

NBER: The Argentine crisis

July 17th 2002

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Should we view the 1991 convertibility plan as having been a success, in hindsight? Argentina appeared to be the world's biggest success story for currency boards, does its failure in 2001 mean that hard pegs more generally, or the corners hypothesis, are now discredited worldwide?

Was dollarization ever a real option? If so, when was it too late? Is it still an option? Would a hard peg have worked if the link had not been to a currency, the dollar that on trade grounds was not well correlated with Argentina's needs?

1. Should we view the 1991 convertibility plan as having been a success, in hindsight?

Economic development proceeds *pari passu* with institutional development. Convertibility allowed important institutional developments since by buying US monetary institutions, Argentina obtained price stability, which allowed the government to concentrate in other fundamental reforms, instead of being occupied fighting inflation.

These reforms included the consolidation of fiscal and monetary institutions; the opening of the economy; the privatisation of public enterprises that increased efficiency and reduced structural corruption; the elimination of most of the regulations that hindered investment in the private sector; the transformation of the pension system, and the consolidation of the banking system. They allowed the private sector to take the leading role in economic development, making long term plans and being able to finance them, both domestically as well as internationally.

However, not all needed reforms were made. Some of the reforms where important efforts were made but where results were lacking were:

1. Political reform, that provides an election process for the legislative power with more accountability;
2. Reform of the judiciary system, so as have a strong enforcement of the Law, to fight corruption and to enforce property rights.
3. Labour flexibility, in particular in the public sector, a needed requirement of a fixed exchange rate system to allow the economy to cope with real shock with as little unemployment as possible;
4. A better distribution of fiscal responsibilities between the national and provincial governments, so as to provide for more fiscal responsibility at the provincial level.

The reforms made led to rapid income growth, large increases in investment including foreign direct investment, growth in productivity, increases in urban employment at the same rate as urban population, large increases in the size of the banking system, and exports that doubled.

All these outcomes in spite of very severe external shocks like the Mexican devaluation, the Southeast Asia crisis, the Russian default, the Brazilian devaluation, the appreciation of the dollar, the recession in industrial countries, the blowing-up of the NASDAQ bubble, and a significant adverse change in the terms of trade.

Whatever the merits of the convertibility plan during that early period, it is clear that it ended in tragedy by the end of 2001, a tragedy that is still unfolding.

Then, the interesting question is whether that outcome was inevitable, or whether it was the result of the mismanagement of the difficult situation produced by these large shocks.

The answer to this question is very relevant for the debate on exchange rate regimes, hard pegs and the dollarization issue, but is also a key element to formulate a new policy that could handle the different problems faced by the Argentine economy in July 2002.

1999, a critical year

GDP rose by 35% in the 1990 –1997/99 period, but in 2002 is falling back to its original level. Given that during those 12 years population grew by around 20%, GDP per capita has already fallen significantly.

I think that 1999 is a critical year that deserves careful analysis since it is in that year where we find the turning point. I will argue **against** the validity of the assumption that underlies many recent papers: i.e. that the enormous shocks of 1998-1999 could not be handled **within** the ‘convertibility program’ and that some radical changes were needed, so that the 2001 outcome was already presupposed in the 1999 parameters.

Convertibility had already faced significant shocks before and price stability has been maintained. During the Tequila crisis, GDP fell as much as 5.8% during three consecutive quarters (quarter on quarter, on seasonally adjusted basis). Confidence was restored and growth resumed quite strongly, even during the very difficult period of the Southeast Asian crisis.

The year August 1998 – August 1999 had even greater shocks for convertibility in store. Could convertibility have coped with them too?

The fact is that it did have an impact similar to the Tequila crisis (except in the banking system, where no effect was felt). GDP growth started to slow down in the 3rd Q of 98 and fell during the next three consecutive quarters, accumulating a total fall of 5.4% (quarter on quarter, on seasonally adjusted basis).

However, as in the Tequila crisis, it was a temporary fall. GDP was already flat in the 3rd Q 1999 and rising at an equivalent annual rate of 5.6% in the 4th Q (i.e. a seasonally adjusted rate of quarterly growth of 1.37%).

But, this outcome was short lived, since GDP fell in the 1st and 2nd Q of 2000. Therefore, we cannot rely on this observation of the growth of GDP alone, to claim that the economy was recovering from that massive shock. We need additional evidence that points in the same direction.

For example, industrial production which bottomed in July 1999 and then started to recover from that point on, and jumped by almost 13% to January 2000.

Other facts consistent with this story are (1) the behaviour of the Argentina’s country risk, that rose to almost 1500 b.p. during the crisis and was at the 500 b.p. level in January 2000, outperforming the country risk for other Latin American countries; and (2) the movement of the peso forward rate that peaked at a 25% per annum rate on September 1999 and by November it was back to its usual 2.5% annual rate.

Finally, a fourth piece of evidence is the response of other Latin American countries to these shocks. With the exception of Mexico, which was not significantly affected by the

shock, Colombia, Venezuela, Brazil and Chile were recuperating by the end of 1999 or beginning of 2000 (Talvi, E., (2000); Calvo, F. and Talvi, E.(2001)).

Then it is not only the behaviour of GDP, but these other evidence that allow us to conclude that the economy was able to absorb the large Russian-Brazilian – terms of trade shock without any substantial change in the economic program.

Without the benefit of hindsight and without the better statistics that are now available, many observers and market participants shared this view **at the time**, including most investment banks that were predicting a 2000 annual growth of 3.5 - 4%, including the government of President de la Rúa and the IMFⁱ.

Government expenditure

Some students of Argentina's economy have argued that the recovery from the 1998 recession was produced by a substantial increase in the level of public expenditures, an increase that could not be maintained and that, therefore, sooner or latter, the economy was going to go bust.

There was an increase in the overall government deficit, both at the national as well as at the provincial level. At the national level, primary expenditures remained constant while interest payments increased by \$1.6 billion. In the provinces, the increase in the fiscal deficit amounted to 1% of GDP.

However, there was not a similar increase in the fiscal impulse. According to the Fund, the fiscal impulse in 1999 amounted to 0.25% of GDP. For Perry (2002), using Blanchard's methodology, the increase in the national fiscal impulse is negative during 1999 (an annual change of -3.2% of GDP for the year); the exception is the 4th Q where it is positive but only of the order of 0.6 % of GDP.

Therefore, according to these two measures, it seems odd to attribute to fiscal policy the increase in economic activity observed in the 3rd and 4th Q of 1999.

Another explanation: Political shocks in the context of multiple equilibriums

If in spite of all the adverse shocks, the model could be considered a success story by the end of 1999, how do we account for the behaviour of the economy in the period that starts in the 3rd Q of 2001?

An explanation that seems to fit quite well the data described, is that advanced by some analysts (Corrales, 2002; Powell, 2002) that emphasises the role of political shocks in a context of multiple equilibriums.

Political shocks affect a vulnerable economy through their impact on investors. Given the behaviour of capital markets, doubts about the ability and/or willingness to pay off the foreign debt could produce a herd behaviour of self-fulfilling expectations, moving the economy from the good equilibrium to the bad one.

Argentina's vulnerabilities

At the end of 1999 the Argentine economy was vulnerable to shocks in its stocks, i.e. the possibility of the non-renewable of the external debt, both of the public and private sector, as well as that of the banking system. This vulnerability aroused not from the size of the debt itself or from its term structure but from the fact that market expectations about

growth, fiscal deficit and/or current account deficit may change and produce a run on Argentinean assets.

Total public debt was of the order of 43% of GDP, with an average maturity of almost 9 years for the bonds; the private external debt was of the order of 13% of GDP and deposits of the banking system amounted to \$80 billion (around 34% of GDP). While reasonable in terms of GDP, they could be seen as large in relation to exports. And for some analyst, especially rating agencies, this was the right approachⁱⁱ.

The fiscal deficit of 2.6% for 1999 –without counting the income from privatisations - while large for a country with a reputation problem, could not be considered large by international standards. This figure, however, could not be compared directly with that of other countries, since it included the large expenditure involved in changing the pension system. Argentines were making contribution to two pension system at the same time: the old, pay as you go system, since pensioner were being pay out of tax collected, and the new capitalisation system in which workers contribution started to capitalise. (In 1999, \$4.3 billion were paid in contributions to the new pension system. If the change had not occurred, the fiscal deficit could have been only 0.13% of GDPⁱⁱⁱ).

The current account deficit was substantially larger: 4.2% of GDP, but not significantly different from those of Brazil, Chile, Colombia, Mexico or Peru. On the other hand, almost three quarters of it was financed by foreign direct investment.

The exchange rate arrangement required a very flexible labour market to be able to accommodate real shocks. This was not the case: salaries in the public sector were as rigid as a rock. The situation was slightly better in the private sector but not as much as to allow adjustment to be easily made. Shifts from better-paid formal to informal work plus unemployment were the adjustment variable.

The tax-sharing scheme between the national and provincial governments did not provide the required incentives for a prudent management of fiscal accounts at the provincial level.

The multiple equilibrium problem

These vulnerabilities presented a challenge to the new authorities but were not unmanageable. However, if market expectations about the ability and/or the willingness of Argentina to repay its debt changed, the economy could face a very difficult problem.

At the end of 2000-beginning of 2001 there were some analysts that were concerned about the sustainability of the debt to GDP ratio. They analysed the problem and were very positive about the conditions needed to obtain that goal.^{iv} All that was required, even at interest rates of 600 – 700 b.p. spread, was a grow rate of the order of 4% or an increase in the primary surplus of the order of 2% of GDP. With a growing economy and the political impulse of a new administration, the adjustment - difficult as any adjustment- did not pose a significant problem.

These models had an important assumption: that all capital services are rolled over. However, the validity of this assumption depends on the expected behaviour of market participants, which may in turn be conditioned by the expected rate of growth of GDP and the domestic interest rate, as well as by the expected behaviour of the *other market participants*.

If there is a reduction in the perceived willingness to roll over the debt, then the fiscal surplus/rate of growth of GDP required would increase dramatically, even for a

country that had a good term structure of its debt. The required primary surplus increases by the size of the amount of capital services for the period necessary to bring the country back to capital markets. To have an idea of the magnitude of the shock, capital service for year 2000 amounted to almost 15% of GDP (US\$ 16.371 million of public debt, US\$ 12.105 millions of the non financial private sector, and US\$ 15.493 millions of the financial sector, i.e. a total of US\$ 43.969 millions.)

In that critical situation, the banking system may be unable to roll over deposits and will be using international reserves to finance capital flows, contributing to increase the vulnerability of the economy through its impact on expectations, domestic credit and the level of activity. (Deposits amounted to US\$ 76 billion, while the international reserves of the banking system amounted only to 20% of that figure.)

As the required primary surplus increases, the needed political support to the economic program must increase *pari passu*. If it does not, then the interest rate will increase again, depressing the expected rate of growth, and increasing the required primary surplus, starting a new cycle.

It is very easy to perceive how the vulnerability of the economy could increase with changes in confidence. Once this process starts, and as long as confidence in the government is not restored, the economy will move to the “bad equilibrium” and the probability of default will increase significantly^v.

In the case of a dollarized economy this increase could have a significant impact on the perceived contingent liabilities faced by the public sector, since default may lead to devaluation, and the initial overshooting may produce severe damage in the banking system. This provides new incentives for increases in the interest rate – assuming that the country still has access to capital markets, and most likely, it will shut off that access completely. A manageable situation could become a disaster if the wrong policies are implemented.

The political shocks

Corrales distinguish two main sources of political shocks: internal and external.

The internal, that he calls “The State-Without-Party Condition”, refer to two main events:

The behaviour of the national government during 1998-99, when President Menem was seeking its re-election (or at least wanted to maintain that ‘door open’ so as not to become a lame duck), and the peronist candidate, Dr. Duhalde, governor of the province of Buenos Aires increased public spending by almost \$2 billion.

The second internal political shock was the lack of leadership of President de la Rúa who control neither the government coalition, nor his own party.

With respect to the political shocks coming from abroad, Corrales mentions the new attitude of the IMF, predicated on the basis of the moral hazard, which changed from ‘fire fighter’ to ‘imprudence fighting’. This new policy began to be applied to Argentina gradually in the second half of 2001.

Whatever the merit of Corrales hypothesis about the international political shock, that is shared by some other important analyst, we have to recognize that the Fund supported Argentina in December 2000 by means of the ‘Blindaje’ (a \$14 billion total loan from the IFI’s in December 2000) and then again in August 2001 by a \$ 7 billion loan (even

though according to Mussa (2002) it was obtained in an unorthodox way), before jumping to any conclusion on the IMF policy.

Internal political shocks

There are many events during 2000-2001 that could be considered as internal political shocks and that may be responsible for the movement of the economy from the good to the bad equilibrium.

It was clear, from the beginning, that the new ruling coalition had very heterogeneous economic views, not only between the two parties, but also within the radical party. President de la Rúa campaign has been based on the slogan “one peso one dollar” and that on October 2000 ex President Alfonsín claimed that: “the Convertibility Law of 1991 is the gravest episode in economic affairs of this century”.^{vi}

So investors were confused as to which was the economic policy to be adopted by the government, and adopted a ‘wait and see’ attitude. This was reflected in the slow recovery of investment during the last two quarters of 1999, and the significant fall during every quarter of the new administration period (with the exception of the 3rd Q of 2000, when there was a modest recovery in the seasonally adjusted figures).

There were at least four important internal shocks:

(1) A first shock was the initial emphasis on adjusting the budget mainly through increases in taxes instead of reduction in government expenditure, that was consistent with the ideology of the government coalition (the ‘*impuestazo*’ that was supposed to yield \$3.5 billions). This sends a signal to investors that the increase in taxes was not transitory.

(2) A second shock was the resignation of Vice President Alvarez in October 2000 that implied breaking formally the government coalition, which rose doubts about the government’s ability to pass needed legislation.

(3) A third shock was the resignation of Minister Machinea, a few months after obtaining a large program of liquidity support from the international community (the ‘*blindaje*’), which signalled that the 1st Q targets of the IMF program were not met and, he was not able to obtain the political support to carry on the necessary adjustments. This confirmed the impact that the breaking of the Alliance had on the political support of government decisions.

(4) The fiscal adjustment proposed by Minister Lopez Murphy in March 2000 that was tailor made to test whether there was enough political support for a fiscal adjustment that hit the political base of the coalition, and found that there was not.

(5) And, last but not least, the defeat of the Alliance in the October 2000 midterm elections for the half of the Cámara de Diputados and all of the members of the Senate, that decreased significantly the power of President De la Rúa.

Finally, even though is difficult to characterize it as a political shock, we must consider the granting of special powers to President de la Rúa and the misuse of them by Minister Cavallo, who tampered with convertibility, Central Bank independence, the banking system, pension fund’s investments and the tax/subsidy structure at the firm level^{vii}.

The impact of the political shocks

These shocks produced a move from the good to the bad equilibrium, a smooth one during 2000 that accelerated during the first semester of 2001 and got a ‘disaster’ dynamic that led to the total closure of debt markets. The debt exchange of June (where interest rates as high as 16% were consolidated for periods of up to 30 years) aggravated the perception of desperation, and the run on banks. The placement of public debt on pension funds accelerated the drop in deposits. The end result was a so called ‘policy’^{viii} of zero deficit’ that implied a politically impossible shrinking salary of public employees.

By mid 2001, the run on Argentinean assets in general, including bank deposits, was very fast. The significant uncertainty caused by that movement led to a huge drop in investment (-25% only during 2001) and consumer confidence.

The final mistake of Minister Cavallo was the way in which deposits were frozen. Instead of using all international reserves to back means of payment, and freeze only time deposits, all bank deposits were treated alike. The result was the breaking of the payment system with a significant impact on the level of economic activity.

2. The second question asked by the organizers is: *Does the failure of the convertibility program in 2001 mean that hard pegs more generally, or the corner hypothesis, are now discredited worldwide?*

I have two comments to make.

The first one is that I believe that the economic crisis in Argentina has had a significant impact on the credibility of the ‘two corner solutions’ for the exchange rate policy. For many authors that accepted reluctantly the currency board solution only due to its success in Argentina, its failure could be taken as a convincing proof of its basic weakness. For them, all the vulnerabilities of the fixed exchange rate have finally been brought to light, and there appears to be no merit left.

This seems to be becoming the **new** conventional wisdom, and inflation targeting or some other form of monetary anchor under flexible exchange rates is assumed to be the only monetary regime for emerging countries. However, I believe that it is too early to jump to that conclusion.

On the one hand, the evidence on Argentina has very different potential interpretations, and one of them, the one I outlined above, basically say that currency boards are difficult to reconcile with large debt positions and significant shocks due to multiple equilibriums. But that may also apply to economies that have a floating exchange rate and some nominal anchor, for example the popular inflation targeting. If the magnitude of the shock is such as to move their economy from the good to a bad equilibrium, and the country is able to do all the political mistakes and still survive, then we may reach a more definitive conclusion.

I hope that the situation in Brazil does not provide us with the needed experience, but I do not see how the exchange rate depreciation could solve the run on Brazilian assets, since most public debt is in dollars or in Real but indexed to the dollar or to the local interest rate. (A similar situation is developing in Uruguay).

This precarious consensus on currency boards, based on one observation, may change again. The emphasis on vulnerabilities, multiple equilibriums, and the behaviour of the capital market, will then have a larger role in the discussion.

My second comment has to do with the ‘failure of the convertibility program’. Was it a failure of the convertibility program or was it a mismanagement of a difficult situation in 2001? Would it have been different under floating exchange rates?

I have tried to show that during the 1991-1999 period the economy had had a very good performance, **in spite** of the very severe shocks that it had faced (Tequila, Southeast Asia), and that it also had the ability to support the larger shocks of August 1998-August 1999, maintaining price stability and resuming growth by the middle of 1999.

I do not intend to minimise the very severe threats facing the economy at that time, given the vulnerabilities that the economy still had.

I also recognise that the exchange rate stability led to a higher dollar exposure than what could be justified on terms of underlying cash flows. But the banking system had excess capital that could handle the loss of a 40% depreciation of the currency without being left with a capital base lower than Basel requirements.

However, I believe that the mismanagement by the new administration, and in particular the policies of Minister Cavallo, can be held responsible for the steep drop in confidence that started in April 2001, which led to a run on Argentinean assets that concluded with the need to freeze deposits. Convertibility still had a chance even after that hard measure, but the particular freeze implemented by Minister Cavallo, that was the worst of all possible ones, killed it.

Therefore, the analysis of the convertibility program should consider this story of mismanagement before jumping to any conclusions.

In summary, hard pegs may look discredited, but seems to me to be so for the wrong reasons.

The issue of dollarization

Another important question asked is: *Would a hard peg have worked if the link had not been to a currency, the dollar that on trade grounds was not well correlated with Argentina's needs?*

There have been a long debate on the choice of the exchange rate regime, and probably tons of ink will still flow on the subject. But one of the more important policy prescription is that imbedded in Bob Mundell’s phrase: “there are good pegs and bad pegs, as there are goods flex and bad flex”, i.e. what is important is not the exchange rate regime itself but the consistency of the macroeconomic policy.

Hard pegs, of which Currency Boards and dollarization are extreme cases, is a policy regime that has significant advantages for a country that is relatively closed to international trade (so that not significant shocks can come from there); where the people use a foreign currency as reserve of value and unit of account; and where to build the credibility in their own currency will take many years of inflation fighting.

The larger the international trade, the more important the potential shocks from that sector and then, in a world of rigid nominal wages, the larger the advantage of a flexible exchange rate. But, if in that context the country decides to peg, then the currency to which it should do it is that of its main trading partners.

Argentina’s exports, in spite of more than doubling during the convertibility program, represented only 9% of GDP, and are mainly commodities. On the other hand, the Argentinean experience of inflation had been pretty bad, with more than 50 years of high

inflation and a hyperinflation in 1989-1990. The end result is that the Argentine economy is largely dollarized. So, in the case of Argentina, obtaining and assuring price stability dominated the cost/benefit analysis.

The problem of the hard pegs is the adjustment to external shocks. On the one hand, if there is not enough labour flexibility, the adjustment will come through unemployment, an adjustment that could diminish the political support to the hard peg. Additionally, the hard pegs are prone to create currency mismatches on the banking system, and a change in relative prices will erode bank's capital.

The way of dealing with these problems is to have as much labour flexibility as possible and avoid as much as possible currency mismatches in underlying cash flows.

The banking system problem is easier to solve than the labour one, since if the currency mismatches could be avoided through prudential regulations. If, however, it is convenient to have currency mismatches, the potential impact of a change in relative prices could be accommodated with a large enough bank capital, so that the banking system can accommodate the increase in non-performing loans caused by the change in the relative prices. The excess of bank's capital over the international standard could be seen as a way of hedging the currency exposure.

This was the mechanism used in Argentina, which by the end of 2000 could stand a depreciation of 40% without bank's capital coming below the Basel requirement.

With respect to labour flexibility, it is clear that the level of real wages today present an opportunity to introduce flexibility, particularly in the public sector where wage flexibility is most difficult. Since in the near future nominal wages would increase, it is possible to make those increases take the form of bonuses, which are contingent on certain parameters of the economy. Thus, for example, the public sector's wage increase could be made contingent on the behaviour of the fiscal situation; the private sector may be made contingent on some variable that expresses each sector productivity increase.

What is clear is that the low level of real wages presents a clear opportunity to tackle the issue of labour flexibility.

To summarize, from my previous analysis of convertibility, I believe that the dollar was the right currency to which to peg the peso, and not much improvement could be obtained from mixing different currencies. Minister Cavallo played with this idea when he 'widened convertibility' and *de facto* depreciated *the dollar* (sic) by assuming that the value of the euro was one dollar - a value that was reached only yesterday - for computing the 'convergence factor'

4. Was dollarization ever a real option?

Dollarization is a policy instrument that could be used in two very different ways (Powell, 2002):

- a. As a way of locking in a program of economic reforms or
- b. As a crisis resolution instrument

From the point of view of a country like Argentina, that had a successful experience of living without monetary policy for many years, it was a measure that could consolidate the reforms that had been made earlier. A right moment for doing it was after 1996, when the model had proved to be able to sustain a large shock as the one arising from the Mexican devaluation.

But then came shocks, one after another, and it seemed difficult to find the room to talk about this ideas. Nevertheless, in the wake of the Brazilian devaluation, ex President Menem declared that before devaluing he would dollarize.

So, the period 1998 through 2000 was a period in which dollarization would have consolidated the reforms. In those years, a move to dollarization will have eliminated the risk of devaluation and its significant impact on contingent liabilities. The pressure on the exchange market was very small; the NDF was of the order of 2.5% annual rate. At that point in time, dollarization was a way of consolidating the economic program, much in the same way as did El Salvador, a country with investment grade that had pushed through a series of deep economic reforms and dollarized on January 1st 2001 quite successfully. (Powell 2002b; Guidotti and Powell, 2002).

In 1998/9 there were some informal conversations with US officials that showed their willingness to consider the possibility of going ahead with a monetary treaty as long as it did not imply that Argentina will have a saying in US monetary policy, that the Fed will be LOLR of Argentinean banks, or that it will be involved in supervising Argentinean banks. Seigniorage –a major issue at the time from Argentina point of view – was not a deal breaker from the US point of view. However, they felt that an outgoing administration (it was the last year of president Menem) did not have enough power to push the Treaty forward in the Congress and that the incoming one (be it De la Rúa or Duhalde) were much opposed to the idea.

I understand that by the middle of 2001 there were also conversations on this topic, especially at the Basel meetings where some prominent policy makers of the US were asking why Argentina was not considering dollarization.

It will have been a bold movement of the new government to promote dollarization in 2000, and it may have gained enormous credibility. It may still be a reasonable bet even until April-May 2001. May be it was still a possible instrument as late as September 10th, after receiving the disbursement of the IMF money.

Latter than that, the freeze of deposits was inevitable, and dollarization could only be considered as a crisis resolution instrument.

However, the internal discrepancy within the radical party – and in particular the position of Dr. Alfonsín – did not leave any room for this initiative.

5. Is still an option?

It is very difficult to say whether dollarization is an option at this moment, since the situation in Argentina is evolving in slow motion. The government took two decisions at the end of last year default the public debt and devalue. We have spent 7 months trying to solve domestic default, i.e. the situation of the freeze of bank deposits, and have made **no progress**.

We have not even started to talk to foreign creditors, nor have any idea of how to handle the foreign debt of utility companies and the price of their services (that has been frozen in pesos), or what the final solution of the corralito/corralón is going to be.

Probably, these “bold movements” of the Duhalde’s government (ratification of the default plus asymmetric pesification) would lead, at the end of the day, to a substantial increase in public debt (new large unregistered public debt – or ‘skeletons’ - as the ones that increased the government debt in the 90’s, and which were originated by wrong government decisions of the 80’s.)

Therefore, before analysing dollarization as a crisis resolution instrument, we need to have a clear idea of how those problems that are present today in the Argentine economy are solved.

Nevertheless, I believe that –provided all the remaining stocks pressures are solved during this transition government, as well as all pent-up inflation in the tariff of public services and the wages of public employees and pensioners - dollarization could be used as a crisis resolution mechanism, much in the same way in which it was used in Ecuador (see de la Torre, 2001).

The benefits that Argentina can obtain from it are still in place and are large: an economy closed to international trade, highly dollarized, and that have lost all trust in its financial and monetary institutions, will be able to reap a significant gain from such a policy. Unfortunately, the alternative of a new convertibility will have smaller credibility, due to the way in which the previous one ended.

Dollarization in the context of a Treaty with the US, which will grant this instrument a constitutional status under Argentina law, will eliminate some of the uncertainties that will have any exchange rate regime after the default-asymmetric devaluation-breach of property rights. The best approach will be to negotiate such treaty together with a free trade area with the US and the European Union, which will provide the basis of a development strategy.

Calvo, G. and Talvi, E. (April 2001); "Understanding Argentina in the Light of Chile" (presentation for the XIV Meeting of the Latin America Network of Central Bank and Finance Ministries)

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De la Torre, A Roberto García-Saltos, and Yira Mascaró (2001) "Banking, Currency, and Debt Meltdown: Ecuador Crisis in the Late 1990s"

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Talvi, E. (November, 2000); "LAC After the Financial Crises: Just Recovery or Growth?" (Presentation at the World Bank, Washington D.C., November 27th, 2000)

ⁱ Thus, in February 24th 2000, the Fund report on the requested Stand By Arrangement says that the economy bottomed out in July 1999. However they did not believe that the economy could grow at 4% in 2000, but only at 3.5% (sic).

ⁱⁱ One reason for using exports and not GDP as a reference for measuring the debt is the fact that if there is a perceived overvaluation of the currency, the figure for Debt/GDP may be larger than what it actually is.

ⁱⁱⁱ There is a very interesting discussion of the problems that arise when old non registered debt is instrumented in the forms of bonds in Hausmann, R. and Velasco, A. (April 2002). In particular, the authors discuss the impact on the interest rate of a registered debt versus an unregistered one.

^{iv} See, for example, Gavin (2001) and J.P. Morgan (2001)

^v Powell (2002a) finds support for the importance of (a) a political risk index and (b) interaction effects within a VAR econometric model of the Argentine crisis which also gives support to this hypothesis.

^{vi} See Corrales (2002), pp.6

^{vii} Hausmann and Velazco are correct in disregarding ‘political gridlock’ at that stage, since very significant powers were transferred to the Executive Branch. This is not the case, however in 2000 and early 2001. (Hausmann, R. and Velazco, A., 2002)

^{viii} Without the possibility of borrowing and with international reserves rapidly falling due to the run on the banks, the only alternative was to adjust expenditure to income. Therefore, it is difficult to call this a *policy*.