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THE MANAGING OF THE FINANCIAL CRISIS – ARGENTINA (2002)

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I. INTRODUCTION

I want first to thank the organizers of this event. It is a very interesting initiative and I am very glad to have the chance to participate and contribute to the discussion. I understand that I was invited to take part in this series not because of my many years spent in this neighborhood but rather because my recent public sector experience and in order to share with you some aspects of that experience and, in particular, to discuss what one can learn in this type of transition.

My public service was short – spanned over one year – but it was particularly complicated and experience-rich. This is so because it was a year of a very profound and traumatic crisis, probably the worst financial crisis in the Argentine history. I am mentioning this since one of the most important things that I learned was not that there is a difference between being an academic or a staff member in an international organization and being a practical policy making – a difference that one can summarize by the trivial and repeated statement that reality is always more complicated than the textbooks. What I really learned is that there is a crucial difference between the manner one thinks and operates in normal times and how one has to think and operate in times of crises. There is policy making for normal times and there is policy making for crises and other emergencies. And both things are – and as a matter of fact should be – different things.

There are, of course, many ways of defining these differences. However, if one wants to resort to some methodology, one can focus on four elements that characterize the particular approach that is demanded in dealing with extreme circumstances:

1. One has to strive to rapidly understand the **nature and the root causes** of the crisis and, more specifically, to define well the type of **trade offs** that one faces as a consequence of the system breakdown.

2. It is crucial to quickly devise an **operational strategy**. It is necessary to think boldly and not to necessarily adhere to standard prescriptions. Crisis management is different than standard economic policy and one has to be willing to take decisive and also risky measures.

3. It is important to **persevere in the implementation** of the strategy. It is true that one always has to learn from mistakes, but during a crisis changing track too often could be very detrimental.

4. Once the crisis has abated, then it is the time to learn some **lessons**, both to amend and adapt the strategy in order to fully stabilize the situation and, more important, to avoid the resurgence of the same problems that created the crisis in the first place.

I will try to follow this script in telling my story about the recent Argentine crisis. I will tell the story, however, from my own angle or, more specifically, from the angle of the Central Bank. Is not going to be, therefore, the complete story of the event but rather a reflection of my own experience. Moreover, I will not discuss here the current situation in Argentina nor the recent IMF accord, since all that goes beyond my remit. But I will certainly discuss the role of the Bretton Woods institutions during the period I am referring to.

II. THE NATURE OF THE ARGENTINE CRISES

While the Argentine crisis could be comprehensively studied as the consequence of extremely large macroeconomic imbalances, it seems more tractable to distinguish, at the

analytical level, between two essential components of the crisis: the ***currency*** collapse and the ***bank*** run. Both aspects are, of course, inter-related but they can be seen as caused by a number and a combination of differentiable factors.

Following an hyperinflationary bout in the late 1980s, Argentina introduced in 1991 a quasi-currency-board system[1] that pegged the exchange rate of the Peso at par with the US Dollar. The system was largely successful in restoring price stability and, in conjunction with the implementation of a set of broad structural reforms, including privatization, pension reforms, and trade and financial liberalization, the economy grew at accelerated rates for a number of years. The system survived the contagion from the "tequila crisis" in 1995 but it became under pressure after 1999, as a consequence of the deep recesion and the increase in unemployment that started in late 1998 (following the Russian crisis and the Brazil devaluation). An attack on the Peso developed and its intensity intensified over time, reaching a peak in January 2002 when the system collapsed and the currency was first devalued and then floated.

The Argentine ***currency crisis*** is, therefore, usually analyzed in the context of these events. The main questions in this respects are: What were the weaknesses of the currency board regime and what were the main causes for its demise? Among the many interpretations advanced for assessing this question, there are three basic lines of arguments:

1. The loss of competitiveness of the Argentine economy caused by an overvaluation of the Peso, given the fixed exchange rate system;

2. The macroeconomic-policy inconsistencies, particularly the persistence of fiscal imbalances and growing indebtedness; and

3. The ***"Sudden Stop"*** argument, i e. the drying up of capital flows to emerging markets.

[1] The Argentine system—known as *convertibility*—was not an orthodox currency board since it allowed for less than full foreign exchange coverage of the monetary base. Up to one third of the coverage could take the form of Argentine government bonds provided they were fully traded in international markets.

Any plausible explanation for the collapse of the Argentine currency board should, in fact , combine these three elements. The macroeconomic policies were inconsistent with the rigidities of the system—particularly the fixed exchange rate system—and the economy was significantly vulnerable to capital flow reversals. In terms of exchange rate regime, the Argentine crisis does not prove that a currency board is always a wrong or unsustainable system. It only proves the need for a consistent set of policies. Macroeconomic policies need to be consistent with the rate of growth produced by the saving and investment balance. The fiscal situation was *not* consistent and given the inflexibility of the currency board and, therefore, the system was unsustainable. This was very important because it also caused part of the banking problem.

Exchange rate uncertainty obviously created a problem in the banking sector. But the banking sector was dollarized, so there was not really an exchange risk. Certainly not one that could have caused the banking sector to collapse. The collapse was caused largely by sovereign risk—arising mainly from the government "abuse" of the banking sector following its inability to adjust the budget.

A bank run started fiscal in March of 2001—and it only abated by mid 2002. Private sector deposits fell from an equivalent of US$85 billion (85 billion pesos at that time) to about US$15 billion by the end of July 2002. Deposits evolved as they did for several reasons, but the main factor was government abuse. This abuse gained momentum as the government increased its interference—first of all, tampering with the autonomy of the central bank, then changing its authorities, and then changing the composition and the level of the reserve requirements in order to gain resources to finance the hardest-to-sell debt

In Figure 1, the evolution of bank deposits, arrows point to events such as the "Finance Minister resignation," which was a change of the economic team. We see from then on the decline in deposits, the withdrawal restrictions, the *corralito* (to which I will return), and the interest rate ceiling. The devaluation and a "pesification" implied that deposits were redenominated, thereby increasing the peso value of the deposits. This was because they were dollar deposits redenominated at 40 percent higher, yet the deposit fall continues over all this period.

What was the main fear that caused this downward trend in deposits? Why in March 2001 did it start? In short: the main fear was that banks would be rendered insolvent by government policy and the deposits would be confiscated. These fears *were* rational, of course, because something very similar did eventually happen. The main reason behind these fears was the pressure on the banks to finance the fiscal deficit. Figure 2 shows private sector assets being displaced by public sector assets in the banks' balance sheets. Public sector assets increased, going from about 20 percent to about 60 percent of private sector assets during the year 2001. As the share of public assets relative to private sector assets rose, two things happened. First, private sectors deposits went down. Second, country risk increased. Of course, each variable reinforced the other—country risk increased, so people took their money out of the bank; deposits fell, so country risk increased.

Figure 3 shows very clearly this correlation, starting in March 2001. Deposits decreasing and the price of bonds falling (country risk increasing) together with an increased banking sector exposure to the public sector, measured as the share of public sector loans in relation to the total net worth of the banks.

As the bank run accelerated and the possibility of a far-reaching collapse of the entire banking system increased, the government imposed, in November 2001, a set of comprehensive cash withdrawal restrictions on bank deposits. These restrictions effectively ended the convertibility regime since also exchange controls were imposed. The public was enraged by these measures that were seen as a prelude to the confiscation of their assets. During December 2001 there were public demonstrations and riots that resulted in the fall of the President de la Rua government. An interim—one week—administration followed and it declared default on Argentina's public debt. At the beginning of January 2002 Eduardo Duhalde was installed as President. During the first two weeks of his government a number of emergency measures were adopted. In particular, the currency board was abandoned (the currency was first devalued by 40 percent and a few weeks later floated), and, in a drastic move, the economy was "pesified", i.e., most of the economy's contracts originally denominated in Dollars were forcefully re-denominated in Pesos. Of

particular relevance was the treatment of the banking sector, that was "pesified asymmetrically", i.e. all Dollar deposits were redenominated in Pesos at 1.40 Pesos per U$S, while bank Dollar assets were converted into Pesos at 1 Peso per U$S. This, of course, gave rise to huge losses in the banks' balance sheets that were to be compensated by the Government

III. THE TRADEOFFS AND THE DILEMMA FOR THE CENTRAL BANK

Given the impossibility of withdrawing money and with deposits being changed from dollars to pesos at an artificial rate, confidence in the currency and in the government plummeted. Meanwhile, the bank run continued, and a run on the peso started. Depositors continued to get money out of the banks within the allowed limits; then they could appeal to the judicial system for a portion of their deposits. After 10 years of convertibility, nobody knew where this would end.

From the point of view of the central bank, the most serious problem was the lack of money market or debt instrument to perform open market operations (or any other type of active monetary policy). That happened because government bonds were defaulted, there were no central bank instruments given the rules of the currency board, and corporate bonds were not available

I took over the central bank at that point. I was appointed governor at the end of January after the devaluation and the asymmetric pesification were already implemented.

The crisis confronted the central bank with a very difficult tradeoff: ***either finance the bank run risking hyperinflation or do nothing and let the banks collapse***. The Central Bank was confronted with this sharp dilemma because, having regained its lender of last resort function following the abandonment of the currency board, it could provide all the liquidity needed to finance the bank run. But, given the lack of money market or debt instruments necessary to sterilize this injection of liquidity, this can only be done at the risk of fuelling a run on the Peso, leading to a very rapid devaluation and, almost certainly, to hyperinflation. Alternatively, the Central Bank could attempt to control the money

supply by limiting the rediscount facility and let banks deal with the deposit run on their own, at the risk of widespread bank failures and, through the expected contagion and domino effects, a total collapse of the banking sector. Thus, the trade off was clear and gloomy: hyperinflation without the collapse of the banks, or stability without banks.

The only possible stopgap was to try to slow the pace of the bank run, and at the same time, develop some kind of sterilization instrument to avoid the inflationary pressures. We needed to put out money to finance the bank run but we could avoid the inflationary impact if much of that money could be reabsorbed with some instrument, that should be attractive enough to compete with the dollar.

IV. THE STRATEGY FOLLOWED

An intermediate approach along these lines was actually implemented. It consisted in a three-sponged strategy. The elements of this strategy were the following:

(i) to stretch the limits of **liquidity assistance** attempting, in this way, to slow down the pace of the bank run by preventing massive bank closures that might have further fuelled the panic. In my view, the key was to prevent massive bank closures if we wanted to slow the bank run. With banks closing everyday, there was no scope for stopping the banking panic. Faced with the dilemma, we decided to continue the provision of liquidity to the banks under attack through the use of the rediscount facility. We set conditions, however, including liquidity contributions from bank shareholders. Eventually, some foreign banks were closed given the refusal of foreign shareholders to accept the conditions;

(ii) to **develop sterilization instruments** in order to absorb, at least partially, the liquidity issued. In this context, it was crucial to stress the difference, increasingly perceived by the market, between an autonomous Central Bank and a defaulted sovereign; In addition, it was necessary to sustain high real interest rate to compete with the US dollar. We reasoned that if the Central Bank can offer extremely high returns on its own paper, banks could buy them and then offer high returns to their clients and, in that manner, people would leave at least some money in the banks; and

(iii) in order to stabilize devaluation expectations, to **intervene in the forex market** to prevent disorderly behaviour and to fight the belief (widespread at the beginning of 2002) that the dollar was bound to spiral up. We needed to prevent rapid, chaotic devaluation. If the exchange rate was to go to through the roof—overshooting of the original exchange rate of 1:1 to something like 7:1 was deemed possible—it would have been utterly impossible to sell any domestic assets. We decided, therefore, to actively intervene in the foreign exchange market, **despite the pressure to cease intervention exerted during the negotiations by the IMF.** This strategy was based on the Central Bank view that, given the lack of reference as to the correct level of the exchange rate, the stabilization of exchange rate expectations was a precondition for a successful sterilization policy. In our view, the Central Bank could develop a successful market for its own sterilization instrument only to the extent that exchange rate expectations are stabilized. Otherwise, the interest rate needed to induce any significant demand for the new instrument would reach levels that would not be credible. In other words, **an interest rate defense and an active foreign exchange market intervention were *complementary* rather than *substitute* policies.**

The three elements of this policy were popularly characterized as the attempt by the Central Bank to induce demand for domestic assets – and in this manner stop the bank and the currency run – by raising "greed" over "panic". Our central consideration was that greed (interest rate policy) cannot overcome panic unless panic is reduced by controlling chaotic conditions in the forex market trough active intervention.

V. <u>IMPLEMENTATION</u>

The Central Bank implemented very actively the three elements of its policy during the first semester of 2002[2]. It provided substantive rediscount to illiquid banks financing about 1/3 pf the deposit drop. The rest was financed by credit contraction and by banks own resources (Figure 4). A market for Central Bank bills (called LEBACs) was actively

[2] The central bank strategy was largely supported by the improvement in the fiscal outlook that started to emerge in the second quarter of the year. Largely as a consequence of an export tax and the effects of inflation on nominal revenues, as well as the maintenance of constant nominal wages, the cash fiscal position turned positive and, in the main, no monetary support was required from the monetary authority.

developed, initially with 7 days maturities and then with 14 and 28 days, in Pesos and U$S. Interest rates reached 140% initially. In this context, the Central Bank paid its debt abroad, a repo operation of more than a billion dollars. The central bank had acquired this debt as way to protect a system that didn't work and had to repay it in order to prevent its own default.

To prevent the dollar from overshooting, we utilized part of the foreign exchange reserve to intervene in the foreign exchange market. This intervention was active and prevented disorderly behavior but **did not peg the rate**, which devalued from 1 to 3.6 Pesos per Dollar. Intervention in the first five months was about U$S 2 bn. As mentioned above, this was done against the IMF advice. We saw a contradiction in this approach since Brazil was allowed to intervene in the context of its IMF Program, but at the time we were told not to use reserves and to let the dollar go to whatever rate.

We opposed the IMF's view; and in retrospect I think we were right. Foreign exchange intervention was necessary in a crisis like ours. The conventional Fund advice to increase interest rates in a currency run could be correct in relatively normal circumstances. But when you are faced with a terrible crisis of confidence in the system, nobody will buy domestically denominated assets. As mentioned above, in times of crises, high interest rates and foreign exchange interventions can serve as complements to each other, not substitutes. It was critical to remain steady on this point. You simply cannot intervene in foreign exchange markets one day, then not the next. You have to show that the return on domestic assets will be high and that the return on foreign assets will be low. By intervening we can get greed, eventually, to exceed panic. People will go back to the domestic assets—not because they love them, but because the difference in return is so high.

VI. THE INITIAL RESULTS

The initial results were not encouraging since the deposit run persisted despite high deposit rates offered by the banks. However, by mid-June, deposits stopped falling and soon started to grow again (Figure 5). At that point the central bank ceased to provide further

liquidity assistance. The exchange rate stabilized in July and started to appreciate steadily. The Central Bank stopped selling Dollars and started actively buying in order to rebuild its reserves. By November 2002, the Central Bank has regained more than the initial stock of lost in intervention (Figure 6). The demand for LEBACs grew strongly. Maturities were extended (LEBACs with up to 18 month maturities were recently introduced successfully) and interest rate has fallen to 3-24% range, according to maturities (Figure 7). The stabilization of the exchange rate has also resulted in a sharp decline in the rate of inflation. After reaching 10 per cent in April 2002, the rate fell to less than 1 percent a month by the end of the year (Figure 8).

This is a snapshot of the situation where the country was by September 2002, exactly one year ago. I believe that by then the worst of the crises has passed and, more important, the worst did not happened: there was no hyperinflation and the financial system did not collapse. The movie, however, is far more complex because the situation was far from solved then and it is still unsolved today. My point here was to argue that, in the mist of one of the most difficult financial crises in the Argentine history, central bank monetary policy was appropriate in terms of monetary management. Following my departure, my successor did a very good job in perfecting and deepening our strategy. The challenge was to restore confidence in monetary and financial institutions. The rest of the system—the political system, the fiscal system—may be another matter; it is difficult to call. If this is a movie, it is a thriller—not a family comedy, yet not a horror movie either. We do not quite know how the story will finally turn out; but from the monetary point of view at least, the outlook improved dramatically. If other variables can be controlled, the situation can be reversed. An important lesson is that the central bank has a good deal of power to reverse certain situations; yet it cannot by itself solve a full blown crisis. That requires nearly every instrument that a country has at its disposal.

MAIN LESSONS

For me, the most important lesson is that if properly managed, greed always exceeds panic, but one has to work over both elements. But beyond the minutia of the Argentine crisis, I believe that there are some more general lessons that one can enumerate arising from this

experience. I will mention, very succinctly, five of these lessons that could be certainly learned.

1. **The Potential Fragility of Financial Institutions**

An evident outcome from the Argentine crisis is that the strength, solvency, and stability of financial systems cannot be taken for granted on the base of static measures and point observations. In fact financial structures could deteriorate extremely rapid. Inadequate macroeconomic policies and inappropriate intervention in the market may swiftly condemn a very sound structure. A well regulated, suitably supervised, and properly capitalized system could be brought down rapidly by unsuitable and badly chosen policies. Indeed, if governments choose to exploit, rather than protect a properly developed financial market, the robustness of the system is no guarantee of its survival. The fact is that financial crises are not necessarily caused by weak financial systems but rather by damaging policies and adverse macroeconomic environment.

2. **Public Financing and "Crowding Out"**

A very significant case in point, related to the issue mentioned above, has to do with the public sector resorting, forcefully and excessively, to private financial markets, and particularly to the banking sector and to other voluntary saving schemes (such as pension and money funds), to fund disproportionate financing needs. In addition to the distortions and the loss of efficiency that such actions could trigger by misallocating credit away from the private sector, the accumulation of government liabilities in the balance sheets of financial institutions could be highly destabilizing if perceptions of public sector default become widespread.

A clear lesson from this, and related experiences, is that it is imperative, for the preservation of a healthy financial sector, to escape the temptation to utilize the resources mobilized through the financial system to avoid or postpone the necessary fiscal adjustments, both in terms of flows (the financing of current budgetary imbalances) and in terms of stocks (the unsustainable rolling over of the outstanding debt).

3. **The role of the Foreign Banks**

It is clearly established that the opening up of the financial markets to the entry of foreign institutions could accelerate and advance the development of local financial markets. The positive impact works trough improved technology, enhanced access to international sources of finance, better payment system integration, etc. There is also a possibility that the incorporation of foreign institutions could boost the credibility of the local system, both domestically and internationally. However, the Argentine experience also demonstrate that a more "internationalized" financial system is no guarantee of stability and would not make the domestic system immune to both external and domestic shocks.

This is so because the deficiencies of a weak and unstable institutional and legal framework cannot be solved, nor can they be ignored, by importing specific external institutions. Moreover, inappropriate policies—or severe external shocks—would eventually impact in a similar manner on the various components of the system. Although sometimes seems reasonable, it is not plausible to expect that foreign institutions would be willing (even if they could be more able) to absorb the burden of external or domestic blows in a completely differential manner than their domestic counterparts.

4. **The Importance of Liquidity**

The availability of liquidity is a crucial element for the development of the system and for the prevention and management of financial crises. It is evident that the growth of financial intermediation and the healthy development of financial structures need to rely on the availability of temporary sources of liquidity assistance to bridge over market eventualities without giving raise to perverse expectations. A well established, credible, and non distorting lender of last resort is a needed component of financial expansion.

Again, the Argentine experience is illustrative in this context. The currency board system prevented the central bank to act as a lender of last resort. Substitutes were looked for, but they did not fulfill the role. Foreign banks were seen as providing their own mechanism to

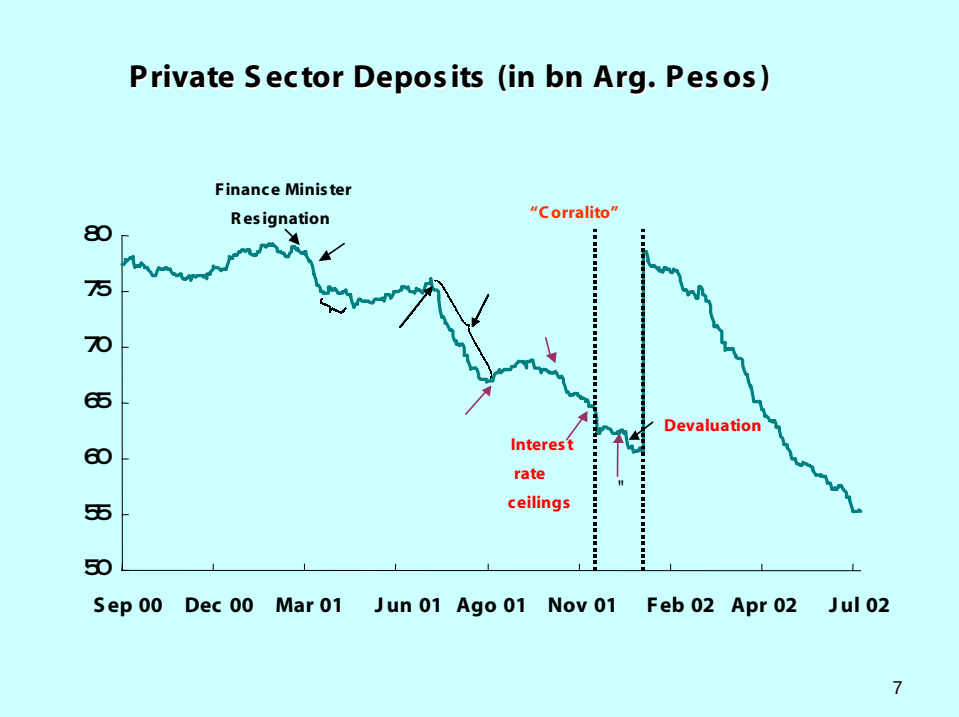
attain liquidity in case of need, and the central bank attempted to develop a creative repo facility. Both elements were not operational to prevent the serious banking crises. On the other hand, as discussed above, once the central bank recovered its ability to act as a lender of last resort after the abandonment of the currency board, its aggressive rediscount policy prevented the total collapse of the banking sector and contributed to its eventual recuperation.

5. **Capital Controls**

It has been conventional wisdom that the opening up of capital markets to the free international movement of capital is a factor that tends to enhances financial market development. However, the crises of the past decade have revived the debate about the role of capital controls. It is not really possible at this point to reach definite conclusions. But it is clear that the issue has at least three different dimensions. In the long run, capital market integration, i.e., openness, is a desirable goal since it boosts efficiency and improves the allocation of financial resources. However, there is a question about the transition. It is quite clear that capital account liberalization requires preconditions and proper sequencing since abrupt changes could result in disruptive consequences. There is a rich literature on this subject, but it is quite clear that the gradual approach embodies fewer risks and is more conducive to properly integrate country specific characteristics.

There is, however, a third dimension that should be taken into consideration and it is the use—hopefully temporary—of capital controls as a crisis management instrument. As the recent crises show, the ability to regain some degree of control is decisive in dealing with emergency situations. In these types of circumstances, the capacity of the authorities to limit the free flow of capital could be vital in containing the spillovers of the crisis and could prove to be a very useful tool to restore confidence into the system. As in many other aspects, dealing with crises enhances the capability to value the importance of pragmatism over textbook solutions.

FIGURE 1



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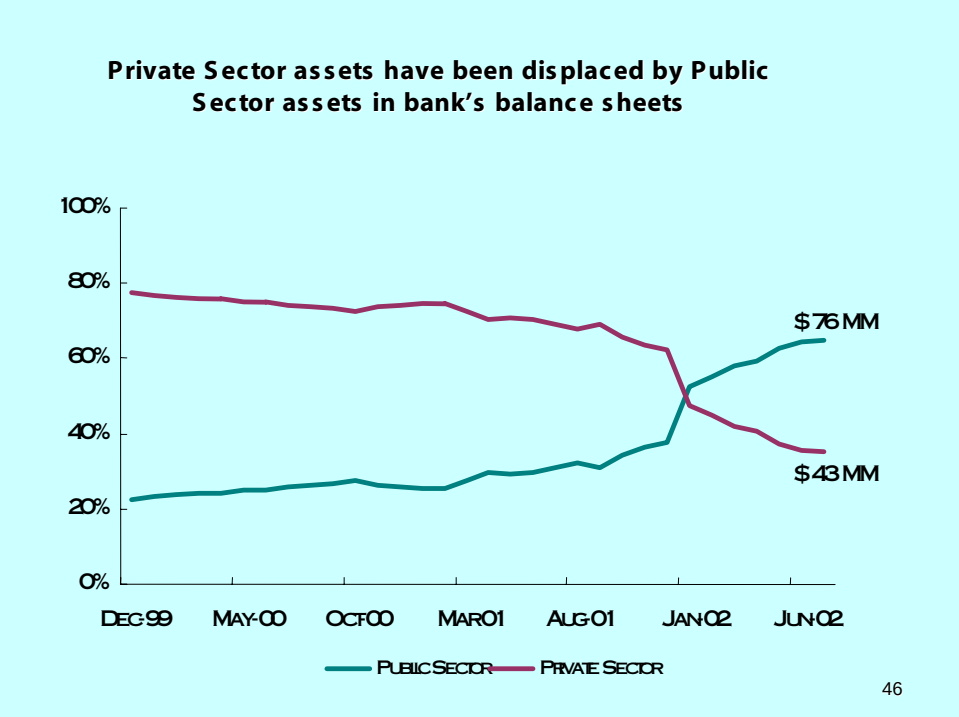

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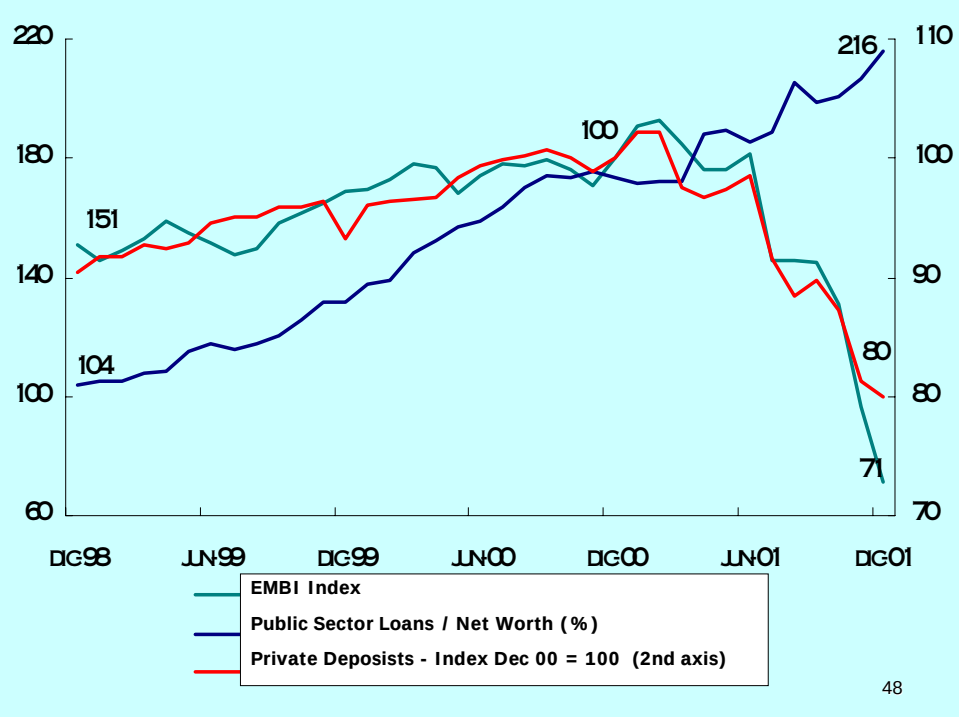

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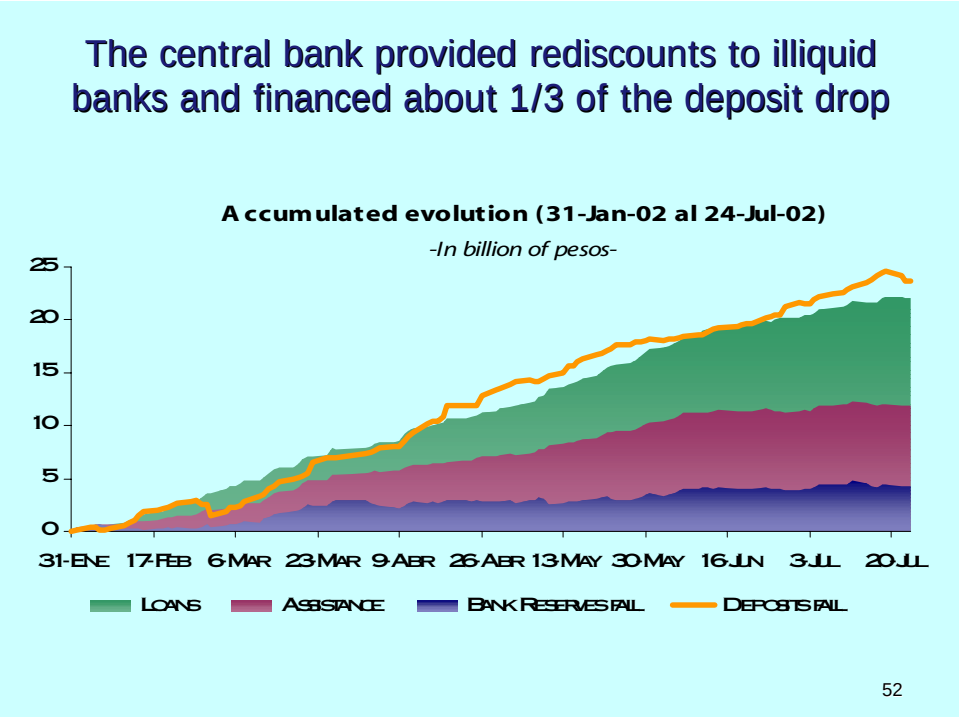

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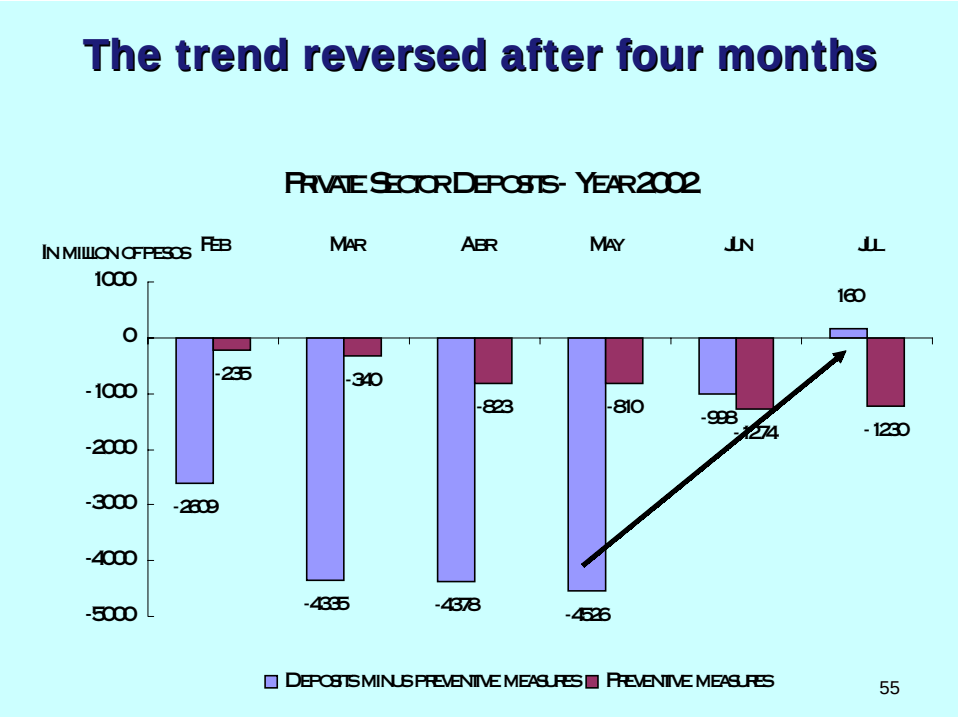

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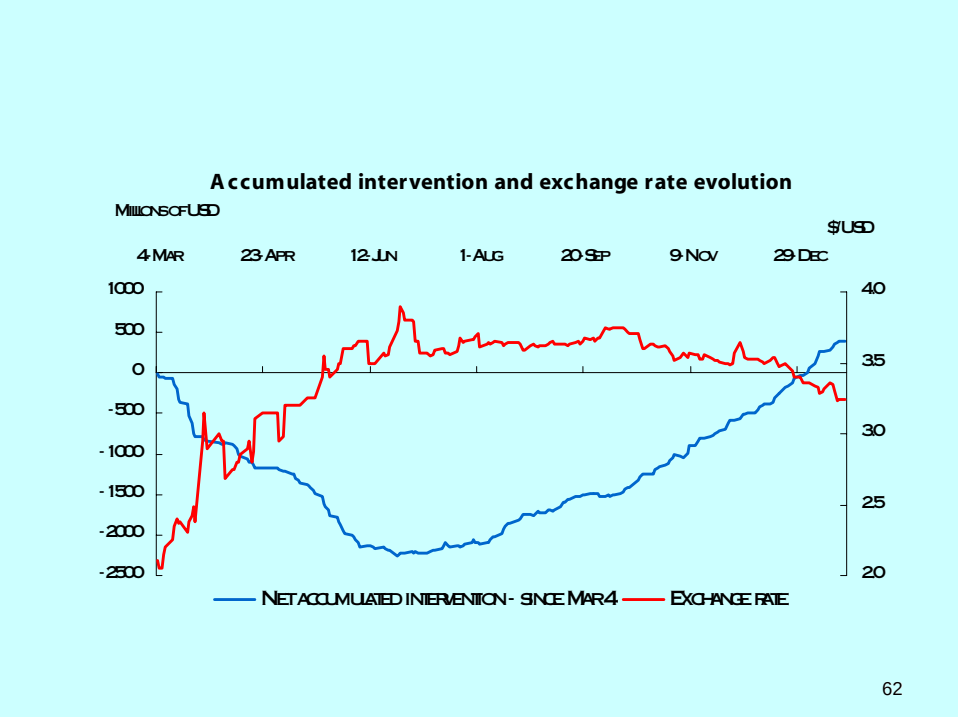

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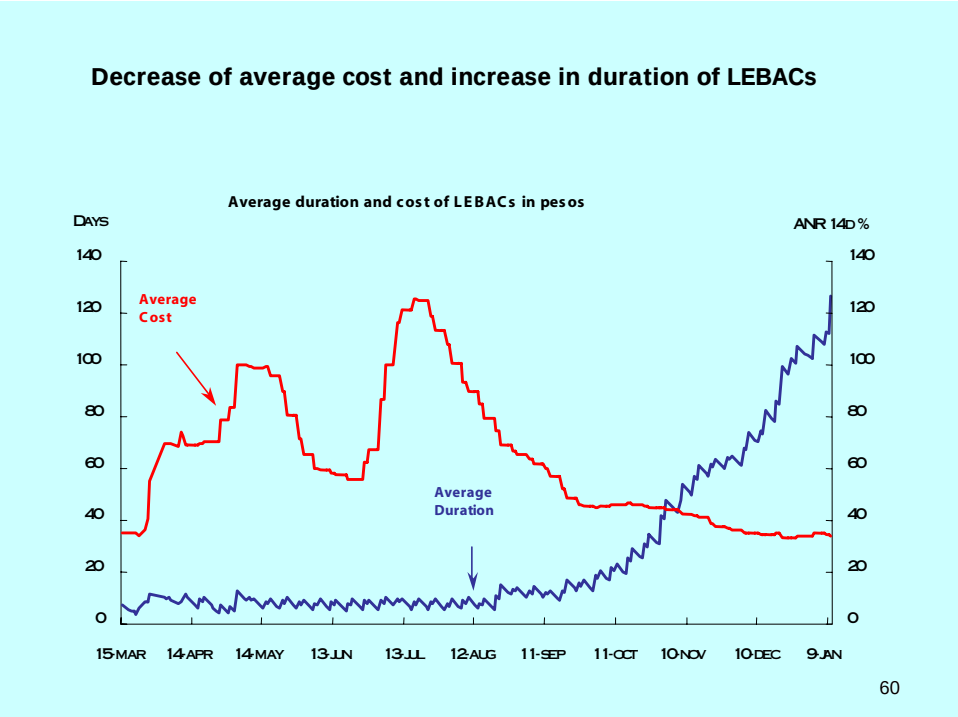
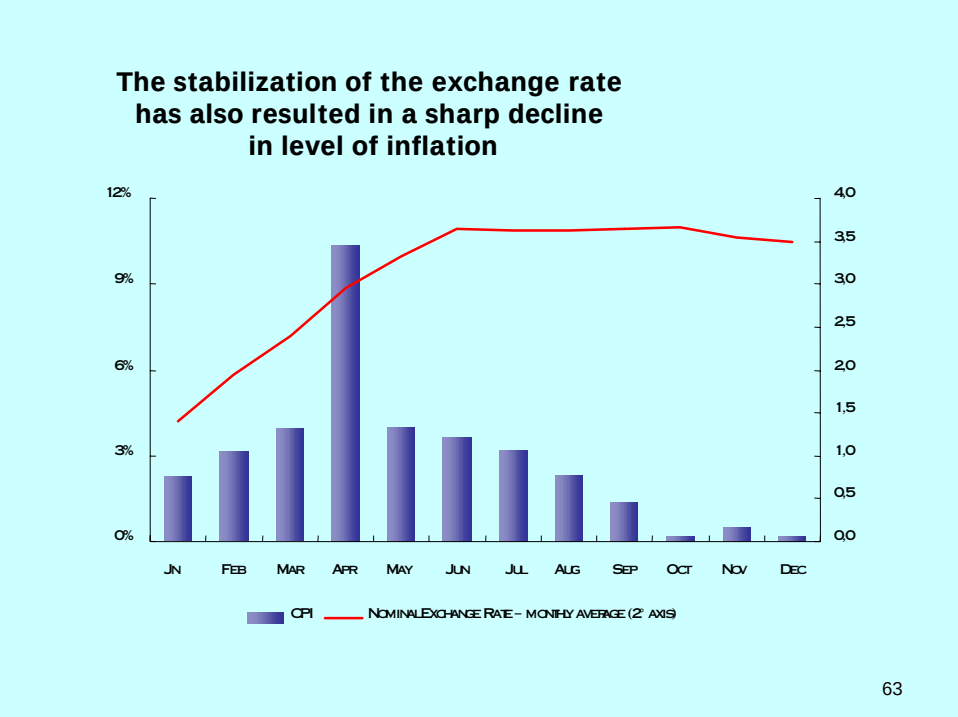


FIGURE 8



The Argentine Crisis: Issues for Discussion

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While the Argentine crisis could be comprehensively studied as the consequence of massive macroeconomic imbalances, it seems more tractable to distinguish, at the analytical level, between the ***currency*** collapse and the ***banking*** crisis. Both are, of course, inter-related but they can be seen as caused by a number and a combination of different factors.

I. The Currency Crisis

The currency crisis that reached its peak with the January 2002 devaluation is usually analyzed in the context of the Argentine convertibility regime**,** or the Argentine currency board system. The main question in this context is: ***What were the weaknesses and the main causes for the demise of the convertibility regime?*** Among the many interpretations advanced for assessing this question, there are four basic lines of arguments. Although they overlap in some aspects and may complement each other, the focus the attention of each particular approach is on a specific issue:

a) **The loss of competitiveness of the Argentine economy,** reflected in increasing unemployment and the long recession that started in 1998. The main exhibits associated with this hypothesis (and the issues for discussion) are the development (and measurement) of the real exchange rate, the evolution of exports and, particularly, of investment, as well as the path of exchange rate expectations, especially in the context of the events in key commercial partners, particularly the devaluation of the Brazilian real which many analysts view as the final trigger of the crisis.

b) **The inconsistencies of macroeconomic policies**. The fixed exchange regime and the lack of nominal flexibility embodied in the convertibility system impose restrictions on the fiscal accounts, given the expected rate of growth of the economy. In this view, the Argentine currency crisis is the consequence of the inconsistencies between the currency board and the fiscal stance, given the savings-investment balance. Moreover, the economic contraction that preceded the crisis was to a large extent the result of anticipated fiscal voracity. The main issues to consider in line with this hypothesis are the evolution of the fiscal accounts over the cycle, the evolution of the stock of sovereign debt with their associated (average and marginal) financing costs, and their impact on the real economy.

c) In some ways related to the above argument, there is a view that emphasizes **the *"sudden stop"*** , i.e. the (largely exogenous) drying up of capital inflows into emerging markets. Given the lack of fiscal adjustment, and the fact that convertibility precludes monetary financing, the *sudden stop* raised real interest rates because of the increased country risk arising from the perceived unsustainability of public debt. High and rising real interest rates led to recession, rendering the system unworkable. The main issues to address in line with the *sudden stop* argument are: i) the exogeneity of the capital account reversal; ii) if indeed the reversal was indeed largely exogenous, what are the reasons that may explain why they affected Argentina differently from other comparable countries.

d) **Institutional and political weakness** that (i) made the system vulnerable to political and sectoral pressures that difficulted the needed fiscal adjustments; and (ii) prevented the design and the implementation of the structural reforms that would have provided the system with the flexibility that was needed in order to cope better with the strictures of the currency board, and with the

changes brought about by convertibility (e.g.,price and exchange stability, more openness, and better arbitrage). This hypothesis, possibly the most Argentine-specific, brings about a number of questions, particularly regarding the exogeneity of institutions (or of the institutional response to changes in the environment), the performance of countries with comparable institutions, and the ways and extent to which economic policies should be tailored to the institutional context.

In addition, to gain a clear understanding of the Argentine process and to draw lessons for the future, it is essential to distinguish between what was idiosyncratic to the country and what was common to other comparable emerging economies, to avoid attributing the outcome entirely to domestic factors. Correspondingly, any attempt to address the causes of the currency crisis should carefully consider the following related questions: i) in addition to its monetary regime, was Argentina different from other countries, and in which way?; ii) was the ex-ante probability of a currency crisis higher in Argentina, or was the crisis the result of adverse shocks that would have triggered the same outcome in equally vulnerable emerging economies?

II. The Banking Crisis

In March 2001 a long-lasting deposit run started to rock the Argentine banking system and led, in November, to the imposition of very restrictive withdrawals restrictions. The run lasted more than 16 months and reduced the level of private sector deposits in the banking sector to about one sixth of their original dollar value. What explains the depth and resilience of the financial crisis? Here again there are a number of views that put the emphasis in specific aspects:

a) There is a view that the financial crisis was **a necessary corollary of the convertibility crisis**. The perceived lack of sustainability of the exchange rate, combined with the currency imbalance derived from the widespread **financial dollarization of the economy** (with the consequent potentially devastating balance sheet effect of a devaluation), reflected negatively in the perceived capacity of local debtors (public and private) to repay the banks. This, of course, caused widespread losses of confidence in the banking system. Similarly, the early dollarization of local deposits *pari passu* with the increasing currency risk led, ultimately, to a run on deposits and accelerated capital outflow out of fear that a sudden devaluation would be followed by some sort of confiscation or forced conversion of dollar deposits. This hypothesis, which highlights the endogenous nature of the *sudden stop* that triggered the crisis, and its link with financial dollarization as a shock amplifier and a source of capital market procyclicality, raises the following aspects for discussion: i) the evolution of deposit dollarization *vis à vis* exchange rate risk; ii) the anatomy of the banking crisis and the relative role of currency risk, country risk and bank fundamentals; iii) the endogenous component of the capital account reversal (compare with I.c); and iv) the capacity of the banking sector to cope with the real exchange rate adjustment (via price deflation) if the deposit run had been prevented.

b) A number of **problems specific to a limited number of banks** (particularly public sector banks and one large domestic bank) induced a continued *flight to quality,* towards foreign-owned banks. The resistence of the system to allow the closing of public banks or an increase in the share of foreign banks led to the adoption of system-wide withdrawal restrictions (the corralito) that ended up generalizing the sense of insecurity to the whole system.

c) The perception of **increasing insolvency of the banking system** that would result in widespread bank closings and the freezing and/or confiscation of

deposits by the government. This perception was fed by two developments: (i) the view that the prolonged recession is bound to increase the share of non-performing private sector loans, and (ii) the rapid increase, initially voluntary and then forced, in the porcentage of banking sector assets composed of public sector liabilities. The *sudden stop* plus the inability of the government to adjust its financing needs gave raise to this balance-sheet crowding out that, coupled with the gorwing awareness of increasing sovereign default risk, led to accelerated deposit withdrawals.

III. Leaving Convertibility

In a retrospective view of the crisis, there are two questions that would inspire many future enquires. Was indeed inevitable to abandon the convertibility regime in January 2002 or there were still alternatives less traumatic to deal with the situation? And if there were no alternatives, could this have been done in a much better way (as opposed to the combination of sovereign default, asymmetrical pesification, imposition of exchange restrictions and tightening of the *corralito* through a deposit freeze)?

Issues that have been discussed under this umbrella include, among others, whether convertibility should have been abandoned earlier, whether an early default (with or without de jure dollarization) could have avoided the run and ensuing pesification; whether pesification was indeed inevitable after the abandonment of the one-to-one exchange rate, whether there was indeed room for a stabilizing fiscal contraction in the second semester of 2001, and whether a more fortcoming support from the international community could have prevented (or postponed) the collapse.

IV. The Monetary Strategy for the Crisis

Following the default cum devaluation and pesification, and given the persistence of the deposit and currency runs, the Central Bank needed to adopt a strategy to attempt to stabilize the monetary situation. The Central Bank faced the following dilemma. Having regained its lender of last resort function, it could provide the liquidity needed to finance the bank run, but this can be done only at the risk of fueling devaluation and possibly hyperinflation, given the lack of money market or debt instruments necessary to sterilize this injection of liquidity. Alternatively, the Central Bank could limit the rediscount facility and let banks deal with the deposit run on their own, at the risk of widespread bank failures and, through the expected contagion and domino effects, of a total collapse of the banking sector.

The intermediate solution actually implemented consisted in a three-sponged strategy to (i) stabilize devaluation expectations, **intervening in the forex market** to fight the belief (widespread at the beginning of 2002) that the dollar was bound to spiral up; (ii) stretch the limits of **liquidity assistance** in order to slow down the pace of the bank run by preventing massive bank closures that might have further fueled the panic while (iii) **developing sterilization instruments** to absorb, at least partially, the liquidity issued, by sustaining high real interest rate to compete with the US dollar (development that was facilitated by the stabilization of exchange rate expectations due to intervention). In this context, it was crucial to stress the difference, increasingly perceived by the market, between an autonomous Central Bank and a defaulted sovereign.

This strategy was based on the central bank view that, given the lack of reference as to the correct level of the exchange rate, the stabilization of exchange rate expectations was a precondition for a successful sterilization policy, despite the pressure to cease intervention exerted by the IMF during the negotiations. According to this view, **an interest rate defense and an active foreign exchange market intervention were *complementary* rather than *substitute* policies.**

While the current situation (discussed below) appears to support the hypothesis defended by the Central Bank at the time, several questions related to this crisis management strategy deserve to be explored: i) Was foreign exchange intervention (at the cost of depleting reserves) really needed?; ii) Was the decision to avoid bank runs ex-post efficient, as compared with the alternative of letting the bad apples fall?; iii) What was the role of the IMF in this process, and what were the consequences of the protracted negotiations on the chances and the cost of regaining stability, given the continuous drain of reserves to service multilateral debt?; iv) to what extent the cost and length of the stabilization process hindered on the unprecedented decision by the Supreme Court not to recognize the pesification of deposits?

V. Current situation and outlook

The fears of hyperinflation and of a total desintegration of the banking system have been averted, and there are currently signs that the crisis (while it possibly took more than necessary) has bottomed up. The deposit run has stopped for the moment: banks are gaining deposits based on high real interest rates (as intended in the central bank strategy outlined above) and, after devaluation expectations were stabilized, the speculative demand for the dollar dwindled, which, given the favorable trade balance, allowed the central bank to regain reserves without generating exchange rate pressures. Moreover, due to the unprecedented recession and the absence of indexation practices that were common in the 1980s, the pass-trough has been very low, and inflation did not respond to the devaluation as most analysts expected.

However, the magnitude of the crisis contributed to leave some pending problems temporarily aside: real wages have declined by 50% (more if the more relevant consumption basket is considered), utility prices have yet to adjust (with a significant impact on low income families), and pressures for increased spending have been

surprisingly weak due to the scarcity of funds. All this suggests that any economic recovery will likely reignite inflation pressures that have been in check due to the economic contraction and the financial constraints.

Moreover, there have been no advance in the sovereign debt front. Here, as before with exchange rate and inflation forecasts, the consensus view tends to be extremely negative, pointing at a required primary surplus that is all but politically feasible. In addition, the political front is still clouded by partisan disputes, and the international community, led by the IMF, has not sent so far a clear signal as to the extent of the support to be expected either directly through an agreement and indirectly through its position in a debt renegotiation process.

In this context, the current positive developments open a number of crucial questions:

a. Is this incipient macroeconomic balance sustainable?

b. Given the institutional and political weaknesses, is it feasible to generate the fiscal results needed for a reasonable solution to the (defaulted) debt problem, and what would such a solution entail?

c. A large part of reprogrammed pesified deposits were eventually redollarized through the various versions of the deposit bond swap. As a result, a large fraction of bank deposits still remains in dollars. Should the goverment go through with an explicit dedollarization strategy (as suggested at the beginning of 2002) or move back to a bi-currency strategy (as recommended by some former officials)?

d. Given the presumption that real exchange rate will remain high, and therefore real wages will remain depressed, low rates of capital investment could be

expected, given the current comparative advantage in labor intensive activities. Should this lead to persistently low rates of growth?

e. What should the federal government do with local "quasi-moneys", buy them back (possibly against some commitment from the issuing province), reduce its use (e.g., cease to accept them for tax-payments), do nothing? How could this local money issuance be avoided in the future?

VI. The role of the IMF

The unravelling of the Argentine crisis raised a number of issues related to the role of multilateral financial organizations, particularly the International Monetary Fund, at different stages of the process. In addition to the issues mentioned above in connection to the IMF, some of the many relevant questions that appear recurrently in the debate on the involvement of the Fund are the following:

a. To what extent the Fund played a procyclical role in the development of the crisis, by endorsing the country's currency board in good times and withdrawing support in the midst of the crisis?;
b. Related to the previous question, what is the optimal timing of IMF warning and withdrawal, once one factor in the negative impact that this can have in international markets?
c. Was the position of the IMF excessively biased, as claimed by some analyists, towards procyclical fiscal adjustment and, if so, to what extent did this play a role in the development of the crisis (did this advice inform domestic policies and to what extent were these policies liable for the crisis)?
d. Did the IMF change its general stance towards emerging markets crisis due to the a change in the stance of the US government? If so, to what degree was this change had an implication in the context of the Argentinian crisis?

e. Related with the previous point, was the evolution of the position of the IMF regarding the Argentine crisis consistent with its position regarding other distressed emerging economies in the past and at the time?
f. What is the rationale of IMF (and other multilaterals') preferred debtor status (seniority) in a context in which no program financing is forthcoming?

Clearly, many of these questions can be addressed in the more general context of emerging market crisis and the international financial architecture. Indeed, we believe that an approach that balances the focus on Argentina with a more general perspective of the evolution of IMF policies, by filtering the exogenous (IMF-specific) factors, shall provide a more accurate picture of what was specific to the management of the Argentine case relative to what was due to swings in the IMF stance.