I. What’s Different in the Recent Crises in Emerging Markets?

The recent financial crises in emerging market countries has shown the vulnerability of these economies to short-term capital flows. Large stocks of short term debt, either private or public, proved much more onerous to service than had been predicted. Rating agencies and other analysts were caught off guard as they focused too much on the sound but misleading debt to export ratios and too little on the more useful short-term debt to international reserves ratio and other financial indicators. In other words, the problems were primarily in the capital account and not in the more traditional factors such as fiscal and current account deficits. Difficulties in rolling over short-term debt, either in domestic or foreign currency, and problems in the banking system were in most cases the triggering factor for the financial crises.

The new crises also required much larger financial assistance than in the past. The financial package put together in response to the Mexican crisis of 1994 exceeded 40 billion dollars, while the rescue packages for the Asian countries in 1997-98 ranged from 20 to 50 billions dollars. In addition, the dynamics of the recent financial crises have shown a new pattern in which capital outflows were very quick and massive, leading to severe balance of payments problems. The ensuing devaluations uncovered large weaknesses in the domestic financial sectors as banks and other domestic borrowers were scrambling to meet their payments.

What can governments do to deal with large capital outflows resulting from rapid changes in market sentiment? At least two things. First, to develop
a debt management strategy that succeeds in limiting the vulnerability to capital outflows, and second, to establish a solid banking system through a sound regulatory framework and adequate supervision.

This note will discuss what can governments do on debt management and examine Argentina’s strategy, whose main objectives are to ensure access to markets, at all times at a reasonable cost, and to reduce vulnerability to external shocks.

Debt management can play a particularly important role in reducing financial vulnerability, especially in limiting the rollover risk of the type that was observed in many Asian countries and more recently in Russia. Regarding borrowing costs, they are affected by liquidity as well as solvency considerations. Government solvency is perhaps the most important determinant of the borrowing costs and determines the country risk (i.e. the spread over the risk free interest rate). The greater the solvency the smaller the cost of financing. Debt management, which primarily affects the liquidity risk (i.e. the ability to access the financial markets at all times at reasonable costs), is the second critical factor in determining the borrowing cost. Many crises started as governments faced difficulties rolling over either domestic or foreign short-term debt. Once a liquidity crisis starts, governments have to pay higher interest rates to rollover their debt and if the liquidity crisis lasts long enough it can deteriorate the fiscal accounts and threaten to become a solvency problem.

II. Argentina’s Debt Management Strategy

The main long-term objective for Argentina’s debt management is to improve its credit rating to investment grade (at the moment Argentina has a rating of BB- by S&P and Fitch-Ibca and Ba3 by Moody’s). Argentina’s debt is still considered speculative grade and as a result it pays has paid between 150 and 500 basis points more than investment grade countries do. To deal with these issues Argentina put in place a strategy that attempts to
minimize long-term borrowing costs, to ensure fluid access to the domestic and international capital markets, and to limit the vulnerability to shocks in the international capital markets.

The strategy has five main elements. The first one is to develop a sound structure of amortization payments of long–term debt in order to avoid the concentration of payments of principal in any particular year, thus limiting the refinancing risk. To meet this goal, the government has issued most of its new debt at longer maturities (five years and more) to take advantage of periods when the amortization schedule is lighter. Thanks to this policy the annual amortization payments of long term debt are converging to $11 billion per year, equivalent to 10% of total long-term debt (see figure 1).

Figure 1. Public Debt Maturity Profile

A second element in the strategy is to limit the size of short-term debt. Argentina issues all its short-term debt in the domestic market in both pesos and dollars. The total size of this debt is just 3% of total debt or around 1% of GDP. These numbers are clearly small, especially when compared with other emerging market countries where the domestic short-term debt represents a large fraction of total debt. In Argentina, the small magnitude
of this debt is part of a deliberate effort to limit vulnerability in an era of high volatility in the international capital markets.

There have been many episodes (including a few in Argentina in the late eighties) where the difficulties in refinancing domestic currency short-term debt destabilized the financial markets. In these episodes, governments were forced to pay exorbitantly high interest rates to rollover short-term debt transforming what initially appeared as a liquidity problem into a solvency one. This type of difficulty has been particularly acute for domestic currency debt, where interest rates are more volatile, especially if there is concern about a possible devaluation or of a large increase in inflation that would erode the real value of domestic currency debt. In Argentina, where there is a currency board and the exchange rate is fixed by law, the policy has been to limit all short-term debt whether in pesos or U.S. dollars.

The third element is to secure a liquidity cushion at the treasury, equivalent to at least one quarter of the annual financial requirements, in order to provide flexibility in the timing of transactions and to avoid the need to issue debt at times of large volatility or high interest rates. This might not be necessary in other countries because the central bank holds international reserves to provide this cushion. But in Argentina, where there is a currency board, international reserves are used to back the monetary base, while the independent central bank cannot finance the treasury (as established in its charter). For this reason the treasury needs its own reserves in addition to those of the central bank.

The fourth element is to diversify the sources of financing as a way to increase the number of domestic and foreign investors that hold Argentine debt, thus improving the chances of tapping the markets at all times. Even with global financial markets, access varies across currencies, and across types of investors. Pension funds usually prefer long duration instruments with capital gains potential, while money markets funds lean towards short-debt instruments with low price volatility and preferably with floating interest rates. In addition, experience shows that there is no full arbitrage between European currencies, the US dollar and the Yen, perhaps as a result of
transaction costs and credit restrictions. As a result, many times there are attractive opportunities to issuers who find more cost effective to issue in one currency as opposed to another.

Argentina has taken advantage of those opportunities and has diversified its issuance across currencies (see figure 2). The government now has well developed yield curves in dollars and European currencies allowing a comparison of costs for different maturities and different currencies. In addition, the existence of these yield curves allows the government to issue structured deals (i.e. deals that use the yield curve for pricing but has some especial features, such as calls, puts or adjusting spreads) that are suitable to specific investors thus broadening the investor base.

The efforts to develop a domestic treasury market, including T-bills (Letes) and T-bonds (Bontes) are the final element of the strategy. One distinctive feature of the Argentine domestic treasury bill market is that the local instruments are by and large denominated in dollars. Despite some efforts

**Figure 2. Diversification of International Founding Sources, 1996.**
to issue Letes and Bontes in pesos in 1996 through 1998, the strategy was abandoned because the peso market lacked depth as domestic investors prefer to make their investment in dollars. In fact, most of the capital market in Argentina functions in dollars. The Letes and Bontes are intended to accommodate the recent growth in the domestic capital markets as four groups of institutional investors (pension funds, mutual funds, insurance companies and banks) are becoming bigger players in fixed income instruments.

The Argentine treasury market was developed based on the successful experiences of industrialized countries such as France, Italy, Spain and the United States. The instruments are issued through Dutch auctions, and most of the bids are submitted through the twelve banks that are the primary dealers or market makers. These banks guarantee the success of the auction, by ensuring the submission of enough bids to cover the size of the auction, and they provide adequate liquidity to these instruments to make them more attractive to investors. In addition, the government has worked in the financial infrastructure to minimize the settlement risk, and is now taking steps to improve transparency in the trading activity and to reduce the bid-ask spread in the secondary market.

III. Debt Management to Limit Vulnerability

Debt management matters and can make a difference in reducing vulnerability. Argentina’s experience indicates that limiting the size of short-term debt and generating a sound profile of amortization payments for long-term debt greatly reduces the rollover risk. And this has helped Argentina to ensure access to the financial markets successfully even at the worst times of the Asian crisis, or following the Russian default. Indeed, thanks to this strategy, Argentina has had smaller annual overall (foreign plus domestic) re-financing needs than Brazil, Russia or almost any other emerging market countries.

One important lesson of the recent crisis is that in today’s globalized
markets the risks of refinancing could be larger for domestic currency than for foreign currency debt. The cost of refinancing domestic currency debt increased up to eight times recently generating a domestic currency debt trap that threatened the fiscal accounts.

As concerns about short-term debt increase, some economists favored the imposition of capital controls. Argentina’s experience suggests that these flows can be dealt successfully through adequate prudential regulation in the banking sector and overall sound policies in the capital markets. The central bank has established a prudential regulation framework for banks which is stricter than international standards, and has ensure adequate liquidity to act as lender of last resort to the banking system by negotiating a stand-by borrowing facility with international banks. (see Box 1)

Avoiding the conversion of private debts into public debt is a second factor that helped Argentina to overcome the crises. During the Tequila, in spite of continuous pressures from investors, the government chose to stay out of private contracts. Problems in servicing private, provincial or municipal debts had to be worked out by the parties involved without the participation of the federal government. This helped to establish discipline and avoid losses thanks to less moral hazard and hence a more prudent behavior by private sector borrowers.

BOX 1.

**The Central Bank Repo Facility**

The Central Bank of Argentina negotiated in 1996 with first rated international banks a contingent repo program with government bond and securitized mortgages. This line was intended to increase systemic liquidity to the banking system while preserving its own capacity to act as lender of last resort. The line originally represented around 10% of deposits, and its size has been increasing over to reflect the increase in deposits in the banking system.
BOX 1. (Continue)

**Operation of the Repo Facility**

During the effectiveness of the program the central bank has the option of making repos with a predetermined set of financial instruments and will receive US dollars.

Difficulties in rolling over short-term debt, either in domestic or foreign currency, and weak banking systems were in most cases a triggering factor for the financial crises. Originally, the length of the program ranges from 2 to 5 years depending on the bank. Every three months the program is being extended under the same terms and conditions in order to ensure access to the facility for a long enough period.

The repo has a 20 to 28% haircut, depending on the security. The margin is based on mark to market and the central has to provide additional margin (either in securities or US dollars). If the prices of the financial instruments fall by more than 5% the central bank will provide sufficient margin to cover between 125 and 140% of the amount of the transaction.

The total amount of the Repo program is 7.2 billion dollars, 6.7 billion with government bonds and 0.5 of mortgage back securities.

Looking forward, perhaps one the biggest challenges for the international community is to develop new indicators of financial vulnerability. Given the greater relevance of capital account over current account transactions, it is apparent that the new indicators should put more weight on the stocks of debt and other financial assets, than on debt to export ratios. Domestic and foreign currency debt have become more fungible with each other (especially under fixed exchange rates), while the liabilities of the banking system need to be monitored more closely as they could become a public sector liability in a crisis. In view of this evidence, it seems surprising that in many cases those responsible for evaluating country risk do not have a good diagnosis about domestic currency debt, nor about the public sector contingent liabilities, and they insist in using indicators of dubious usefulness such as debt to exports ratios.