimum capital ratio acts to amplify macroeconomic fluctuations. Second, evidence summarised in the preceding section suggests that sovereign ratings lag rather than lead the markets; it seems that there is little scope to improve on that performance. Thus, assigning fixed minimum capital to bank assets whose risk weights are in turn determined by market-lagging ratings will reinforce the tendency of the capital ratio to work in a pro-cyclical way. The Basel II proposals reinforce that tendency further as a strong discontinuity in treating double A and single A assets will make banks' loan portfolio more liquidity-hungry, hence raising the vulnerability of the financial system to liquidity risk.

The theory: assuming a non-Modigliani-Miller world where investment demand depends on the ability of firms to retain earnings or to obtain bank loans, Blum and Hellwig (1995) show how capital adequacy regulation for banks may reinforce macroeconomic fluctuations. If negative shocks to aggregate demand reduce the ability of debtors to service their debts to banks, such reduction in debt service lowers bank equity which in turn reduces bank lending and investment because of capital adequacy requirements. Linking bank lending to bank equity thus acts as an automatic amplifier for macroeconomic fluctuations: banks lend more when times are good, and less when times are bad. Moreover, the minimum capital ratio can also be shown to raise the sensitivity of investment demand to changes in output and prices.

Figure 1. Bank Capital–Asset Ratios



Source: Central Bank of the Netherlands.

An important assumption that underlies the Blum-Hellwig model is that the capital adequacy requirement is binding. With a binding requirement  $c$ , an additional dollar of bank profits induces  $1/c$  additional units of bank lending. Figure 1 suggests that the rise in weighted bank capital-asset ratios occurred mainly in the US over the Basel I period. Elsewhere, the ratios have been hovering pretty much around the required 8 per cent. This suggests that the Basel capital ratios can generally be considered as binding; the logic of the Blum-Hellwig model is thus of more than purely academic interest.

It can be argued that the specific proposal for the Basel II Accord risks reinforcing the pro-cyclical impact of minimum capital requirements. Recent research at Deutsche Bank (Adamson *et al.*, 1999) points to the large discontinuity suggested in Basel II between risk weights on double A (20%) and single A (100%) corporate borrowers. To the extent that a high share of banks' loan portfolio is invested in AA-borrowers, the financial system may become vulnerable to a liquidity crisis in a downturn when borrowers become downgraded. This would face banks with higher capital requirements for the same class of borrowers. Deutsche Bank notes that one dimension of bank response will be to cut back lending to lower rated credits.

Linking regulatory bank capital to agency ratings might move the banks' loan portfolio behaviour closer to their trading book characteristics. Governed by the mark-to-market rules of the value at risk (VAR) approach, banks' trading books have been shown to have first encouraged excessive bank lending and then intensified the global contagion of the 1998 financial crisis (Reisen, 1999). Crisis contagion under VAR is intensified as a volatility event in one country automatically generates an upward re-estimate of credit and market risk in a correlated country. Faced with the proposed large discontinuity between AA and A rated loans, banks will, in the context of the VAR methodology, have to reserve more liquidity and capital against their loan portfolio.

The evidence: the determinants and nature of sovereign ratings risk intensifying the pro-cyclical impact of capital adequacy requirements under the Basel II proposals. First, the real rate of (annual) GDP growth has repeatedly been identified as an important determinant for ratings, with a positive sign (Cantor and Packer, 1996; Larraín, Reisen and von Maltzan, 1997). This implies that during boom periods sovereign ratings will improve, while they decline during bust periods, hence reinforcing boom-bust cycles. Second, as it is hard for the agencies to acquire an information edge on sovereign risk, they tend to lag rather than lead financial markets (Reisen and von Maltzan, 1999); and their ratings on low-rated borrowers are characterised at times by a low degree of durability (IMF, 1999), indicating a weak prediction value. The Basel II Accord would strengthen the market impact of sovereign ratings. However, as long as sovereign ratings fail to convey an information privilege to the markets, improving ratings would reinforce euphoric expectations and stimulate excessive capital inflows to the emerging markets; during the bust, downgrading might add to panic among creditors and investors, driving money out of the affected countries and sovereign yield spreads up.



## Conclusions

Possibly because of its quite technical character, the recent proposal by the Basel Committee on Banking Supervision to revise the Basel Accord has not yet received the policy attention it deserves. The new framework suggests substituting risk weights or minimum capital requirements based on ratings for risk weights based on OECD membership as compared to non-membership. As risk weights have been shown to drive investment decisions by banks, the suggested revisions will have important consequences. Immediate losers will be new OECD entrants and other relatively low-rated OECD members; some well-rated countries outside the OECD, for example Chile, would benefit under the Basel II Accord.

Beyond the immediate impact of Basel II, however, is the more systemic issue, largely ignored so far, of the macroeconomic effects of the revision to the capital adequacy framework. This paper collects theory and evidence, and discusses some specifics of the proposal, to suggest that linking regulatory bank capital to external credit ratings risks destabilising private capital flows to the emerging-market economies. These worries would be unfounded if sovereign ratings could be shown to lead rather than lag financial markets. While the IMF (1999) has recently suggested that more staffing with economists might help solve the problem of late ratings (a suggestion always warmly welcomed by an economist), the problem lies deeper. The nature of sovereign risk and the public nature of sovereign default determinants make it difficult if not impossible for rating agencies to acquire an information lead over financial markets. This differentiates sovereign from corporate ratings, where the agencies may be able to receive private inside information from corporate borrowers (e.g. on acquisition, new product and debt issuance plans). Such advance knowledge can be conveyed to market participants through ratings on private borrowers, but this is very unlikely in regard to sovereign borrowers.

This paper does not presume to offer alternative supervisory solutions to Basel II. But it does contain a strong warning about linking regulatory bank capital to external credit ratings.

## Notes

1. The two other pillars, not dealt with here, are (1) the *supervisory review* of a bank's capital adequacy and internal assessment process and (2) the use of *market discipline* as a lever to adhere to sound banking practices.
2. Other OECD members facing higher risk weights under Basel II are the Czech Republic, Greece, Hungary, Iceland, Korea, Poland and Turkey.
3. Claims on public sector entities would generally be treated like claims on banks of that country.

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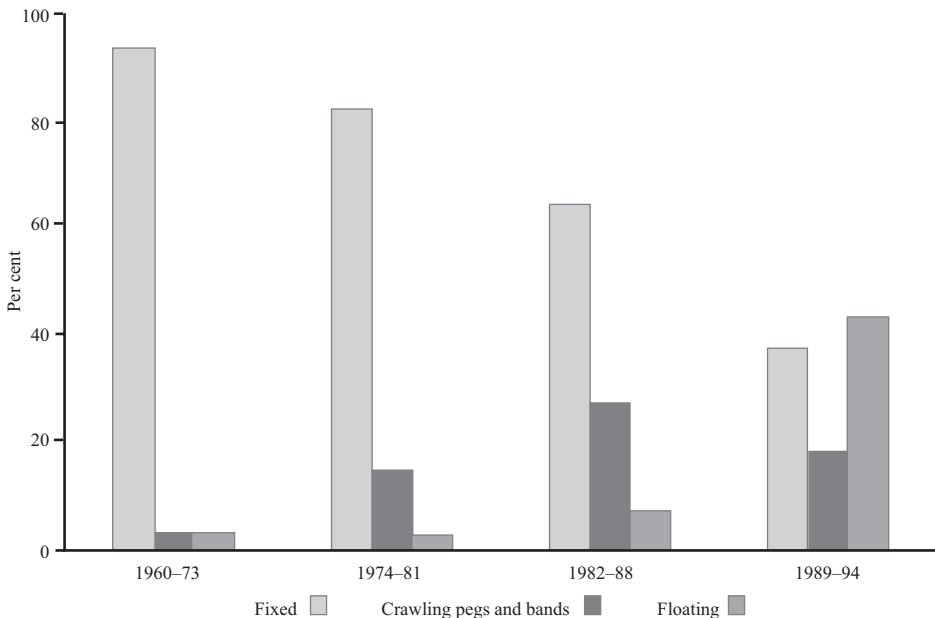
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# Exchange Rate Arrangements for the New Architecture

Ricardo Hausmann

Latin America has been moving from fixed to more flexible exchange rate regimes. From the pegged exchange rates of the 1960s, Latin America moved to intermediate regimes of crawling pegs and crawling bands in the 1970s and 1980s. In the 1990s, it has been moving away from both pegged and intermediate regimes toward more flexible arrangements (see Figure 1).

Figure 1. Proportion of Exchange Rate Arrangements by Period



Sources: Hausmann, Gavin, Pages-Serra and Stein (1999), *Financial Turmoil and the Choice of Exchange Rate Regime*; based on data from Frieden, Ghezzi and Stein (1999).

This actual trend in exchange rate regimes has been accompanied by a similar trend in thinking that takes a polar view of the issue. Countries are encouraged to peg very credibly through a currency board or dollarisation, or alternatively (and preferably) to float freely. It is argued that intermediate regimes tend to be unsustainable. Advocates of this view include former US Treasury Secretary Robert Rubin, the Council on Foreign Relations, and the G-7 who argue that not only should countries float their exchange rates but international financial institutions, particularly the IMF, should not help them defend a peg. In 1999 alone, Brazil, Ecuador, Chile and Colombia decided to adopt fully floating exchange arrangements, joining other Latin American floaters such as Bolivia, Guatemala, Mexico and Peru.

The debate between fixing and floating is certainly an old one and has a vast literature associated with it. Ostensibly, floating regimes perform better in the face of real shocks, which require a change in relative prices that is easier made by moving the nominal exchange rate than by adjusting millions of contracts, especially wages. Flexibility is also supposed to allow countries to adopt a more autonomous monetary policy that can then be used anticyclically to deal with each country's peculiar business cycle. Finally, flexibility should allow the central bank to play a lender of last resort function, thereby backstopping the banking system<sup>1</sup>.

The virtues of fixing exchange rates are also expounded upon in the literature. Fixing facilitates trade by reducing exchange rate uncertainty and transaction costs. More importantly, a fixed exchange rate provides a clear nominal anchor that lowers inflationary expectations and, consequently, interest rates. These are the traditional arguments in favour of fixing.

There is, however, a new debate underway that has spawned a new set of arguments in favour of either floating or fixing. Concerns about moral hazard see pegged exchange rates as an implicit guarantee against exchange rate movements that leads to an excessive accumulation of currency mismatches. Borrowers are willing to accept the lower dollar interest rates because they assume they are protected against currency movements by a central bank committed to a pegged currency. Hence, those concerned with moral hazard argue in favour of floating as a way of eliminating this implicit guarantee and discouraging unhedged foreign currency positions.

It is unclear, however, whether such a policy recommendation would lead to less unhedged borrowing because it encourages more hedging or simply less borrowing.

Arguments against flexibility emerge from noting three characteristics of emerging markets. The first one is "original sin", which will be defined shortly. The second is large external shocks. And the third is a volatile volume of capital flows, where much of that volatility is exogenously induced. These three characteristics give rise to some adventurous conjectures.

The first one is that floating would lead to very volatile domestic interest rates. This high volatility of domestic interest rates would make the banking system riskier because a volatile short-term interest rate would make it hard for the banking system to lend in anything other than floating rates. Floating interest rates, in turn, are hard

to assess because the borrower is unsure of the interest rate he will face over the life of the contract. Hence, banking activity will be restricted by the volatility of interest rates. Moreover, volatility of the short-term interest rate will hinder the development of longer-term markets that are essentially the aggregation of many short-term interest rate expectations. The result would be a very illiquid and undeveloped long-term market.

The presence of large external shocks will tend to reduce the attractiveness of saving in the domestic currency. The argument is that in good times the currency will tend to appreciate, thereby raising the value of accumulated saving in domestic currency. In bad times the currency will tend to depreciate, which lowers the value of accumulated domestic saving just when it is most needed to smooth out consumption. Hence, the return on domestic assets is not correlated with the income process from the point of view of risk diversification. In the presence of large external shocks, this factor becomes more important. Savers are safer keeping their money in dollars. This means that floating will lead to smaller banking systems, an inability to develop long-term markets, and more saving in dollars. In addition, floating would create disincentives to borrow in dollars because of the higher currency risk. This, in turn, would lead to less financial development because it would be difficult to intermediate in both local and foreign currency. All this adds up to lower growth.

## **Original Sin**

What is the original sin argument? We will begin by defining original sin. A currency suffers from original sin when it cannot be used to borrow abroad and cannot be used even domestically to borrow long term. That is the operational definition of original sin, and it has very strong implications. It implies that investors will inevitably have to finance their investments either in dollars or short term. Consequently, all investments will have either a currency mismatch if peso-generating projects are financed in dollars or a maturity mismatch if long-term investment is financed with short-term borrowing. These endogenous currency and maturity mismatches make the financial system vulnerable and impose ominous policy choices on monetary authorities. If there is pressure on the exchange rate and they let the currency depreciate, those with a currency mismatch are likely to be financially affected. If instead they try to defend the currency by jacking up interest rates, selling reserves, and reducing the stock of domestic liquidity, those with a maturity mismatch will have trouble rolling over their short-term debts, generating a potential banking crisis.

What causes original sin? The first culprit is a history of irresponsible monetary management. Countries with a history of high inflation tend to suffer from original sin. But original sin seems to be a far more prevalent phenomenon in the world and it also affects countries without a history of fiscal, financial or monetary irresponsibility. In fact, almost all emerging markets, whether in Asia or Latin America, are unable to borrow abroad in their own currency or borrow domestically long-term. One potential interpretation involves the concept of sovereign risk. If a country were able to borrow abroad in its own currency and accumulate a significant stock of foreign debt

denominated in its own currency, then it could increase its wealth by just debasing the value of its currency. The market would be unwilling to lend in that currency unless it was compensated for the risk of the country debasing its own currency. It would charge a spread to cover that risk, but that additional spread would tend to generate adverse selection problems. The only countries willing to pay higher spreads would be those that would be willing to debase their currency and consequently, the market would quickly disappear.

This raises the question of why some countries can actually borrow abroad in their own currency. One political economy interpretation relates to who actually holds the public debt or who actually holds much of the claim in domestic currency. If the median voter is the holder of the public debt, then the government would be unlikely to try to expropriate the median voter. But if the bulk of the stock of debt is owned by a few people or by foreigners, then it may benefit the median voter to debase the currency because it would imply a transfer of resources in its favour. In this case, it may be hard for a country that does not have a political incentive to keep its currency stable to credibly commit not to debase the currency. Under this interpretation, no matter how many years a country has been virtuous, at any time it could benefit from abandoning its traditional policy, which would limit the development of a market to borrow abroad in its own currency.

What are the implications of original sin for exchange rate policy? Essentially, all exchange rate arrangements are going to be difficult. Fixing will make it hard on those with a maturity mismatch because the peg will require periods of illiquidity when it would be impossible to roll over many short-term debts. On the other hand, floating will generate very large balance sheet effects caused by exchange rate movements on the dollar liabilities. Countries that suffer from original sin should either design a strategy to sort themselves out of this predicament or opt out of their own currency.

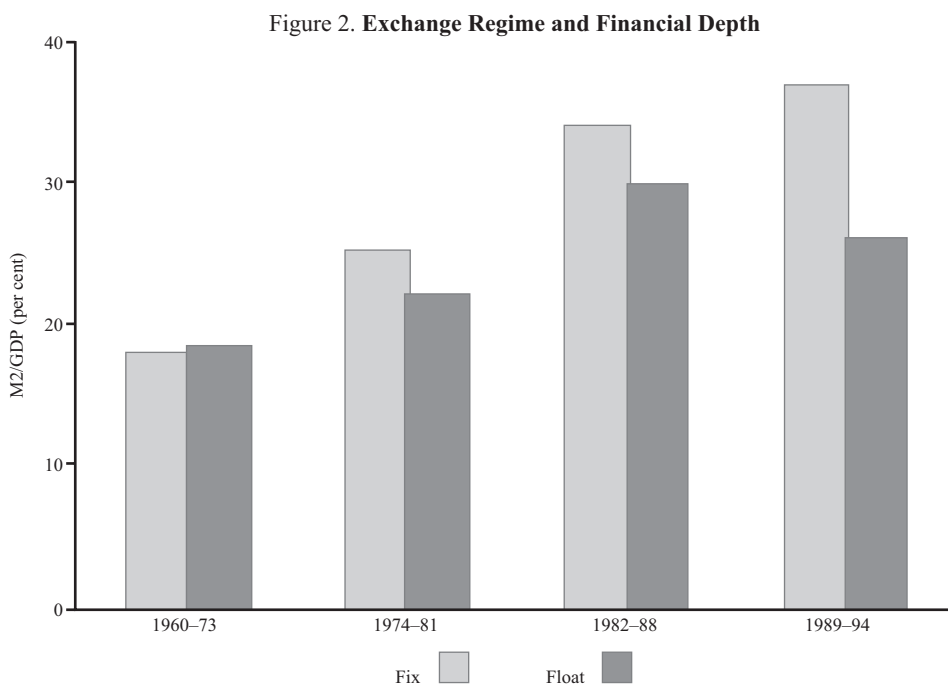
Unfortunately, it is very hard to find countries that have achieved redemption from original sin. Most countries that today can borrow abroad in their own currency and have long-term public debt markets reached this point before financial liberalisation and before they started to float. Most emerging markets are characterised now by open capital accounts, liberalised financial systems and floating regimes. It is hard to see how a country could be cleansed of original sin once the markets are in that state. Essentially, there are no clear models of how to be acquitted of original sin.

One implication of original sin is that countries do not hedge their currency exposure — not because they lack incentives to do so, given the protection afforded by a central bank that limits exchange rate flexibility — but mainly because they cannot. If countries could hedge their currency exposure it would also mean they could borrow internationally in their own currency. After all, a loan in pesos is just a loan in dollars plus a hedge. If hedging were possible, international banks would offer peso loans and hedge their currency exposure away. The fact that they do not offer peso loans indicates that they have no market to hedge their foreign currency risk away. The reason is that for a country with a foreign debt denominated in a foreign currency, there is a fundamental imbalance in the hedging market. Assuming that a

country can hedge its foreign currency exposure is equivalent to assuming that foreigners are willing to go long in the domestic currency. But that is simply assuming away the problem of original sin.

## Large External Shocks

Emerging markets are typically characterised by large external shocks, whether to the terms of trade or to the capital account. Under floating regimes with inflation targets, this leads to a very procyclical monetary policy. With a negative shock to the terms of trade, the currency tends to depreciate and inflation accelerates. A contractive monetary policy response becomes necessary, which makes monetary policy procyclical. In addition, floating leads to a depreciation in bad times and appreciation in good times and generates the wrong correlation between asset returns in domestic currency and the income process from the point of view of risk diversification. Returns will be high in good times and low in bad times. Consequently, the return on savings would have the same correlation as income and would not provide risk diversification opportunities. A saver in that environment would be better off saving in foreign currency. Thus, floating would tend to lead to smaller financial systems. Hausmann *et al.* (1999) provide empirical evidence consistent with this intuition, showing that in the 1990s, financial systems in floating regimes are about 11 percentage points of GDP smaller than in fixed exchange rate regimes in Latin America. (See Figure 2)



Source: Hausmann, Gavin, Pages-Serra and Stein (1999).

## Volatile Capital Flows

The third characteristic that emerging markets face is volatility in capital flows or volatility of an exogenous nature. As argued in a companion paper (p.19 of this volume) by Fernandez-Arias and Hausmann, “What’s Wrong with International Financial Markets?” country risk is too volatile and too correlated across discrete countries to be mainly a reflection of changes in domestic conditions. Clearly there is a significant international component in the volume and cost of capital.

How do floating regimes work under such circumstances? Do they actually shelter the domestic economy from the impact of this exogenous volatility? Or do they in fact amplify that volatility? These are important questions because floating exchange regimes vary in the way in which they operate. A striking difference is highlighted by the contrast between the performance of the Australian floating exchange regime and the Mexican floating exchange regime during the time of the East Asian crisis.

Figure 3 illustrates that, as the East Asian crisis developed, the exchange rate in Australia depreciated from early 1997 to a peak in September 1998. It then strengthened slightly, but accumulated a significant depreciation on the order of 20 per cent vis-à-vis the US dollar. In the meantime, the Australian monetary authorities consistently reduced interest rates to compensate for the expected deflationary impact the East Asian crisis would have on economic activity in Australia. Under this regime, exporters benefited from the depreciation while everybody else in the economy benefited from lower interest rates and the increase in available liquidity for credit expansion. Obviously, there is a down side to this picture. Capital flows reacted endogenously to compensate for any domestic imbalance as the current account deficit in Australia widened from some 3 per cent of GDP in 1996 to more than 6 per cent of GDP in 1999.

Figure 3. Floating at its Best: Australia

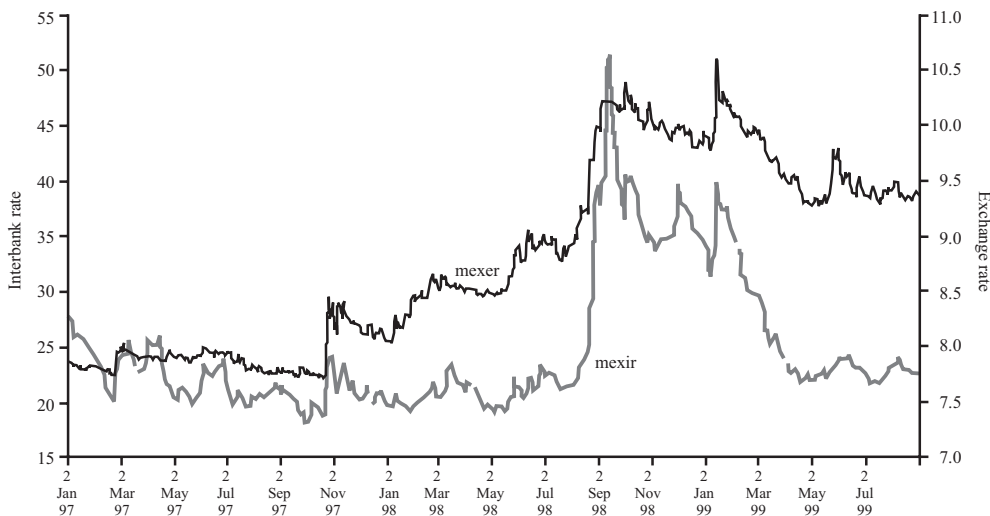


Source: Bloomberg, Interest rates on one-month Treasury Notes and exchange rate with respect to US dollar.



In contrast to the Australian experience is the behaviour of Mexican exchange rates and interest rates for the same period (See Figure 4). Here, a remarkable correlation exists between innovations in exchange rates and a highly procyclical reaction of the interest rate. Every time there has been pressure on the exchange rate, interest rates rise; similarly, whenever there is pressure to appreciate the exchange rate, interest rates fall dramatically. The correlation is very high, indicating that in Mexico, monetary policy has been operating in a relatively procyclical manner.

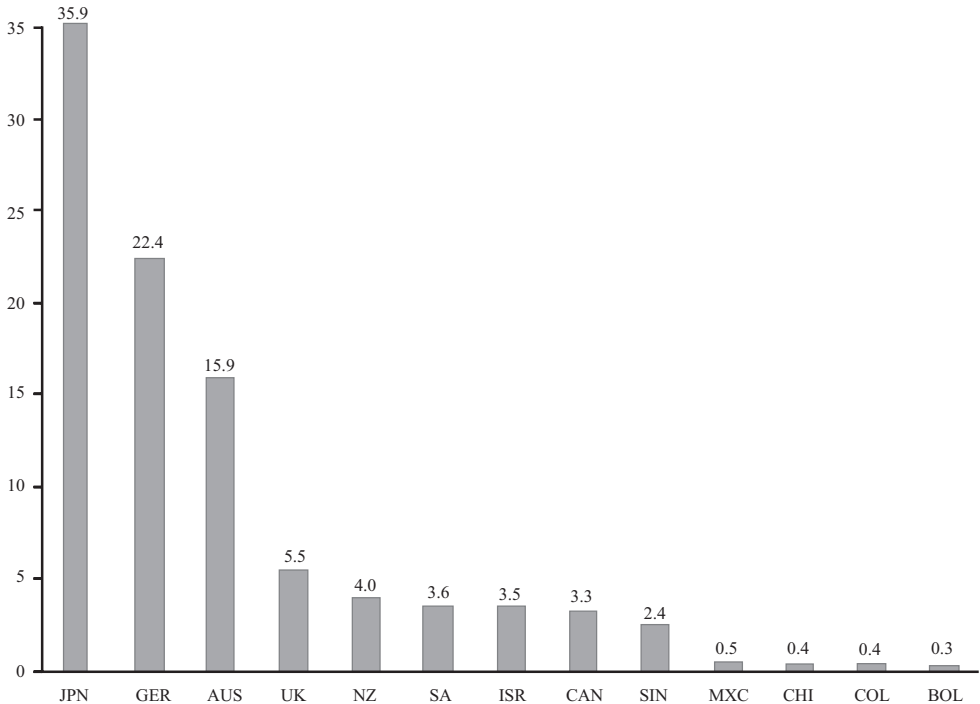
Figure 4. Floating Latin Style: Mexico



Source: Bloomberg, 28-day interbank rate.

Interestingly, this is not just a Mexican and Australian phenomenon. One way to compare across different countries is to look at the relative volatility of exchange rate vis-à-vis interest rates in countries characterised by significant exchange rates flexibility. Figure 5 shows the ratio of the volatility of the rate of depreciation and the volatility in the interest rate. It shows how Japan and Germany, which are G-3 countries, have incredibly volatile exchange rates relative to the enormous stability of the interest rate achieved by monetary policy. The same figure illustrates how Australia is able to tolerate enormous volatility in the exchange rate without resorting to interest rates in order to stabilise. Interestingly, Latin American floaters — be they Mexico, Chile, Colombia, Bolivia or Peru — have a ratio of these volatilities that are two orders of magnitude removed from the Japanese paradigm, for instance, and one order of magnitude removed from industrial country floaters such as New Zealand, the United Kingdom, Israel and Canada.

Figure 5. Ratio of Exchange Rate to Interest Rate Volatility

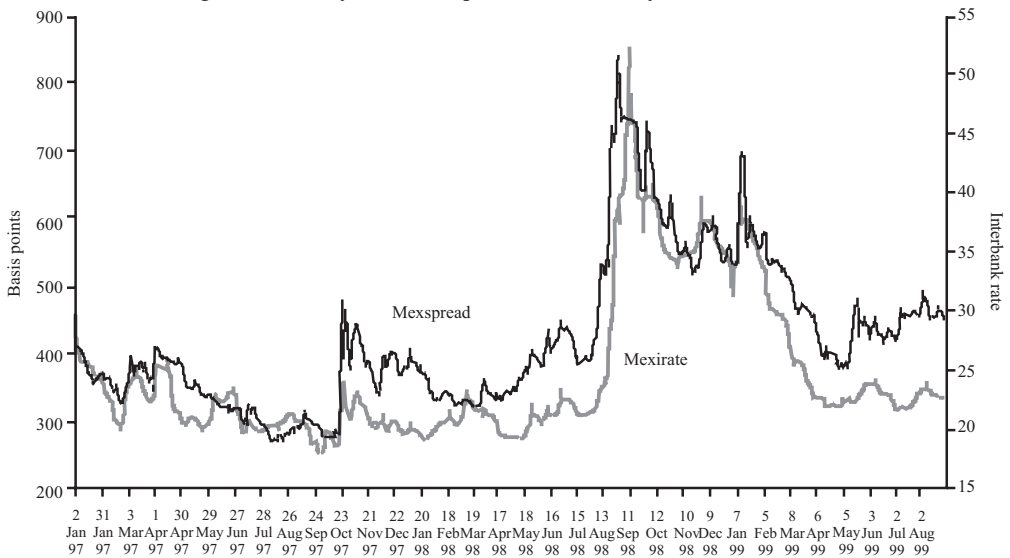


Source: IMF, based on *International Financial Statistics* and *World Economic Outlook*.

Not only do countries in emerging markets tend to absorb shocks far more in movements in interest rates than in exchange rates, but the impact of country risk on interest rates tends to be magnified. Figure 6 illustrates the enormous transmission of changes in country risk to changes in interest rates in Mexico and their close correlation, with an elasticity on the order of 6.5. In fact, this elasticity is similar to what it was in Brazil, while it is on the order of 1 in Argentina. This indicates that the transmission of country risk to interest rates is smaller in a very hard peg country such as Argentina compared to floating rate countries such as Brazil and Mexico. In this sense, international volatility is applied in its transmission to interest rates, in spite of the fact that country risk is also transmitted to the exchange rate in floating rate countries. In fact, for both Brazil and Mexico, the correlation between country risk and the exchange rate is very high while it has an elasticity of around 2, meaning that an increase in country risk of 100 basis points would lead to a depreciation of 2 per cent in the exchange rate.

In sum, floating in emerging markets, or at least in Latin America, leads to an exchange rate volatility that reflects country risk and an interest rate volatility that also reflects country risk in an amplified manner relative to the transmission that is observed in more fixed rate countries.

Figure 6. Country Risk is Amplified in the Money Market in Mexico



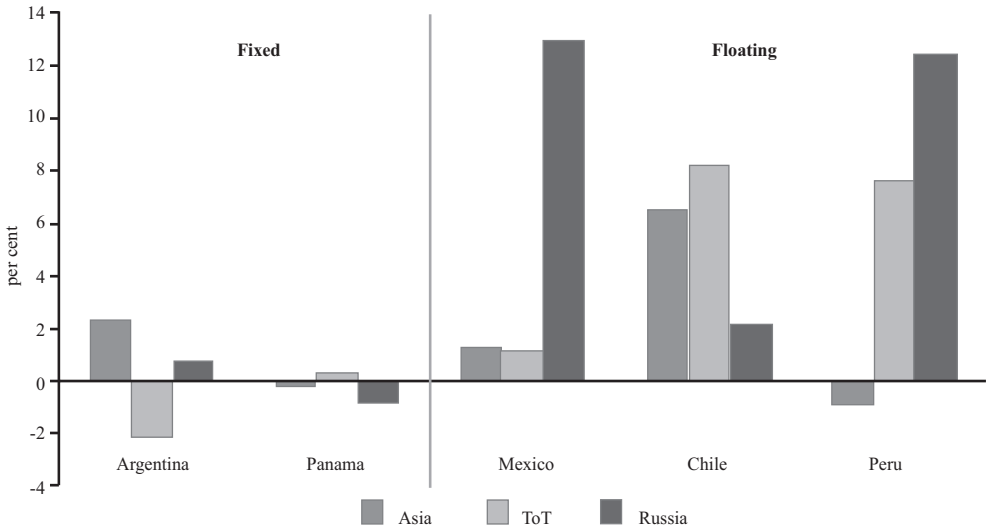
Source: Bloomberg.

This observation makes clear the notion that floating does not necessarily reduce the impact of uncertainty or the need to adjust interest rates. On the contrary, if we look at the impact of the East Asian crisis, the decline in the terms of trade, and the Russian crisis on Latin American interest rates (see Figure 7), the floating rate countries (Mexico, Chile, and Peru) have suffered far more than their fixed-rate counterparts (Argentina and Panama). The notion that flexibility reduces pressure to jack up interest rates in times of trouble because the exchange rate can absorb part of the hit is not borne out by the facts (see Hausmann *et. al.*, 1999).

Why is this? One possible argument is that when there is pressure on the currency, the market does not know how much pain the central bank is willing to endure. If it is willing to let the exchange rate go, investors will demand very large increases in the interest rate because even a small depreciation can only be compensated by large increases in interest rates. Credible pegs avoid this; knowing that the exchange rate is not going to move implies that interest rates do not need to be as responsive to whatever monetary innovations the Central Bank might introduce.

Thus, floating in emerging markets can amplify the domestic transmission of capital market volatility by making both the exchange rate and the domestic short-term interest rate more volatile. The implication is that with a more volatile short-term interest rate, domestic intermediation is riskier and long-term markets are more difficult to develop because of instability in the short market. This is in addition to the fact that floating will create disincentives to save in local currency and to borrow in dollars, limiting the use of both domestic and foreign savings in the financing of growth. It is possible that this strategy may lead to less growth.

Figure 7. Interest Rates Since the Asian Crises



Source: Hausmann, Gavin, Pages-Serra and Stien (1999).

## Alternatives for the Future

We have argued that pegging is difficult, risky and costly and has been increasingly abandoned. Floating we have argued is unattractive in the context of original sin, large real shocks and volatile capital flows. In terms of alternatives for the future, the question is whether emerging markets can escape from original sin. Is that a feasible strategy? If not, would a strong currency that does not suffer from original sin be a better solution? In this sense, the experiences of countries with historically weaker currencies such as Portugal, Spain, and Italy are encouraging. Adopting a strategy that moves them away from the weaker domestic currency seems to have been important for these countries to achieve lower costs of capital, less turbulence originated from international financial turmoil, as for example during the Russian crisis, and a more stable environment for growth.

The euro is a common European currency. Would a common Latin American currency make sense? Is Latin America more integrated *per se* than to the United States and, more importantly, would a Latin currency not suffer from original sin? These issues suggest that it might make sense for Latin America to move more closely into an association with the dollar. A monetary association with the US dollar might lead to lower inflation, lower interest rates, and it would suddenly eliminate the currency mismatches. It would also allow for longer term borrowing; in fact, Latin America has successfully placed thirty-year global bonds in the international markets, while it is unable to tap domestically any long-term money in domestic currency<sup>2</sup>.

Panama is an interesting case in terms of mismatches. Panama is the only country in Latin America that has an active 30-year mortgage market that now trades at interest rates below 9 per cent. Panama is also a country that has the largest and deepest domestic credit market, a market that acted anticyclically during several of the major macroeconomic disturbances that Panama suffered. Hence, dollarisation, by eliminating both currency mismatches and maturity mismatches, may eliminate financial fragility in these banking systems. In that context, dollarisation would lead to larger and more stable capital flows, which would then support more growth. Of course, there is a price to pay for dollarisation. What must be given up in a strategy that moves Latin America closer to the United States?

First, an independent monetary policy. We have argued that Latin America does not have an independent monetary policy. It imports the monetary policy decisions of the US government with a vengeance (see Hausmann *et al.*, 1999 and Frankel, 1999). Domestic interest rates are more sensitive to movements in international rates in floating rate countries than they are in fixed rate countries.

Secondly, there is the issue of seignorage. Dollarisation would imply abandoning the revenue that comes from issuing a national currency. This is an issue that could be debated in the context of a monetary association treaty, as has been suggested by the Subcommittee on Banking and Finance of the US Senate, which has formulated several alternatives for the issue of seignorage<sup>3</sup>.

Third, the ability to assure the liquidity of deposits is limited by the fact that the central bank can no longer guarantee the conversion of deposits into cash because it cannot print that cash. In other words, there is a more limited role of the lender of last resort. This issue requires attention but it is important to understand first what underpins a lender of last resort's ability to exercise that function. It is often argued that by just being ready to print money at times of crisis, a central bank can backstop a financial system. However, experience in Latin America indicates that if the central bank attempts to print money at a time when it or the government is unable to borrow, the printing of money will be a net issue of base money that cannot be recovered through open market operations and signals to the market an inflationary solution to a banking problem which tends to lead to an attack against the currency and a drastic acceleration of inflation. This happened in Argentina in 1992, in Venezuela in 1994 and in Ecuador in 1999. Hence, what really underpins the ability of the lender of last resort to play that function is its ability to borrow at times of crisis. Otherwise, the only lender of last resort is the inflation tax.

Fourth, when a country gives up its own currency it also gives up the ability to erode the value of nominal obligations through a sudden change in exchange rates or the price level. This capacity tends to be used to erode the real value of nominal fiscal obligations and to erode the real value of wages. It is important then, that the mechanisms whereby fiscal obligations are generated and wages are set be adapted to the new, harder constraints of a dollarised system. Hausmann *et al.* (1999) provide evidence that a harder commitment to pegs leads to less indexation of wages and that more flexible regimes are accompanied by more endogenous wage indexation. They

rationalise this outcome by arguing that when the unit of account of wage contracts has a more uncertain value, the life of contracts will tend to be shorter or they will incorporate more indexation. Hence, arguments in favour of floating regimes as a way of compensating for nominal rigidities tend to assume that those normal rigidities are not affected by the nature of the exchange regimes. In any case, it makes sense to assume that a dollarised economy in which the exchange rate does not respond to the rate of unemployment would benefit from more flexible labour markets. That is not to say that the type of floating regimes that are feasible in emerging markets would make the exchange rate sensible to the rate of unemployment. In fact, as argued above and in Hausmann *et al.*, (1999) floating may generate a more procyclical monetary response than the alternative pegged regime.

It has been argued that the development of the euro is a consequence of a strong political commitment between the European countries, while there is no equivalent political commitment in the Americas. Clearly, political relations within the European Union are far different from the relationship between the United States and Latin America. Nevertheless, it is important to ask whether it would be within the national interest of the United States to create a framework for other countries to share its currency.

There are a number of advantages that the United States might gain from such an initiative. First, a monetary association treaty would eliminate the exchange rate mismatches in the balance sheets of several US banks and corporations that deal in the Americas. Secondly, a dollarised economic area would eliminate the risks borne by American workers of sudden collapses in dollar wages paid in the Americas. By giving up the ability to let the currency depreciate suddenly, dollar wages in the South are bound to be more stable and would present a more predictable source of competition for US workers. Thirdly, a common currency would promote a more stable and deeper trade and investment climate. Fourthly, by sharing a common currency, flows of capital from north to south become more secure. This would be important from a long-run perspective as demographic trends would make the supply of labour grow faster in the South than in the North and the rate of growth of pensioners would be much higher in the North than in the South. The world could gain from the benefits of reallocating capital to the South to pay the pensions in the North. A common monetary area would also be a way of making trade more secure. Finally, expanding the dollar area may be a means of bolstering the role of the dollar vis-à-vis an increasingly important euro.

It took fifty years for Europe to get to where it is. How long might it take Latin America? Much of Latin America is already integrated into the dollar area. Most trade is denominated in dollars and most countries are highly dollarised in deposits and liabilities. Consequently, moving to the dollar would not require the creation of a new currency, but instead the elimination of an old currency. It may be a process that can be thought of in terms of less than a decade instead of half centuries.

## Concluding Remarks

In spite of the big push toward floating regimes that emerges from the moral hazard view of international financial markets, floating with original sin appears to be a costly proposition. It may lead to less growth by making both intermediation in local currency and in dollars more restricted and by limiting the development of a long-term market. Currency boards are probably no worse but they still suffer from original sin in the sense that countries under a currency board cannot borrow abroad under a domestic currency nor can they borrow long-term domestically in their own currency. Hence, the option to devalue affects the stability of the financial system and even the interest rates paid on dollar loans. The risk of a dollar loan is the risk of lending to somebody who earns pesos and could hence become insolvent should the currency board be abandoned.

Common currencies could be an improvement over the dismal options of exchange rate policies with original sin. But nothing attractive has been suggested yet. It is vague at best to ask whether the debate on the international financial architecture should deal with this issue. Should there be a monetary dimension in the new debate on international financial architecture? Should part of the debate be devoted to the question of generating additional options beyond the dismal choices that are now on the table? Are there alternative supranational arrangements that could represent an improvement over current, nationally-based exchange rate policies?

## Notes

1. This claim is false. What really allows the Central Bank to play a lender of last resort function is its ability to borrow at times of crisis. If the Central Bank is unable to borrow at these critical times, the attempt to function as a lender of last resort will simply translate into an inflationary spiral and a devalued currency. This point is argued in Hausmann and Powell (1999).
2. The only country that has a liquid domestic market for long-term debt is Chile. However, that market is not denominated in a nominal unit, but in a real inflation index unit. This may be an important avenue to consider. Up to now the Chilean government has been unwilling to allow its companies to borrow abroad in this index unit. It may be one way out of original sin for that country.
3. This issue is also taken up in Hausmann and Powell (1999) where different alternatives for the issue of seignorage are discussed.

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**PART TWO**

**NATIONAL AND INTERNATIONAL  
RESPONSES**



# Co-ordination for Stability

*Ernesto Acevedo*

The link between financial markets and the performance of the global economy is so strong that a sound financial system is a prerequisite for sustained economic growth. That is why strong financial regulation and supervision are essential, not only to ensure financial stability, but also to promote global growth.

In this sense, current arrangements have made a significant contribution to raising the standards of soundness and risk-awareness in financial systems. These are remarkable achievements and represent an important response to the dichotomy of fragmented supervisory structures and increasingly integrated markets.

However, there are some important aspects which still require improvement. We need to bring together the major international institutions and national authorities involved in the financial sector so that they can work in co-ordination to improve the stability of the financial system. In addition, it is very important to integrate emerging market economies more closely into the debate and to involve them in the entire process of stabilising the financial system, otherwise the whole process might fail.

Recent events in international financial markets have highlighted many areas in which improvement is needed. Two of them deserve special mention:

First, increased effort is necessary in order to identify incipient vulnerabilities in national and international financial systems. We need a better understanding of the sources of systemic risk that could enable us to formulate more effective financial, regulatory and supervisory policies to mitigate those sources. We know that systemic risk can arise from many factors and circumstances including macroeconomic weaknesses and unsupervised financial service providers, mainly highly leveraged institutions. We also need to be very careful of spillover effects which could arise from difficulties at non-bank financial institutions and large insurance companies. All of this will require transparency, close monitoring and an effective exchange of relevant information among financial institutions and national authorities.

Second, more effective procedures are required to ensure that international rules and standard codes are developed and implemented. However, in emerging-market economies these rules and standards need to be implemented gradually so that capital flows to these countries will not be affected.

These goals call for intensifying the co-operation and co-ordination between national authorities, international regulatory bodies and the international financial institutions. They also call for greater involvement of the emerging-market economies in this process in order to ensure the commitment of these countries to implementation of the standards. National and international regulatory authorities must develop procedures to ensure that market participants (basically the private sector) pay attention to the standards and apply them so as to manage the risks that they incur. This process has to guarantee not only that such codes and procedures are implemented but also that they will not disturb the flow of capital to emerging-market economies.

Mexico recognises that a more open and integrated financial system has led to a large increase in capital flows to emerging market economies and resulted in greater benefits to both emerging economies and developed countries.

The decade of the 1990s has witnessed strong economic growth in emerging markets. For instance, excluding Russia, real GDP growth in these countries has averaged 5 per cent per year. This result reflects progress in establishing sound macroeconomic policies and also progress in implementing important structural reforms.

However, after the recent financial crises, we have seen sharp swings in both capital flows and market sentiment towards emerging economies. It should concern us all that net lending by banks and capital markets to major emerging-market economies in 1999 is likely to have been zero or even been negative, in contrast to a peak of \$207 billion in 1996 and an annual average of \$110 billion during 1994-98.

We recognise that liberalised financial markets have compelling benefits such as savings mobilisation and efficient investment allocation while, at the same time, smoothing consumption and diversifying portfolio options. There are clear efficiency gains from relying on the market. However, there are some circumstances in which we cannot let the market work alone and in those circumstances regulation and supervision are needed.

In this sense, capital account liberalisation must be embraced after banks have upgraded their risk-management practices, supervisors have strengthened their oversight of financial institutions and governments have corrected their macroeconomic policies.

In this regard, Mexico has corrected many of the macroeconomic imbalances we saw a few years ago. In particular, the federal government has adopted a flexible exchange rate regime that allows the economy to absorb the effects of external shocks better. In the year 2000, the federal government expects a public deficit of 1 per cent of GDP and a current account deficit less than 3.1 per cent of GDP, while the monetary authority has set the inflation target at 10 per cent.

Mexico has also implemented ambitious measures to improve the disclosure of fiscal, monetary and financial statistics. Additionally, the Mexican Congress has approved legislation regarding the implementation of a series of significant reforms of the financial system. These reforms include the Protection of Banking Savings Act and the Financial Service Consumer Protection Act.

Despite these and other recent achievements, however, the federal authorities recognise that they must continue with their efforts. Further measures include the establishment of internal controls within financial institutions, the strengthening of corporate practices and the adoption of an efficient corporate bankruptcy law.



# **The Complementarity of National and International Reform**

*Marcos Caramuru de Paiva*

If one looks at the four last crises that happened in the world, two started in Latin America, the other two did not start in Latin America but Latin America was greatly affected by them.

This could mean that Latin America is one of the most fragile regions susceptible to crises, but at the same time perhaps the best prepared to deal with crises when they occur. Actually, the crises in Mexico in 1995 and Brazil in 1999 both had a very limited spill-over effects and were of short duration compared to the Asian crisis and to the Russian crisis, whose impact still continues.

Reforms have taken place. Lessons were learned in terms of debt management, restructuring of the financial systems, banking supervision and different choices in terms of exchange rate regimes or in terms of limitations to capital flows. If macroeconomic policies are consistent with these choices, the problems will not be so great.

We are still under the impact of the recent crisis and one has not seen a very enthusiastic year in terms of flows of capital to emerging markets in general and to Latin America in particular. Some countries have seen very strong flows of FDI; this is the case of Brazil, but portfolio flows have not been as strong as they were in the past. There still is a certain degree of doubt on whether the sound policies that have been implemented in the region are enough to maintain a regular and stable flow of capital to Latin America in years to come and then reduce the risk of crisis and the risks that are inherent in the costs of crisis; costs for the society, or in terms of growth, inflation, costs for the public sector, and costs in general for the country.

The question one might ask is whether the steps that have been taken by the international community will be conducive to guaranteeing a stable and regular flow of capital to emerging markets in general and to Latin America in particular. Basically, the choice of the international community was to follow an incremental approach according to which institutional reforms should take place in a number of emerging

markets. There would be some improvement in fund surveillance and in surveillance by the multilateral institutions and better regulation and supervision of markets, particularly in more mature economies.

There is no doubt that all these steps are needed, but the question is: are they enough to guarantee the stable and regular flow of capital that is needed in emerging markets, given the fact that Latin America, in terms of policy response, has been following the right lessons and delivering the results that could be expected from the region?

Certainly, the international community needs to do more. It needs to do more first in the area of crisis prevention; needs to do more in terms of finding the right incentives for financial institutions, individual financial institutions, to improve the quality of risk assessment and the capability of understanding different markets and differentiating different markets; it needs to do more to understand better how liquidities are created, how contagion occurs, and what kind of measures could be taken to prevent the spread of contagion in the way we have seen since the Asian crisis.

The risk that we Latin Americans, or at least in Brazil, see in the steps that have been followed by the international community is that they are conducive to either a reduction in flows or an unnecessary increase in spreads, and that the results that we would expect in terms of stable flows are not going to occur.

The incremental approach has not been tested either because of the crises themselves or because of the anticipation of the Y2K problem. We have not seen the level of portfolio flows to Latin America that we have had in the past, and if the situation changes we still are uncertain about what kind of impact this is going to have in terms of an expansion in liquidity and capital flowing to the region and being followed by a sudden reduction in liquidity and the risk of new crises.

Thus, *i*) the international community should do more to prevent crises, and *ii*) whatever is done, no bias should be created towards reducing the flow of capital and increasing unnecessary spreads.

As far as the role of the international institutions is concerned, it is clear that, in the absence of a forum that is representative of emerging markets and more mature economies, what one sees is a proliferation of additional forums, such as the G-22, 33 and now 20. They are important forums because they bring in the possibility of emerging market countries participating in a way that doesn't have the formality or the number of votes which is associated in their participation in the multilateral institutions.

Finally, much of what should be done in the international community will depend on the recognition by more mature economies of the fact that their own decisions in terms of economic policy making will affect other smaller economies and middle-size economies and thus will have to be taken into account more directly and more effectively than before the crises that we have recently seen.



The economy of Brazil, after a very difficult starting point this year was able to deal with a crisis much more effectively than we had first imagined. We are going to close the year with growth of between 0 and 0.5 per cent, a slight positive growth with inflation around 6 per cent which was the inflation target that had been established previously with FDI flows. These are now around 130 per cent of the current account deficit, so it has been financed entirely by stable, long-term flows, and with fiscal, social security, tax reform and fiscal responsibility.

We are convinced that if we manage to go ahead with reforms, we will be helping to create a more stable environment for better integration into international financial markets, but domestic policies are extremely important in their own right. They are crucial to prepare countries to face the ups and downs of the international financial markets, but they are not enough.



# Global Finance from a Latin American Viewpoint

*Pablo Guidotti*

The phenomenon of globalisation that we have seen in the 1990s has certainly been very beneficial for developing countries; it has been beneficial for trade, for investment and for growth. Thus globalisation and open capital markets should be seen in a positive light.

The drawback, however, the problem that we have faced in the 1990s is volatility, a volatility which has hit countries having very diverse characteristics. We have still a long way to go in understanding the causes of volatility and contagion, but it is quite clear that countries can have external effects on other countries. We need to have an international approach to the subject of capital flows because there are channels of international transmission. The objective is to try to induce the resumption of sustainable capital flows to emerging markets. We tend to act under crisis conditions, and crisis sets our agenda, but it is most productive to implement recommendations based on what we can learn from a crisis during a normal period. Therefore, the international community should keep what we have learned in the last two years very high on the agenda in coming years.

A combination of domestic and international issues needs to be addressed. From an emerging-market point of view, one would be tempted to call for help from the international community. Yet, that is probably not the most productive way to go about things. If we do the right things domestically, the international community can develop institutions for dealing with contagion or external effects.

In this respect, let us consider the Argentine experience of the last five years. Argentina succeeded in managing all these crises remarkably well, although their impact should not be disregarded. Thus, perhaps there is something about our approach and some of the reforms that we have made which were actually useful.

There are two aspects of domestic policy which are essential. The first of course is fiscal policy, and what fiscal policy looks like depends on risk premia.

The second area in emerging markets is institutional strength: the strength of government institutions, the quality of spending on education, meeting social needs and strengthening the judicial system. The work of the judicial system is essential to

the enforcement of contracts, and contracts are essential for financial markets. These are areas in which we have not done enough but which are an essential part of reducing country risk premia.

The question now is dealing with volatility. Basically, we have to deal with volatility in three main areas: the financial sector, the public sector and the corporate sector.

In Argentina, we have approached the financial sector a little differently by always stressing the importance of having capital requirements that were higher than recommendations at the time. There is nothing particularly new about this; in fact some other emerging countries have also done this. The interesting thing is that, typically, when one chooses to have higher capital standards, the industry will say that this will lower profitability, and that will diminish competitiveness. This does not seem to be the case in Argentina, judging by the amount of foreign investment that has been made in banking during the 1990s. In fact, the tremendous amount of foreign investment in banking shows that a strong banking system is seen as being potentially more profitable.

The area in which we have perhaps advanced the most (and which in 1994 nobody really was looking at) is the area of liquidity. An emerging market has to have liquidity in foreign assets. Typically, one regards liquidity of banks as being held in domestic government bonds, but the fact is that in our case domestic government bonds lose liquidity during periods of high volatility, so actually they are not really very liquid. In fact, banks in emerging markets tend to hold much less in government bonds than their counterparts in industrial countries. Thus, there is reason for a government policy of requiring banks to hold some amount, some proportion of their short-term liabilities in foreign bonds, for example.

Essentially, this approach responds to the fact that the central bank alone should not be relied on to provide liquidity to the market. Banks themselves have to hold liquidity because otherwise, when there is the need for liquidity, there will be a very significant strain on credibility, on fiscal credibility, if everything is put on the shoulders of the central bank. Moreover, the opening of the financial system to international banks has also benefited Argentina greatly by enhancing the financial system's stability, providing a secondary channel of liquidity into the system, and gains from technological transfer.

Another aspect that has been very positive for the behaviour of the financial system in Argentina has been transparency. During the periods of high volatility we have responded to volatility with a lot of disclosure: disclosure of daily data on international assessments and daily data on deposit behaviour. When there is anxiety in the market, it is magnified when there is a lack of information

Finally, we have learned that closing a very small bank in periods of crisis can lead to systemic effects, while there will be little systemic effect if a medium-size bank is closed in good times. This simply shows that banking problems should be dealt with in good times, when possible. In fact, we have learned how to liquidate

financial institutions with a very small effect on the treasury, by simply having legislation which provides seniority to depositors, and especially to small depositors, while other liabilities bear the cost of bad investments. Argentina has had three years of experience with this liquidation process, or this way of dealing with banking problems, which has shown that it does not generate financial instability if some investors lose money in banking.

In the public sector, we primarily have to work on debt management. We have worked a lot on having a long debt maturity. There has to be an understanding of how the market works and we also need to have a pre-financing policy for the treasury so that it will have liquidity to meet a significant portion of the following year's financing programme. The maturity issue can be dealt with by primary issues and also very effectively by debt exchanges during good times. But again, this is an area in which it is very important to deal with before problems occur. In a period of market volatility, it is very hard to make significant debt exchanges. In fact, during periods of volatility it might be useful to examine Argentina's experience in which some recent bonds were issued with World Bank warranties; this permitted a significant increase in the amount of funds provided by the World Bank and also at a much lower cost.

It is very important to develop domestic markets. This covers major structural policies such as the privatisation of social security, which provides for the growth of pension funds and legislation authorising the creation of mutual funds. These two types of institutional investors, which legislation provided for during the early 1990s, now manage assets equivalent to about 8 per cent of GDP, and this amount will continue to grow at about 1.5 per cent of GDP per year.

In terms of the corporate sector, it is important that in general we have found that the maturity structure of corporate debt follows, to some extent, what the government does. If the government is able to develop long-term markets then the corporate sector will also tend to have a long maturity. Our average maturity of domestic or government debt is about 9 years, and the average maturity of non-financial private debt is about 4.5 years.

It is also very important to have good information about the stock position of the private sector. First of all, consider the composition of the private debt. Who owns it? Who is actually the debtor? We have found that 80 per cent of our corporate debt is issued by multinational corporations, which may explain why Argentina has not had big problems of corporate default during these periods. The other aspect is the net external position of the country's balance sheet. Argentina's public sector is a net debtor. On the other hand, the corporate and non-financial private sector is a net creditor. Argentina thus has more foreign assets than debt in the non-financial private sector, and the financial system is more or less balanced.

Exchange rate policy is one aspect of overall risk management. We have to understand the responsibilities of every choice of exchange rate regime. A currency board may require more liquidity than a flexible exchange rate regime. However, it has some benefits; it provides for longer term markets and so on.

What does all this imply about the international environment? If countries are able to develop an adequate overall risk-management policy, then multilateral institutions or the official international community should be able to provide liquidity in exceptional circumstances, which is limited but effective, not huge packages, but sufficient funds to tide a country over for a reasonable period of time.

This implies a strict requirement for domestic debt management. However, it also implies a role for multilateral institutions in liquidity provision. This is a useful alternative to international bankruptcy legislation which would be extremely difficult. The international community should base its policy on national bankruptcy principles. We have to be sure that every country has national bankruptcy principles and then the international community should make certain that countries abide by those principles in case of default. This avoids the legal difficulties of having international legislation but, at the same time, provides the needed certainty in terms of contractual obligations for the markets. It is a bad idea, as in the case of Ecuador, for the international community to try to change the seniorities of different types of credit. That is really a very messy way of dealing with a crisis.

# Financial Globalisation Seen from Europe and from France

*Jean Lemierre*

I would like to contribute a two-fold perspective, both French and European, to the overall debate on the crisis, on the various approaches to globalisation, and on European views concerning these issues.

*1) From a European standpoint, the recent financial crisis seems to have had only a moderate impact*, despite the great concern expressed a year and half ago about its consequences for the North American economy and hence the European economy. In the end, this concern proved to be only partly justified. The current economic slowdown in some European countries, notably Germany and Italy, is partly due to the greater difficulty of exporting in a less favourable international climate. Most European countries have weathered the crisis, thanks to the Economic and Monetary Union and especially thanks to the euro.

The case of Finland provides an illustration. This country was rocked simultaneously by the fall in raw materials prices and the political crisis in Russia. The monetary history of Finland suggested that a depreciation of the currency (the markka) should have ensued, but in fact this did not occur. This observation holds true for all of the European economies.

This highlights the importance of a regional approach, particularly for exchange rate policy, and suggests that the extension of the discussions on regionalism in Latin America and Asia is indeed worthwhile.

*2) Still from a European viewpoint, this crisis demonstrates the need to strengthen the international financial system.* The burden of this adjustment should fall equitably on all actors: partly on the industrialised countries, partly on the emerging countries, partly on the private sector, partly on the international financial institutions. There can be no simple approach in which only one of these partners adjusts and the others remain exempt. This should not, however, prevent us from giving priority to certain approaches and remedies.

These priorities are as follows:

*Stronger international financial regulation.* The creation of the Financial Stability Forum and the work conducted there under Andrew Crockett are vital in this respect. In early 2000, the Forum should yield operational conclusions on questions relating to offshore financial centres, unregulated institutions and even the highly sensitive issue of short-term capital movements.

*The involvement of the private sector and moral hazard.* The issue of moral hazard needs to be addressed in order to avoid behaviour linked to the “too big to fail” syndrome. This is a sensible rule which has been mentioned repeatedly and developed by many financiers and economists. In this context, how can the private sector be made to assume a measure of responsibility? This is a difficult question, and one that should be addressed quickly in order to avoid disruptions in financing flows and the cost of financing.

There is consensus on the responsibility of private actors in the context of crisis management. From a political standpoint, the recent crises led to the disbursement of appreciable amounts of international public aid by the IMF and the industrialised countries. In view of these massive public outlays, it would seem legitimate to insist that all the actors involved should bear some of the responsibility. From an economic point of view, aid packages for crisis-ridden countries can no longer be drawn from public financing alone: the sums in question are far too large.

Lastly, a degree of pragmatism should be observed in seeking to involve the private sector. In addition to the case-by-case approach, an overall framework could be developed by the International Monetary Fund.

*The issue of exchange systems.* This important topic calls for further examination, and the International Monetary Fund’s work in this area should be examined and debated in the near future. Nevertheless, certain statements that have been made on the subject call for qualification: we should remember that the exchange rate system is a consequence rather than a cause of the economic policies followed. Ultimately, it is the consistency, cohesiveness and sustainability of economic policy which determine the exchange system, and not the contrary. Some current debates on this issue, in which the exchange rate regime is regarded as the sole source of credibility for a country, would do well to return to fundamentals: the content of economic policies, the sustainability of those policies and in particular, effective application of decisions. The last item is worth emphasising because the *implementation* of economic policies and structural reforms is a central issue, discussed in all the forums mentioned here.

3) *If these debates are to be useful, they must be open to as many actors as possible:* the existing forums in which these issues are discussed should be used to the full, and more should be created. The leading forum which is suitable for this type of debate is the Interim Committee of the International Monetary Fund. France has argued that the Interim Committee should have more responsibility and political legitimacy. This essential reform will move forward, because it will be impossible to manage



financial globalisation without the broadest possible participation. It is within the IMF that the greatest number of countries is represented, and hence the IMF is the authority having the greatest legitimacy in this respect.

There are also two new arenas in which these questions can be debated: the Financial Stability Forum, mentioned earlier, and the G-20. France is strongly in favour of these two bodies, whose purpose is to promote effective communication. Their existence is testimony to the role and influence of the emerging countries in the process of discussing and drafting the operational rules governing the international financial system.

Lastly, we must work towards a more legitimate and broad-based dialogue between countries. This is the only effective means of preventing crises.

I wish to thank all of those present for starting and contributing to this type of debate, as it is by such means that progress will be achieved.



# Global Finance from a European Viewpoint

*Vittorio Grilli*

The last ten years has brought to light the great increase in the power of transmission of a new financial system. Financial crisis that starts very far away, in places which many of our citizens do not even recognise on the map, somehow have an impact on our economies. It is true that Europe was either lucky or well prepared to deal with this major crisis. As a whole Europe has withstood the crisis fairly well. Clearly, the impact has not been homogeneous. However, one important thing is that the major impact did not work through the usual financial channels because the origin was initially of a financial nature. The financial markets *per se* were able to withstand the shock. The impact came later, at least in Italy, in the real market through the trade sector. The interaction between financial market, financial crisis and the real economy has been changing. So we have to be watchful, not just of the solidity and the surveillance of the financial markets *per se*, but also of the connection and the impact that this quick transmission through the financial markets has on the real economy.

From a European point of view the first question is: “What is really new in this new financial crisis with respect to the old one?” Well, a first characteristic was the transmission from the financial to the real market. Clearly, crises are not travelling on copper wire any longer. We now have superconductors. The origins of financial crises, however, are still of a local nature, as they were 20, 50 or 100 years ago. The origins of most financial crises really come from inconsistencies of macro policies to start with, a weakness or inefficiency of local markets and a lack of effective supervision locally. This is the first thing that we have to say, and Europe and the euro zone has understood that this is a very important fact. The development of the euro zone has been an accelerated process of globalisation, clearly within a limited area, but full integration of markets within a rather large area. The construction of the euro zone involved rules so that each country’s house was in order, thereby limiting the possibility of local generation of financial instability and crisis.

Second, there are new aspects that are coming to light because of this globalisation. The major difference is transmission through a different channel, through the equity market. Globalisation of the financial market is now creating new ways of accessing other countries through equity rather than debt. This diversification of equity portfolios

is a new phenomenon which has taken three quite distinct forms. One is through the usual institutional investor diversification that already existed. A second is through corporate decisions and actions, because globalisation of financial markets, especially in Europe, removed barriers to transactions such as take-overs, changing ways of thinking and operating at the corporate, institutional and at the household levels. The third factor is behavioural change: the direct entry of households into equity markets, first locally but now internationally. This latter development is new and is still in its infancy, especially in Europe. The possibility of accessing equity markets through the internet is changing the environment significantly. Financial movements, financial transactions and possibly financial instability may be transmitted to the real economy by this process.

We should be careful not to confuse stock and flow adjustments which are due to financial instability from those which result from increased competition linked directly to globalisation. Globalisation opens up countries and economic systems to increased competition. In a sense, many of the flows which generate short-term instability are not necessarily unstable in nature but are a response of economic decision makers reacting to different levels of competition of different markets. This impact of financial globalisation also has to be watched. This increase in competition across economic systems will bring about a lot of tension, not because there is underlying instability, but because of the competition of different systems having different levels of efficiency and industrial structure. Sometimes, perhaps, this short-term destructive stock adjustment should not be considered as bad news. It may not be good news, but it may well be part of an inevitable movement towards a better steady state.

# Excessive Short-term Flows

*by Klaus Regling<sup>1</sup>*

One of the issues of crucial importance for crisis prevention and crisis management is: What can be done to dampen excessive short-term capital flows? As a starting point, let us recall that Professor Nunnenkamp said that there are really two problems that need to be addressed when we think about international capital flows: on the one hand these flows are quite small in relative terms compared to the situation before World War I and, on the other, they have been very volatile. Here, we will talk about the second problem, excessive volatility, which is very much linked to the relative importance of short-term capital flows.

Why is it important to find ways to dampen excessive short-term capital flows?

- It was the withdrawal of short-term claims in the second half of 1997 and in 1998 that contributed to the financial crisis in Asia. All crisis countries had a relatively high share of short-term debt in their total external debt. Alan Greenspan has said that short-term bank lending was the “Achilles heel” of the crisis countries. Indeed, commercial banks, which had increased their exposure to emerging markets by almost \$120 billion in 1996, withdrew \$45 billion in 1998<sup>2</sup>.
- A financial crisis can only spread faster to other countries if creditors have the possibility of withdrawing claims rapidly. That is much easier if a large share of the external debt is short-term. Contagion and/or global panic are therefore more likely with a lot of short-term debt.
- Helmut Reisen has presented evidence that short-term capital flows, unlike longer-term flows, such as foreign direct investment, do not contribute much to growth.
- Finally, it may simplify the international debate on the reform of the international monetary system to agree on a pragmatic approach, instead of endless discussions about “moral hazard” and “too much, too little”.

Of course, not all short-term cross-border claims are “bad” — trade finance requires short-term capital, for example — but volatility in capital flows seems to be associated with a high share of short-term debt that can be considered excessive. What

are the measures that could dampen short-term flows? There are eight, broad areas that should be considered. Most of them have been discussed during the conference, but generally in isolation. Many emerging markets have some of the measures already in place, but rarely all of them. A comprehensive list of possible measures would contain the following:

- 1) *better banking supervision*, including limits on maturity and currency transformation;
- 2) *Chilean-type taxes* on short-term capital inflows. We know, such taxes are not really effective over a longer period of time, but they may work in some countries for a while;
- 3) *better external debt management*, including a shift to more long-term debt and the use of contingent lines of credit, as explained by Pablo Guidotti (see elsewhere in this volume);
- 4) for emerging markets that do not have capital account convertibility yet, *better sequencing in the capital liberalisation process*. Korea, for example, had started its liberalisation at the short end of the market. Anybody who wanted to hold Korean claims had to invest short-term and was therefore in a position to withdraw quickly when the crisis hit;
- 5) *more efficient exchange rate regime*. One of the key reasons for the Asian crisis was that these countries had pegged their currencies too rigidly for too long to the US dollar. With respect to their international competitiveness, this policy worked as long as the dollar weakened internationally until early 1995 (Mexican crisis). During the subsequent dollar-strengthening, +60 per cent vis-à-vis the yen and + 40 per cent vis-à-vis European currencies, competitiveness suffered. For external borrowing this big dollar swing was even more disastrous. The pegs had been kept in place for so long that those who borrowed in dollars no longer perceived that they had incurred a currency risk. This made borrowers and lenders increasingly careless;
- 6) *revision of the Basel Accord*. Helmut Reisen has discussed the problems with the proposals currently under discussion (see elsewhere in this volume). In this list of measures to dampen excessive short-term capital flows, the Basel Accord is important because the present accord includes incentives that favour short-term claims and penalise longer-term claims because they require more capital. This approach of the Accord is understandable from the point of supervising individual banks (longer-term claims are riskier than short-term claims), but is negative for the system as a whole;
- 7) *more transparency*. Creditors and debtors often did not know the full extent of lending to and borrowing by certain countries. Often there was no clear picture of the overall short-term debt, including off-balance sheet liabilities (for example of central banks). Consequently, the country risk was underestimated. More transparency could have avoided some of the excessive short-term flows;

8) *more comprehensive involvement of the private sector in crisis resolution.* Creditors should know from the outset that those who receive high risk premiums on certain claims will have to accept the risk from time to time and may have to participate in a burden sharing operation. Ideally, this should be done on a voluntary basis; but occasionally it may require a temporary “standstill” imposed by the international community. Such a framework, with clearly defined “rules of the game”, could be another way of dampening excessive short-term capital flows.

These eight measures represent a broad menu that policy makers should consider in order to dampen excessive short-term capital flows. All the measures are market-based instruments and, though the list may look a lot like “second-best solutions”, that is how the world normally operates.

The list of possible measures does not include controls on capital outflows. Such controls would not work in many countries and/or their imposition can be rather costly. Moreover, financial markets have a strong interest in ensuring that the “rules of the game” are not changed *ex-post*, which is what the imposition of capital controls implies (as in Malaysia in 1998). Rather, policy makers should define the “rules of the game” *ex ante*; then markets can and will adjust accordingly.

Of course, containing short-term flows will not prevent all future crisis:

- “Good” macroeconomic policies remain essential to preventing crisis;
- If a real crisis hits, foreign creditors can reduce their exposure even if they have no short-term claims. They can borrow in the crisis country short-term, use their longer-term claims as collateral, and leave. (All this would be more expensive, however, than the quick withdrawal of short-term claims.);
- Capital flight by residents has often been more important than withdrawal of claims by non-residents.

Nevertheless, the fact remains that all crisis countries during the last two years had previously attracted an excessive amount of short-term capital inflows. If that can be avoided in the future, through the measures outlined above, the frequency and depth of future crisis could be reduced. Certainly, the scope for contagion would be less. If there were fewer boom-and-bust cycles, perhaps the basis could be laid for more long-term capital flows that really contribute to growth and long-term development.

## Notes

1. Managing Director of Moore Capital Strategy Group, London, and former Director General for European and International Financial Relations at the German Ministry of Finance. This statement presents his personal view.
2. Institute of International Finance, Capital Flows to Emerging Market Economies, September 25, 1999, Table 1.





# Post-crisis Reconstruction: the National Dimension

*Ignazio Visco*

Many conferences have taken place on issues related to the recent financial crisis in emerging economies. This conference is particularly promising for its subject matter as well as for the way it is structured and the quality of the participants. Even if views still differ on both the nature of the crisis and its consequences, as well as the longer-term institutional and policy changes needed to foster an overall safer financial environment, a number of points can be made concerning what we have learned and about the successful responses to the crisis. However, the starting point should be that not much should be expected as a result of the efforts to reshape the so-called international financial architecture, and efforts should mostly concentrate on what should be done to make countries more resilient to contagion and panic effects.

First of all, we have learned a number of lessons that could be summarised in at least five points:

- Rigid exchange rate pegs directed at price stability or export promotion objectives carry an inherent risk of becoming unsustainable because financial imbalances — also associated with large fluctuations of the anchor currency — are perceived as persistent and rising. As this is, sooner or later, a rather likely event and as it is very difficult to determine the precise timing for giving up an exchange rate peg, (small) open economies seem not to have much choice between the extreme forms of fully flexible exchange rates and completely fixed ones supported by currency boards. In both cases, important conditions have to be met to avoid negative economic consequences, keeping inflation expectations under control in the first case and setting the exchange rate at a value that adequately reflects economic fundamentals in the second. It is as obvious, in this case as it is essential to make sure that fundamentals remain consistent with the chosen exchange rate parity. A strong and well-capitalised banking system is also necessary in order to meet adverse shocks.

- Complete liberalisation of short-term capital flows, with contemporaneous substantial restrictions to long-term foreign capital inflows (fixed direct and equity investment), produces a fundamental distortion that amplifies the risks of contagion and may lead to extreme pressure on a currency even in the presence of otherwise seemingly satisfactory macroeconomic fundamentals.
- The provision of adequate information on the size and composition of a country's foreign external position, including not only the level of official reserves but also information on the maturity of domestic banks' foreign indebtedness, is essential to maintain orderly market conditions. Transparency on capital flows and on the underlying stocks is necessary (though not sufficient) to produce timely responses when imbalances start to threaten.
- To restore confidence on the part of investors after a crisis requires both a return to a consistent and prudent macroeconomic policy setting and the recognition that growth prospects will not be jeopardised. This has important implications with respect to the stabilisation programmes put in place following a crisis, since it is clear that one size does not fit all. In particular, while an increase in short-term interest rates might often be the inevitable response to counter an extreme depreciation of the currency (and an especially necessary one if firms' balance sheets show a very high level of foreign currency indebtedness), the fiscal policy reaction very much depends on the state of public finances as well as on the need to offset possibly dramatic reductions in employment and the level of domestic demand.
- To avoid capital flows that may be excessive, given the riskiness of the underlying investments, the latter need to be properly priced. This leads to a need for revising the role and significance of capital adequacy standards such as those agreed in the 1988 Basel Accord. In particular, it should not be taken for granted that OECD membership is the most appropriate prerequisite for guaranteeing the lowest possible risk attached to short-term bank lending.

Considerable attention has been given to moral hazard as a possible element that might explain the building up of a systemic crisis. Without denying that this factor might at times play a non-negligible role, the stability of a modern dynamic financial system is not necessarily guaranteed. Quite apart from what might trigger a crisis, its diffusion depends, in fact, very much on the building up of self-fulfilling expectations, on the prominence of herd behaviour in conditions of partial and heterogeneous information, on "beauty contest" phenomena that are difficult to avoid. Therefore, even more important than how to prevent a crisis from taking place, the question might be how to act to reduce its impact and volatility in real economic conditions that might be associated with it. It should also be observed that, while the short-run consequences might be very severe, experience seems to indicate that only in very difficult times do crucial measures that make the domestic economies more crisis-resilient end up being taken. Clearly, the positive consequences of these measures crucially depend on the associated structural reforms not being withdrawn as the "good" times arrive.

This leads to a further observation. Perhaps too much emphasis has been given so far to the search for (“optimal”?) exchange rate mechanisms (in a menu that ranges from fully flexible to completely fixed exchange rate systems, including single currency areas). Correspondingly, we risk not giving sufficient attention to the fundamental necessity of enforcing coherent macroeconomic and structural policies and conditions that are needed to support any exchange rate system. Consider, for example, the proposal advanced by Eichengreen and Hausmann to look at the European countries’ experience during their progress towards the EMU. To guarantee capital flows towards emerging economies, they claim, a necessary condition is to reduce interest rate volatility (and the burden associated with the connected risk premium). The European experience is therefore interesting, as the drive towards monetary union would seem to have led towards a substantial reduction of interest rates “in the continent’s chronically high interest rate countries, making it easier to cut budget deficits and stimulate growth”. It nonetheless has to be observed that the reduction in the level and volatility of interest rates in these European countries (i.e. the interest rate convergence among the countries participating in EMU) was a condition for their taking part in monetary union rather than a consequence of such a decision. The convergence was only made possible by substantial progress improving economic structures and public sector finances that led to a remarkable reduction in inflation rates and fiscal deficits, and to a period of sufficiently stable exchange rate conditions. On the other hand, considering the proposal of “dollarisation” recently advanced, for example, in the case of Argentina, there is a risk that the country might be negatively affected by fluctuations in US interest rates and in the effective exchange rate of the dollar, especially if the product and labour markets are not flexible enough. Also in the case of an exchange rate bilaterally fixed with respect to a single foreign currency, even in a currency board arrangement, such risks are obviously present. Such an arrangement might be modified, however, and to avoid real and perceived competitiveness losses consideration might, for example, be given to linking the national currency to a basket of a small number of important currencies rather than to a single one.

Responses to financial crisis are obviously different depending both on the origin of the crisis and the initial conditions of the economies involved. However, even if we are still far from the possibility of expressing a final appraisal, in a number of countries the exit from the 1997-98 crisis seems to point in a positive direction. In Southeast Asia, the V-shaped recovery, as in the case of Korea, is very much the result of a proper mix of policies and structural reforms in the corporate and financial sectors, as well as some positive developments in the labour market. In Brazil, the macroeconomic adjustment is, eventually, likely to bear fruit. Even if the crisis has had dramatic effects in many countries, the counterfactual question of whether it would have been (politically) possible to adopt proper policies in the absence of pressure from a critical situation is very difficult to answer. Other experiences of advanced economies seem to suggest that even if in good times structural reforms would certainly be much less costly, it is most often the case that only a crisis will induce the necessary policy changes. What is important is that these not jeopardise the growth prospects of the real economy. Reducing the regulatory burden in the corporate sector, and at the same

time increasing transparency and improving the governance system, therefore have to go hand in hand with healthier and more efficient banking and financial systems. The Korean experience of 1998-99 is important as it shows that a wide range of structural reforms may have a significant impact in restoring the confidence lost during a crisis. Even if confidence might be an elusive concept, as Krugman and Stiglitz have recently forcefully observed, this does not mean that we should not pay attention to it, as it plays a crucial role in investment decisions. Even if a comprehensive effort towards structural reforms may not be, by itself, a guarantee towards rapid recovery from a crisis, especially if not accompanied by supporting macroeconomic conditions and policies, it is certainly a very important element to ensure its sustainability. The best response against a financial crisis, then, is likely to be that of building stability-oriented institutions while, at the same time, ensuring that market relations have a transparent and efficient environment. This might not be sufficient to prevent a crisis from occurring, and perhaps even spreading to the global economy, but it would help significantly in dampening its effects.

The need to provide better information on the state of an economy is often mentioned as a prerequisite for a proper assessment of sovereign risks. Transparency should not only be applied to produce appropriate statistics of real and financial transactions with the rest of the world, but a more thorough assessment of real economic developments and prospects also appears to be needed. Proposals have been made to give to an institution such as the IMF the role of “formally” judging the progress and the failures of the various countries. An enhancement of the role played by private rating agencies has also been examined, even if much evidence has been accumulated on their lagging behaviour, and associated destabilising effects, in the evaluation of country risks. While the possibility of producing (peer-examined) reviews of emerging economies along the lines of the country surveys that are part of the OECD surveillance process might well be considered, it is mostly the responsibility of the countries themselves to provide the information and analysis that is currently lacking. There should be an especially strong incentive, in fact, for countries with strong fundamentals, consistent policies and solid institutions — from which stable growth prospects appear to follow with high probability — to provide market participants with the elements necessary for discriminating properly among different risks.

*Tenth International Forum on Latin American Perspectives*

**PROGRAMME**



*Tenth International Forum on Latin American Perspectives*

*25-26 November 1999*

**Global Finance from a Latin American Viewpoint**

Thursday, 25 November 1999

**Session I. What's Wrong with International Financial Markets?**

Chair: Ulrich Hiemenz, Director,  
OECD Development Centre

Introductory Remarks: Jorge Braga de Macedo, President,  
OECD Development Centre

Introductory Remarks/  
Presentation Ricardo Hausmann, Chief Economist,  
Inter-American Development Bank

Discussants: Wolfgang Fritsch, Head of Division, International  
Relations Department, Deutsche Bundesbank

Hans Blommestein, Head, Financial Affairs Division,  
OECD Directorate for Financial, Fiscal and Enterprise  
Affairs

**Session II. The Paris Club and the Private Sector**

Presentation: Philippe de Fontaine Vive, Vice President of the Paris  
Club and Deputy Director at the Treasury, France

Discussants: Frans van Loon, Managing Director, Emerging Markets  
Group, ING Barings, Amsterdam

Edward Luce, *Financial Times*

### **Session III. Getting It Right: What to Reform in International Financial Markets**

Chair: Ambassador Francisco Suarez Davila,  
Permanent Representative of Mexico to the OECD

Presentation: Eduardo Fernández-Arias, Lead Economist,  
Inter-American Development Bank

Discussants: Guillermo de la Dehesa, Vice Chairman,  
Goldman Sachs Europe Ltd., Madrid  
  
Peter Nunnenkamp, Head of Research Division,  
Kiel Institute of World Economics

### **Session IV. Revisions to the Basel Accord and Sovereign Ratings**

Chair: Ricardo Hausmann, Chief Economist,  
Inter-American Development Bank

Presentation: Helmut Reisen, Head of Research Division,  
OECD Development Centre

Discussants: Lionel Price, Managing Director, Sovereigns, Fitch IBCA  
  
Pablo Graf, Economist, Monetary and Economic Department,  
Bank for International Settlements

### **Session V. New Suggestions for Monetary Arrangements**

Chair: Jorge Braga de Macedo, President, OECD Development Centre

Presentation: Ricardo Hausmann, Chief Economist,  
Inter-American Development Bank

Discussants: Daniel Cohen, Special Adviser, OECD Development Centre and  
École Normale Supérieure, Université Paris I, France  
  
Pedro Pou, President, Central Bank of Argentina



Friday, 26 November 1999

**Session VI. Rapporteur Session on Thursday's Findings**

Presentation: IDB and OECD Development Centre

**Session VII. Panel Discussion: Global Finance — A View from Two Regions**

Chair: Sally Shelton-Colby, Deputy Secretary-General, OECD

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Ignazio Visco, Chief Economist, OECD

Sweder van Wijnbergen, Former Secretary General,  
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Concluding Remarks: Ricardo Hausmann, Chief Economist, Inter-American  
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PRINTED IN FRANCE  
(41 2000 05 1 P) ISBN 92-64-17647-0 – No. 51179 2000