61 | Policy Brief
Lessons from Financial Crises[1]

Roberto Frenkel

Introduction

I was invited to talk about the lessons from the financial crisis, probably pointing to the lessons to be derived from the global crisis that began in the U.S. in mid-2007 and, incidentally, is still in full development in Europe. I allow myself to modify the contents of my presentation to reflect the lessons of financial crises, involving in my consideration not only the experience of the recent global crisis but also the many crises experienced by developing economies, particularly in Latin America (LA), in the period of financial globalization that began forty years ago.

The abundance of critical experiences in our region is associated with its early inclusion in the globalization process. Brazil began to receive private international finance in the then emerging Eurodollar market in the late sixties. Other countries in the region followed Brazil in the mid-seventies. The depth and long duration of the LA debt crisis in the larger countries in the region slowed for a while the process of globalization in the eighties. But the process accelerated and expanded geographically since the early nineties to give room for new crises in emerging markets in other regions.

The period between the mid-seventies and early 2000s covers a range of crises that provide rich material for the analysis of the phenomenon. The analysis of the common features of the crises provides clear lessons on their causes. Consequently, the conclusions of the study of the set of cases suggest policies to prevent crises and to mitigate their effects and facilitate their resolution once they occur.

The experience of developing economies in the recent global crisis provides another type of evidence. The most remarkable fact is that no developing economy experienced financial crisis in this context. The fact is important because the real and financial negative shocks that hit developing economies at this time were similar to the impacts generated by the 1997-98 Asian and Russian crises. In both episodes the external shocks were of the greater magnitude and the broader geographic coverage that occurred since the beginning of financial globalization.

[1] This Policy Brief is an edited translation of the presentation by Roberto Frenkel at the International Seminar "Towards Inclusive Development in Latin America and Chile", organized by ECLAC, the Initiative for Policy Dialogue (IPD) of Columbia University and the Foundation for European Progressive Studies (FEPS), Santiago de Chile, August 29-30, 2011. The author thanks the support of the research by Ford Foundation.

We associate the novel experience of developing countries in the recent global crisis to two factors. One is the renewed role played by IMF. Innovations in the IMF brought the institution closer to the role of international lender of last resort. It is plausible that the action of the IMF has helped to avoid crisis in a set of small economies that showed great financial and external fragility in mid-2008.

More important is the fact that no crisis occurred in other developing economies, which did not need to resort to IMF support. The second factor we associate with this new experience are the changes experienced by many developing economies in the 2000s. With respect to the dominant features in the 90s and before, significant changes took place in the recent period in the patterns of insertion into the international financial system, in macroeconomic policy regimes and in the regulation of national financial systems. We argue below that the performance of emerging market countries in the global crisis confirms and reinforces the lessons derived from the study of previous crises. The changes observed in many economies are consistent with the prevention measures suggested by those lessons. So, it can be concluded that the robustness exhibited recently by developing economies can be seen as an a-posteriori confirmation of the recommendations derived from those lessons. In what follows we develop the arguments presented in this introduction.

The crises in the twentieth century

In the last three decades of last century (expanded to include the first two years of the 2000s) there were two waves of financial crises in Latin America. The first was the tsunami that swept almost the entire region in the early years of the eighties. The second wave began with the 1995 Mexican crisis, which was followed by the Brazilian crisis in 1998 and the crises in Argentina and Uruguay in 2001-2002. Between the mentioned Mexican and Brazilian crises five economies in East Asia and Russia experienced crises in 1997-98. The Asian and Russian episodes had important financial spillovers and real impacts in LA and helped trigger the mentioned Brazilian and Argentine crises. Each wave of crisis came after a boom of capital inflows to developing countries, both in the second half of the seventies and in the nineties.

Each crisis is unique and different from others in many ways. But in a more abstract level, the LA crises do not show specific traits that justify considering them a distinct analytical category from the aforementioned crises in Asia, Russia and Turkey in 2001. The comparative analysis of the whole set of crises in emerging market countries shows the following common stylized facts:

- In all cases the crises were preceded by a macroeconomic cycle dynamics, with an initial phase of expansion, followed by a period of stagnation or recession, a growing external and financial fragility and finally, the financial and currency crisis.

- The initial phase of the boom is generated by relatively drastic changes in macroeconomic policies and regulations, which typically include the capital account and the local financial market liberalization in combination with a preset rule for the nominal exchange rate (fixation or active crawling-peg). In all cases the nominal exchange rate is fixed or quasi-fixed and the real exchange rate is initially appreciated or appreciates during the booming phase.

- The implementation of the new regulations and macroeconomic rules operate as an exogenous shock on the financial system, which quickly establishes incentives for arbitraging between domestic and foreign assets and leads to the booming phase.

- International capital movements play a crucial role in both the boom and the contracting phase. Capital inflows during the boom are very large in proportion to the size of foreign exchange, money and capital markets.

- Finally, the regulation of local financial market is weak. This may be because the local financial market was recently liberalized or because the expansion of financial intermediation during the boom exceeds the existing regulatory capacity.

In the cases of AL in the 90s, the aforementioned institutional contexts and macroeconomic policies were configured by the application of programs that combined reforms such as trade liberalization and the opening and liberalization of the capital account - along with privatization, tax reform and deregulatory measures in other markets - with anti-inflationary macroeconomic policies in which the fixed or quasi-fixed exchange rate played a crucial role. Mexico implemented a program of this kind in 1988, Argentina in 1991 and Brazil in 1994.

The cyclical dynamics leading to crisis

We have already mentioned that the starting point of the cycle that characterizes the crisis episodes is the conjunction of the local programs with a boom in capital flows to emerging markets.

The implementation of the changes in regulations and macroeconomic policies are followed by massive capital inflows and a first phase of reserves accumulation and high rates of growth of money and credit. There is a strong expansion of domestic demand and price bubbles in real and financial assets such as land, property and shares. With a fixed or quasi-fixed nominal exchange rate, that initially enjoys high credibility, investment in local assets offer high returns in international currency. There are strong incentives to adopt positions in local assets debt-financed in foreign currency.

The real exchange rate is initially appreciated or tends to appreciate in the expansionary phase because inflation is greater than the sum of the international rate of inflation plus the pre-fixed rate of devaluation of the domestic currency. The pressure of the rapid expansion of the demand on non-tradable sectors contributes to the appreciation. As a result of the currency appreciation (to which trade liberalization is added in many cases) and the expansion of domestic demand, imports increase rapidly and the trade deficit widens. The interests and profit remittances components of the current account deficit tend also to increase, more slowly at first and more rapidly on, as debt accumulates and the stock of foreign capital invested in the economy increases.

The evolution of external accounts and reserves reflect one aspect of the cycle. There is a steady increase in the current account deficit. Initially, capital inflows are higher than the absolute value of current account deficits and reserves accumulate. At some point the current account deficit becomes larger than the capital inflows. The stock of international reserves reaches a maximum and then contracts, inducing the contraction of money and credit. However, the cycle is not determined exclusively by this mechanism: capital flows are not exogenous. The portfolio decisions of local and external agents – with regard the portion of the portfolio exposed to country and/or currency risks - are affected by the observed changes in the balance of payments.

The evolution of domestic interest rates reflects the financial aspects of the cycle. The local interest rate tends to decline in the first phase and to increase in the second. As exchange rate policy initially enjoys credibility, arbitrage between domestic and internal financial assets and credits induces the reduction of domestic interest rates in the first phase. Low interest rates contribute to the real and financial expansion. In this context, the financial fragility (in the sense of Minsky) of local agents increases. In the second phase the interest rates rise and episodes of illiquidity and insolvency emerge, first as isolated cases and then as a systemic financial crisis, which often precedes the currency crisis.

The increase in nominal and real interest rates in the second phase of the cycle is also explained by the arbitrage between local and external assets and credits. The sum of the exchange risk premium plus the country risk premium - the added price of devaluation and default risks – sets a floor for local real interest rates and is the main variable that drives their increase. The persistent increase in the current account deficit - and from a certain point the contraction trend in international reserves - reduces the credibility of the exchange rate rule, on the one hand, while increasing, on the other hand, the probability of default of the debt issued in international currency. The maintenance of the exchange rate rule and the regular service of external obligations require increasing capital inflows. Therefore, the prices of risks tend to increase. Higher risk premiums and consequently higher interest rates are required to balance the portfolios and attract foreign capital. The economic activity contracts and episodes of illiquidity and insolvency further contribute to reducing the credibility of the exchange rate policy. At the end of the process there is no interest rate high enough to sustain the demand for local financial assets. There are runs on central bank reserves, which ultimately lead to the collapse of exchange rate regime.

The financial crises in developing and developed economies

Financial crises seemed an exclusive attribute of emerging market economies until the emergence of the subprime crisis in the United States. The recent crisis in US and other developed economies prompted a revaluation of the work of Hyman Minsky to analyze the processes that give rise to the crisis. His conceptions were recovered from intellectual exile and revalued because the processes that led to the crisis in the US very clearly reproduced Minsky’s model.

In Minsky's model financial crises are always preceded by a period of economic and financial boom. In the development of this phase, optimism is growing and confidence is increasing. Optimism and confidence tend to reduce the perception of risk and agents, savers and intermediaries, are assuming greater risks. Asset price bubbles that support the financial expansion inflate in the process. At some point a negative episode draws attention to the high degree of risk exposure and a period of distress begins. Renewed risk perception leads many players to prefer liquidity and disarm positions. The bubbles deflate and wealth losses are recorded. Pessimism replaces the previous optimism and the contraction process feedbacks. The development of the downturn leads to the systemic crisis.

The analysis of emerging market crises presented above shows that the processes that lead to financial crises in these economies exhibit Minskyan features similar to those observed in the US economy in the 2000s. Both in the US and in emerging market economies the crises were preceded by booming periods in which financial activity expanded and risk taking increased. Analysis of the range suggests that the crises emerged as the culmination of the same process that caused a growing optimism and encouraged greater risks taking in the boom phase.

However, the crises in developing economies differ from the recent American crisis in one important respect. The difference lies in the factors leading to the initial boom phase and consequently to the entire process. In the crises in emerging market economies, the bubbles that inflate during the boom and the financial innovations that underlie the expansion of the activity are exogenously caused by the confluence of three elements: the opening of the capital account, the establishment of macroeconomic policy rules that provide the context that makes profitable the arbitrage between foreign and domestic assets and lax regulations in the local financial system. In the case of developing countries the conditions that induce the Minskyan cycle are generated by the conjunction of certain macroeconomic policies (particularly fixed or quasi-fixed exchange rates) and liberalizing reforms in the capital account and financial regulations. In developing countries foreign capital inflows and outflows play an essential role both in the expansion and the contraction phases.

Lessons from the crises in developing countries

Overall, the crises in developed economies and developing countries have highlighted the shortcomings of poorly regulated domestic financial systems. The general lesson is that reinforcing and extending financial regulation is essential to avoid instability and crisis. However, a specific conclusion from the study of developing economies is that the prevention of crisis in these economies involves elements that go beyond the regulation of the domestic financial systems. In developing economies, the conjunction of macroeconomic policy with the modality of insertion into the international financial system plays a crucial role in the financial performance. Consequently, crisis prevention in these countries also requires consistent macroeconomic configurations in which the exchange rate policy and the policies related to the management of balance of payments and international reserves are crucial components.

In summary, the study of crises in developing countries suggests that in addition to strengthen and expand financial regulation, countries should: 1) adopt exchange rate regimes providing flexibility to policymakers and preventing speculation, 2) implement measures pointing to the regulation of capital flows and 3) implement policies that ensure the robustness of the external accounts, including the accumulation of international reserves and the preservation of competitive (or non-appreciated) real exchange rates.

Changes in the international financial integration and macroeconomic policies in developing countries in the XXI century

There have been important changes in developing economies in the 2000s, in comparison with the previous thirty years of financial globalization, both regarding the modalities of international financial insertion and the implemented macroeconomic policy regimes. The changes began to take place after the 1997-98 Asian and Russian crises. The most striking novel features are as follows.

First, the generation of current account surpluses or the significant reduction of deficits in many leading developing countries (whose overall result was a reversal of the direction of net capital flows between developed and developing countries that characterized the thirty previous years). This new configuration of current account results persisted after the global crisis.

Second, the accumulation of large reserves in many developing economies. This feature also persisted after the global crisis.

Third, many economies adopted flexible exchange regimes (with varying degrees of administration by the monetary authorities).

It is easy to see that the orientation of the changes is consistent with the lessons derived from the financial crises sketched above. In fact, there has been a significant reduction in the risk of financial instability in developing countries.

Indeed, current account surpluses and foreign reserves are bulky external robustness indicators. In the 2000s the "class" of emerging markets assets became more heterogeneous and many of these assets correspond to robust economies. This helped to dispel the segmentation of emerging market assets and significantly reduce the risks of contagion and herd behavior with respect to this "class" of assets, so that reduction of risk was also extended to developing countries which continued showing current account deficits or did not make their exchange rate regimes more flexible.

The managed floating exchange rate regime allows the monetary authority to intervene in the foreign exchange market to prevent or mitigate the appreciation trends and accumulate reserves, when the conditions of the current account and / or capital inflows lead to selling pressure in the market. This was the case in many emerging market countries after the Asian crises, particularly in the period 2002-2008.

The availability of reserves reduces the risk of default on public and private debts due to insufficient international liquidity under any exchange rate regime. But the combination of abundant reserves and managed floating tends to reduce the risk by other means. For instance, faced with a negative external shock, exchange rate flexibility leads to exchange rate depreciation, thus contributing to the economy's adjustment to changing external conditions. In such a case the availability of reserves allows the selling intervention to control and prevent overshooting and the formation of self-fulfilling bubbles in the exchange market. This limits the negative balance sheet effects on banks and firms, particularly in economies with partially dollarized financial systems. In this context, the exhibition of large reserves gives greater strength to the central bank's ability to guide the foreign exchange market and consequently large-scale selling interventions are not required.

In the 2000s the AL region showed since 2003 a surplus current account result that turned into deficit since 2008 and reached a maximum deficit for the period in 2010. The regional aggregate surplus was determined by the performances of the major South American countries, with the exception of Colombia. In fact, Mexico, the economies of Central America and the Caribbean and Colombia continued showing current account deficits in 2000s. In South America several of the economies that had generated current account surpluses since 2003 turned to deficit since 2008 and reached maximum deficits for the period in 2010. Forecasts project increasing current account deficits in these economies if no changes in economic policies alter these trends. Do these trends in current account deficits represent a similar threat of crisis as in the past? In fact, the international financial market does not perceive these deficits as an indication of increased risk. For example, capital flows intensified and country risk premiums remain low even in the case of Brazil, which already shows an important deficit.

In the past, surges of capital inflows led to critical ends whose immediate causes were unsustainable external debts resulting from persistent current accounts deficits. The risk premium increases reflected perceptions of increased risk and, as explained above, tended to place the countries in financial traps that usually resulted in crisis. These processes were verified in contexts of fixed exchange rates and limited availability of international liquidity by the indebted country. The current settings are different from the pre-2000s in two main aspects. On the one hand it counts the already mentioned difference created by the managed floating exchange rate regimes and the availability of large reserves. On the other hand, there have been in the 2000s significant changes in the structures of the current accounts in comparison with the structures that prevail as from the LA debt crisis of the early 1980s.

In the 2000s the external debts were significantly reduced. The emergence of current account deficits under these conditions is a new phenomenon for the region, because as from its reinsertion into the international financial market in the late 80s the region was loaded with heavy foreign debts inherited from the previous phase. In principle, this suggests that the countries might experience a prolonged trend of increasing foreign debt before debt ratios reached critical levels similar to those of the past. But our assessment of present and expected current account deficits goes beyond this point and focuses on the structural changes in the current accounts in the region.

One consequence of the reduction of foreign debt is that, unlike the previous thirty years, the income payments to foreign factors have a relatively small component of interests and are explained in large part by the profits from foreign investment. The interests of the international currency debt must necessarily be paid in that currency and constitute an inertial component of the current account debit. In contrast, foreign investment profits are largely earned in local currency and its magnitude in international currency is devalued when the exchange rate depreciates, for example, in a situation of a sudden stop. Moreover, in this situation the authorities may impose temporary restrictions on the transfers of profits. On the other hand, under normal conditions a significant proportion of the foreign investment profits is used to finance new investment (and recorded in the balance of payments as a new FDI inflow), so that a significant portion of the FDI profits item has a more or less automatic funding. In this case, neither the profits nor the reinvested inflow of foreign capital go through the foreign exchange market. Consequently, given some magnitude of the current account deficit, the external fragility represented by this result is lower than in the past.

For example, between 1999 and 2010 the proportion of interests in the foreign factors income debit account decreased from 39.7% to 11.4% in Brazil, from 40.8% to 7.4% in Chile, from 82.8% to 26.3% in Colombia and from 93.7% to 15.6% in Peru. The situation in Mexico is somewhat different. The proportion of interests declined less than in the other mentioned countries, from 75.7% in 1999 to 63.8% in 2010. It should be added that the inflows of FDI fully fund the current account deficit in all cases.

Improvements in financial regulation in Latin America

From the early ‘80s to the early 2000s many countries (including the largest ones within the LA region) experienced one or more banking crises. The latest of such episodes was the deep Argentine financial crisis of 2001-2002. But none of these countries suffered a banking crisis amidst the global financial crisis that started in 2007.

The two waves of financial deregulation (in the 70s and in the 90s) implemented with varying degree of intensity in different countries in the region amplified banking problems and the depth of financial disruptions. The significant economic and social costs associated with banking crises led to the review of regulatory frameworks. Deregulatory approaches had to be retraced (in a greater or lesser degree, depending on the country). Instead, the "best practices" on regulation and financial supervision developed in advanced markets had to be gradually implemented. This process, which began in the late ‘80s with the adoption of basic guidelines for lending operations, is currently characterized by the use of very sophisticated rules.

The adoption of regulations specific to mature banking systems, such as the Basel proposals, did not fully address the specific characteristics of the economies and banking systems in LA. The partial dollarization of financial intermediation, the higher risk of sovereign debt, accentuated information problems, lack of depth or absence of certain markets (particularly the low significance of domestic capital markets) and a high weight of the informal economy are some of the peculiarities present in LA. International financial institutions contributed to the mechanical reproduction of the regulatory schemes from developed countries, as they become part of the conditionality attached to their financial assistance programs.

Based on each national experience and also on the international practice, central banks and supervisory agencies along the region have carried out an intense revision of regulations, aimed at improving them. From the review of current legislation of Argentina, Brazil, Chile, Colombia, Peru and Mexico, we can draw the conclusions that follow.

Central banks and supervisory agencies have been institutionally upgraded: during the last few years, they have been granted greater authority and resources to carry out their work. Some of the remaining weaknesses are related to overlapping tasks and roles between the different surveillance units. Also, the complicated issue of allocating legal responsibilities to officials in charge of banking supervision and control still remains unsettled.

The decisive weight of banks within the system and a less sophisticated financial activity constitutes an advantage from a regulatory point of view -especially when compared to regulatory needs of more developed markets. In LA, regulation and supervision have primarily focused on monitoring bank activity, given its systemic relevance and the access the banks have to the lender of last resort window. But there has also been a sound tendency to incorporate within the regulatory perimeter (i.e., the scope of the rules regarding institutions, markets and products) all financial operators, including non-traditional ones.

Financial conglomerates have a significant presence in LA financial systems. There is a growing concern among supervisors -although uneven in the analyzed countries- in order to monitor their activities. The presentation of balance sheets and risk management on a consolidated basis is now required. Progress in this area is still insufficient. There are difficulties in coordinating the agencies involved in the control of the different areas where the conglomerate is engaged. There are still insufficient regulations related to trusts activity and banks' securitized investments.

Overcoming these weaknesses will be very important if, as expected, financial conglomerates continue to grow, driven by the development of capital markets.

Cross-border banking regulation is crucial in LA, given the high participation of foreign banks in the six analyzed financial systems. Banking problems in their countries of origin may affect the economies where their affiliated companies and branches are located. It's impossible to attack the risk of contagion without limiting the participation of foreign banks in domestic financial markets. However, proper regulation can help to mitigate this risk. First, foreign banks should face no less requirements than domestic banks. Second, supervisors from the foreign banks' home country should be asked to perform a consolidated supervision involving the parent bank and its subsidiaries abroad. Third, there should be a fluid exchange of information among supervisory agencies. Finally, domestic depositors and other creditors of subsidiaries and local branches should be informed about the true level of commitment of the parent bank for domestic liabilities. Although there has been (unequal) progress in this direction, these are still issues that must be further addressed in the future.

The deposit insurance systems are mostly public, although there are also two mixed (public-private) regimes. In some of the countries the maximum amount covered by the provided insurance seems to be insufficient to protect small- and medium-size savers. Central banks have extensive powers and tools to act as lenders of last resort in cases of systemic crises. These instruments were tested during the current global financial crisis, particularly in 2007-2008, when central banks decisively deployed an extensive battery of devices in order to provide liquidity. However, it is noteworthy that the role of lender of last resort was satisfied without reforming the existing legal and regulatory frameworks. In that context, unconventional measures adopted by LA Central Banks were limited.

Financial institutions in the six mentioned countries are well capitalized. In most cases, capital requirements are more stringent than those included in the Basel I proposal. There are roadmaps for the implementation of Basel II, although it is possible that the foreseen schedules included in them will have to be finally modified if new changes arise from the current global regulatory debate.

The dollarization degree of the banking operations recorded a declining trend during recent years. Current macroeconomic settings are characterized, among other things, by managed floating exchange rate regimes and high levels of international reserves. These factors tend to reduce the probabilities of abrupt changes in the exchange rates with their negative consequences for banking systems. Additionally, some countries resorted to specific regulations to limit dollarization and have privileged financial intermediation denominated in local currency. In countries where foreign currency denominated operations are allowed (Argentina, Chile, Mexico and Peru) there is a wide body of prudential regulations aimed at limiting the banks' currency mismatches and to monitor exchange rate-induced credit risk. In Peru, the only country where dollarization remains high, the Superintendence implements a number of rules to reduce the associated risks. However, exchange rate-induced credit risk is not properly contemplated in Peruvian regulations. Despite the recent progress, risks inherent to the partial dollarization of the financial system must be permanently monitored. This is especially true in the current international context, characterized by sharp swings in capital flows and exchange rates.

Banking regulations related to credit risk have improved significantly in recent years and are close to international "best practices". Among them, there are rules that limit the concentration of the portfolio, the size of loans to the largest debtors and the amount granted to debtors related to the financial institution. Schemes of borrower classification and loan loss provisioning are also in line with the international best practice. Peru and Colombia have recently adopted schemes of countercyclical provisions.

The regulations associated with market risk management are very recent and its characteristics are dissimilar among the different domestic financial systems. In some countries, market risk was already incorporated in the calculation of minimal capital requirements. Other countries require each bank to implement a comprehensive regime of market risk management. The rules on risk management should be probably complemented with strict limits on market risk-taking, especially for the most complex and opaque operations.

Banks are authorized to operate with derivatives in the six countries as far as they meet a series of requirements. The regulations reflect that, even before the international crisis, the regulatory agencies were aware of the high risks involved in the transaction of these instruments. Operation with credit derivatives is mostly prohibited and an explicit authorization to operate with other derivatives is required. Other requirements to operate in this area of business are related to the technological infrastructure, skilled staff, the issuance of a risk management handbook, and the need to provide comprehensible off-balance sheet information to the supervisory agency. The volume of derivatives operations varies greatly between countries, but in all cases is much lower than what is traded in developed markets. A concern is the risks arising from the growing volume of derivatives trading in OTC markets.

Weighted sovereign credit risk in determining minimum capital requirements is nil in five of the six analyzed countries. There is a 10% coefficient in the remaining one. Zero weighting reproduces a Basel standard designed for countries with (usually) solid finances and sovereign bonds (generally) qualified as "investment grade". It is true that the solvency of the public sectors of the region has improved over the recent years -a situation reflected in Latin American sovereign bonds ratings. But it seems advisable that the weighting of sovereign risk is non-zero by definition and, instead, that such weighting is derived from the structural situation of each public sector financial accounts. Additionally, limits to banks' exposure to the public sector could be set – as is already done by some regulators in the region.

The rules related to the exposure of accounting and financial statements, disclosure of the information and external audit processes have experienced substantial progress. However, in the accounting and information areas, there is a considerable space to improve data related to the actual composition of financial conglomerates, the detail of portfolios and major debtors, and data on off-balance sheet exposure to market risks and cross-border risks.

Conclusions and outlook

The combination of robust external accounts, availability of large reserves, managed exchange rate flexibility and better financial regulation showed their strengths on the occasion of the contagion from the global crisis. Indeed, the global crisis was a stress-test for emerging market countries. As mentioned above, no emerging market economy underwent external or financial crisis and there were no defaults. On the other hand, the increase in IMF resources and greater flexibility in implementing their programs also played a role in preventing crises and defaults in emerging market countries and the renewed role of the IMF should be durable. In summary, the stress-test results of the global crisis reinforced perceptions of low risk.

However, the IMF expressed concern about the trend in current accounts and growing domestic financial fragility, caused both by the significant capital inflows that the region is receiving. This concern underlies the change of position regarding the treatment of capital flows that was recently adopted by the IMF. The institution is now promoting a prudent attitude against the capital inflows and recommends policies to neutralize or mitigate their effects, including the imposition of capital controls. The reduced risk of crisis we diagnose above might suggest that we promote a more passive orientation vis-à-vis capital inflows and their effects than the IMF. Not so.

The conclusions of our analysis say that many emerging market countries are more robust than in the past to face negative external shocks and that in the foreseeable future it seems unlikely that capital inflows experience a sudden-stop endogenously led by the emergence of a critical financial situation in the recipient countries. But this does not imply the impossibility of a sudden stop caused by other factors, for example, by the emergence of a new important critical disruption in the advanced economies. Nor we assume as permanent the favorable terms of trade experienced by many developing countries. The future is always uncertain, but the current uncertainty is exacerbated.

Prudence vis-à-vis uncertainty advises measures to neutralize or mitigate the effects of the boom in capital inflows. These measures should be implemented not only to prevent the formation of bubbles in asset prices and control inflation, but also because not implementing them increases the mentioned risks faced by developing countries. In this respect we agree with the position adopted not long ago by the IMF, as expressed in several recent documents of the institution.

However, the same prudence in the design of policies should be generalized to all the effects of the boom in capital inflows, including the consequences of a long lasting appreciation of the real exchange rate (RER) on growth, industrial activity and employment. In this respect we disagree with the position of the IMF, which disregards the RER appreciation among the criteria to guide the implementation of capital controls.

Capital inflows and their effects on the RER involve a threat to the real economy, to the ability to generate employment and to the development process. Long lasting real appreciations generate negative trends that are slow to be clearly visible and that do not assume critical forms (as opposed to the trends in finance or the balance of payments). These real effects must be considered on an equal footing with the risks of crisis because they are difficult to reverse. Investment in the manufacturing industry is largely irreversible and the loss of competitiveness that results from several years of RER appreciation (even if it is transitory) causes permanent destruction of human and organizational capital. Moreover, avoiding the effects of a prolonged RER appreciation is recommendable even if the favorable the terms of trade and international financial conditions were lasting.

In contrast to a passive orientation, our view leads us to recommend the implementation of vigorous policies to neutralize or mitigate the effects of capital inflows. We believe that the implementation of these policies is crucial and urgent. We also believe that these policies should be strongly promoted, particularly because governments do not perceive current trends as a threat of crisis that would encourage their implementation.