
financiamiento del desarrollo

From hard-peg to hard landing? Recent experiences of Argentina and Ecuador

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NACIONES UNIDAS



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Executive Secretariat Office

Santiago, Chile, January 2003

This document was prepared by Alfredo Calcagno, Sandra Manuelito and Daniel Titelman, Economic Affairs Officers of ECLAC, for the International Conference "Towards regional currency areas" (Santiago de Chile, 26-27 March 2002) organized by: Centre d'Economie et de Finances Internationales (CEFI), Centre d'Etudes Prospectives et d'Information Internationales (CEPII), Economic Commission for Latin America and the Caribbean (ECLAC), Institut de la Caisse des Dépôts et des Consignations (CDC) pour la Recherche and Revue Economique.

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United Nations Publication

LC/L.1849-P

ISBN: 92-1-121391-6

ISSN printed version: 1564-4197

ISSN online version: 1680-8819

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Sales No.: E.03.II.G.17

Printed in the United Nations, Santiago de Chile

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Abstract

Based on the analysis of the Argentinean currency board and the full dollarization scheme in Ecuador this paper argues that an intermediate exchange rate regime (compared to free floating or hard peg) will be a better option for countries subject to external financial shocks and a worldwide export and import structure.

It shows that the Argentine convertibility system was successful as an anti-inflationary program. However, the reduction in the inflation rate has been accompanied by a dramatic change in relative prices of tradable and non tradable goods and services, which have caused serious problems in the international competitiveness of the economy. The dollarization regime in Ecuador did not lead, as in Argentina, to a rapid reduction in the inflation rate (in 2001, CPI may still increase 30%); if inflationary inertia persists for too long, Ecuador may witness the same deterioration of relative prices between tradable and non tradable products, negatively affecting its external sector.

Price stability is not a synonym of economic stability. The convertibility system generated a paradoxical situation, in which the economy is very stable when judged by the stability of the general price level and the exchange rate, but very unstable, if one looks at the growth rates of the economy. This instability relates to external credit cycles and changes in export income which directly affect the monetary base and hence the level domestic credit. Also, the absence of the adjustment in relative prices between tradables and non-tradables, requires that in the event of an external deficit, the entire

burden of adjustment falls on the contraction of the economic activity, since this is the only way to reduce imports.

Hard-peg regimes heighten the external sector's influence over the pace of economic activity, even in a country like Argentina, with low coefficients of trade openness (in 2001, imports and exports each represented less than 10% of GDP in current values). In Ecuador, trade openness coefficients are around 30%. Argentina took advantage of the availability of foreign capital that emerging markets enjoyed beginning in 1991-1992. In the first half of the nineties, the capital inflows permitted the financing of the current account deficit and significant pace of economic growth. Nevertheless, it has resulted in high external indebtedness and rising payments of interest and capital income, which, in the absence of a sustained rate of export growth, jeopardized the future viability of the convertibility scheme.

A lesson that arises from the Argentine experience is that it is not possible to sustain in the long run a hard peg regime together with long lasting fiscal or current account deficits; either fiscal or current account equilibrium have to be achieved, which as it was seen is not an obvious outcome of hard peg regimes. In Argentina, this simultaneous equilibrium was not attained: when the economy grew, it produced an increase of imports and a trade deficit; when it did not grow, there was a fall in tax revenues, which led to a fiscal deficit. Increasingly since the Mexican crisis, the way to elude this contradiction was the increasing in public external debt. In this sense contrary to what was suggested, the convertibility system stimulated public external indebtedness instead of forcing a move towards fiscal discipline. As a final result, at present Argentina had to face severe deficits both in the fiscal and external sectors. This implies that in the case of Argentina the convertibility law was able to eliminate for several years the devaluation risk, but dramatically increased the default risk, which has proven to be as costly as the former and led to a strong attack to convertibility.

It is also shown that for the Argentinean case the automatic adjustment mechanisms implied by hard pegs has not operated in a smooth way. This is due to the fact that international financial markets tend to adjust via quantity rather than via prices: a rise in interest rates does not lead to an increase in capital inflows to a country whose over-indebtedness is already manifest, as is the case of Argentina and Ecuador and they can not rely on a permanent access to the international financial markets at reasonable interest rates.

Also, external crisis go hand by hand with domestic banking crisis introducing difficulties in the dynamics of the automatic adjustment. The natural raise in the domestic interest rates to attract external financing has a strong effect in deepening domestic recession and increasing financial cost. These two factors create solvency and liquidity problems in the corporate level, worsening the risk of the banking sector liabilities and driving it towards a banking crisis. As long as the exchange rate regime places limits on the Central Bank to act as a lender of last resort problems of insolvency can spread more easily to the banking system.

I. Introduction

As a result of the series of exchange rate crises in emerging economies, a debate concerning the most suitable exchange rate regime increased in intensity during the late nineties. It was argued that “intermediate” exchange rate regimes were no longer sustainable in such countries, given the growing integration of financial markets and the instability the latter have shown. According to this view, countries should choose between free floating and “hard peg” regimes. Within Latin America, the cases of Argentine “convertibility” (until December 2001) and the dollarisation in Ecuador were given as examples of successful hard peg regimes.

Latin American economies have witnessed a wide range of different exchange rate regimes. In some cases, exchange rate policy has been used as a tool to enhance competitiveness; while in others, it has been used as a nominal anchor for stabilization purposes. According to the different objectives posed to the exchange rate policies, countries have experienced with active crawling peg systems (a timetable of pre-announced devaluations), exchange rate bands, where the exchange rate is allowed to float within a certain margin (it is possible to allow the band to slide, but not necessarily at the rate of current inflation), flexible exchange rate with some degree of intervention, and fixed parity. Sometimes, when a fixed exchange rate regime has been adopted, additional credibility has been sought through the passage of laws setting the parity of the currency and the adoption of very strict monetary rules under which the monetary base issued by the central bank has to be fully backed by the country’s international reserves at all times.

These cases constitute the so-called “hard peg” regimes. Dollarisation is the most radical regime within this policy category (Calvo, 2000).

Even though the major reason for implementing a fixed exchange rate regime has been to control the inflation rate, in many cases this type of regime has also been used as a device to induce or promote changes in the behaviour of economic agents and institutional reforms. In particular, when implemented simultaneously with trade liberalization, one of the economic authorities’ objectives has been to impel sectors exposed to external competition to increase their competitiveness, since it will no longer be possible to protect their market share through devaluations of the local currency. Moreover, by reducing the flexibility of monetary instruments and of the exchange rate, it was thought that a greater flexibility in other markets (particularly, in labour market) and fiscal discipline would be necessarily achieved.

In the last twenty-five years, the decision by some Latin American economies to adopt a fixed exchange rate regime was taken in moments when they could profit from a large availability of international financing. These countries have, for the most part, been successful in reducing inflation, but not in establishing a regime of sustained growth. Examples of such regimes are the monetarist experiments of Chile, Argentina and Uruguay in late seventies and early eighties, Mexican anti-inflationary policy between 1990 and 1994, and the “Real Plan” in Brazil, between 1994 and 1999.

Once the fixed exchange rate was put in place by these countries, the economies tended to follow a similar macroeconomic pattern, which can be stylised in three distinct phases. In a first phase, these regimes promoted what seemed to be a “virtuous circle” of foreign capital inflows, lower inflation, an expansion of domestic credit as the economy remonetises, a recovery of consumption, an upturn in imports and a rise in fiscal revenues. Economic growth attained high figures, boosted by the availability of credit, both foreign and domestic, and by the use of idle capacity of production. In a second phase, the virtuous circle of stabilization and recovery comes to an end. The brake is usually put on by current account deficits, mainly due to trade imbalances caused by the real appreciation of the currency. Moreover, that appreciation leads to increase difficulties in tradable-producing sectors, where employment and production tend to decline, while both domestic and external debt are on the rise.

In a third phase, external deficit widens, since now the service of the foreign debt and the payment of profits increase. The level of perceived country risk increases and capital inflows decreases dramatically, while capital outflows speed up. Interest rates are raised in order to attract short-term capital and to defend the exchange rate. Expenditure is cut down in order to reduce the trade deficit; as a consequence, fiscal revenues fall, interest payments over public debt soar, unemployment rises and bank fragility becomes evident. While output contracts, the “virtuous circle” of phase-1 reverts into a vicious one. This phase is often accompanied (or triggered) by external shocks like a rise in external interest rates, the deterioration of the terms of trade, an international capital’s “flight to safety” provoked by the crisis of another emergent country, a slower growth in the world economy or a drop in world trade, which, given the economic *disequilibria* accumulated, force countries to leave abrupt and traumatically the fixed exchange rate regime.

Hard-peg regimes aim at introducing qualitative differences with other fixed exchange rate regimes, by means of tighter legal commitments concerning the exchange rate peg and monetary emission rules. These differences, according to official views, should prevent previous failures to occur. Based on the Argentine experience, this paper shows that the three phases process is not avoided, but may be even accentuated by hard peg rules. During the first phase, legal guarantees and tougher rules played a decisive role in building credibility on international financial markets, leading to excessive capital inflows; they afterwards prolonged the second phase, during which

external and public debts increased steadily, and the conditions for a grave crisis were set up; and finally, they made it impossible to pilot the economy through the third phase, due to the loss of policy instruments. In that phase, the strategy to stick to the basic rules of convertibility in the hope of a renewal of confidence and the achievement of an automatic adjustment only aggravated the crisis.

The situation could be different to some extent in Ecuador, since initial conditions are not favourable to a booming first phase. But even if macroeconomic dynamics is not explosive, the sustainability of these regimes and their capacity to frame a development process is unlikely. Recent experience suggests that the maintaining of a hard peg system (including dollarisation) needs conditions, which are very difficult to gather and preserve, such as growing and sustained inflows of foreign currency. Moreover, countries that choose to implement such regimes should have their economies mostly based on services rather than on the production of tradable goods, in order to cope with real appreciation of the exchange rate, and be in a situation that allows them to live almost completely from external trade and finance. However, Hong Kong and Panama are not replicable models for almost all other Latin American countries.

II. Phase-1: price stabilization and economic recovery

In Argentina, for the sake of credibility, the “convertibility” plan had to show sharp differences not only with the policies followed in the near past, but with a previous attempt of using the exchange rate as a nominal anchor as well; that was the 1978-1981 “active crawling-peg” experience, which intended to check inflation and enforce liberal reforms, and led to a serious banking crisis, huge capital outflows and high external indebtedness; the crisis culminated in the devaluation of the currency, the nationalization of private external debts and the acceleration of inflation (Calcagno, 1984). The burden of external debt over the balance of payments and government finances was overwhelming; it was one of the main reasons of the process of deterioration that led to debt default in 1988 and hyperinflation in 1989.

The Act establishing the Convertibility Plan (in March 1991) fixed the exchange rate at the value of 10,000 *australes* per dollar,¹ and tried to give credibility to this rate in two ways. One was the rigidity of the measure: the exchange rate was fixed by law, which could only be changed by another law; the other was the announcement that the money issued must be backed by the international reserves: if the public so wished, it was stated, they could change the entire national currency holdings for dollars. The possibility of such conversion was ensured (in theory) by the monetary rule: the Central Bank could only increase the monetary base in

¹ As from January 1992, the *austral* was replaced by the peso at the rate of 1 peso = 10,000 *australes*.

accordance with a corresponding increase in its monetary reserves.² Furthermore, another Act amending the Charter of the Central Bank severely limited its capacity to grant rediscounts and temporary advances to financial institutions and restricted the possibility of granting finance to the government. Through these measures, the issuing function of the Central Bank was brought closer to that of a currency board which would issue or absorb money in line with variations in the foreign exchange reserves, depriving the Central Bank of its function as lender of last resort.

In Ecuador dollarisation began with the peg of the exchange rate at 25,000 *suces* per dollar (on January 9th 2000) and attained legal status with the adoption of the Law on Economic Transformation of Ecuador in March of the same year. This law does not formally eliminate the *sucre* as national currency (to that purpose a constitutional reform would be required) but makes circulation of foreign currencies legal, guarantees their transfer out of the country, establishes that accounting and contracts should be made in dollars, bans the issuance of new *suces* by the Central Bank and withdraws from circulation those that are exchanged for dollars. As a result the *suces* progressively disappeared from the economy of Ecuador, leaving only a tiny amount of small change, which should be entirely covered by international reserves.

This Act stipulates that the fiscal budget to be submitted to the Parliament may not present a deficit of more than 2.5% of Gross Domestic Product (GDP), and that real expenditure growth cannot exceed 5% of that in the previous year. Moreover, the average fiscal balance over three years must be at least in equilibrium. In case of extraordinary fiscal revenues from the oil activity, a part of them must go to a Stabilization Fund, designed to finance infrastructure projects and debt repayments.

This law also opens sectors such as hydrocarbons, electricity and telecommunications to private capital,³ and changes the Labour Code by making it more flexible, in particular by the introduction of hourly contracts (with a minimum pay of 0.5 dollars per hour). These basic reforms are presented as necessary requirements for the functioning of the dollarisation: from this point of view the extension of precarious labour contracts is imperative for obtaining flexibility in an economy that has lost several instruments for dealing with external shocks, while privatisation would attract external capital and thereby strengthen the balance of payments.

In Argentina, the convertibility system has been very successful as an anti-inflationary program: from a four-digit inflation rate before the beginning of the plan (1,344% in 1990), the rate was lowered to 84% in 1991 (with the major rises being concentrated in the first quarter, before the start of the program), 18% in 1992, 7.4% in 1993; between 1995 and 2001 it has oscillated between +1.6 and -1.8%.⁴

This achievement, however, came together with a dramatic change in relative prices of tradable and non-tradable goods and services. Figure 1 shows the evolution of the price index of industrial goods (mostly tradables) related to the price index of services (mostly non-tradables). It can be noted that the authorities pegged the exchange rate after a year during which the local currency had been overvalued, with the consequent deterioration of the relative prices of industrial goods. Since the establishment, along with the convertibility system, of a fixed exchange rate, the momentum of services prices continued having an adverse impact on the relative prices of industrial goods until this relationship stabilized in 1994.

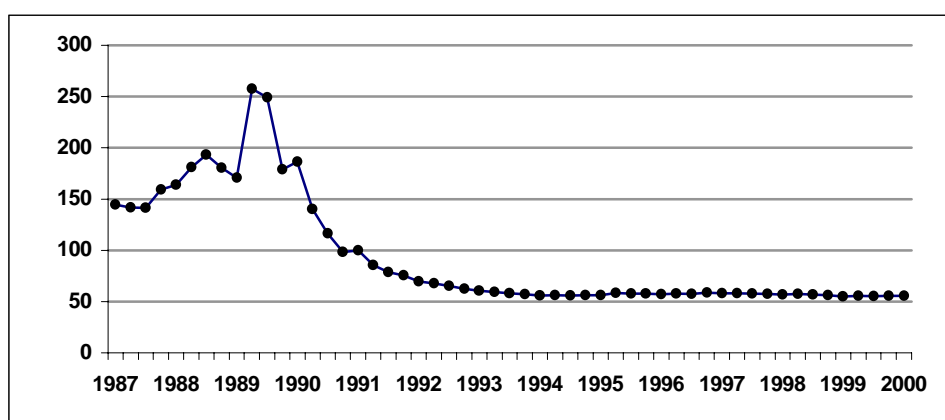
² Among the international reserves computed as backing for the monetary base the Government included dollar-denominated Argentine public securities in the hands of the Central Bank, valued at their market price. Strictly speaking, these securities should not be considered as a component of international reserves, since they are not foreign claims. The special nature of this component was implicitly recognized because it was laid down that they could not account for more than 20% of total reserves —that limit was afterwards increased to 33%. In fact, as a part of the monetary base could be backed by these securities, the Central Bank was given some (limited) flexibility in monetary emission, which would prove to be of great importance to cope with 1995 crisis.

³ The private sector could absorb up to 51% of the shares in the telecommunications and electricity firms.

⁴ These values correspond to the December-December variation in the consumer price index (ECLAC, on the basis of official figures).

The stabilization of the price level, together with the inflow of foreign capital, had a major effect on the economic recovery that took place between 1991 and 1994. These factors permitted a rapid remonetisation of the economy and an expansion of credit (especially consumer credit), which gave way to a reactivation that was mainly based on the use of idle capacity (table 1). Fiscal accounts improved for several reasons: the lower real cost of the public debt in dollars; the diminished inflationary erosion of fiscal revenues (the Olivera-Tanzi effect in reverse); and a wider tax base, due to the increase in both activity and imports. These new conditions, combined with the improved operation of the tax system, paved the way for a rise in fiscal revenues and a considerable reduction in the fiscal deficit, even though public expenditure also increased.

Figure 1
ARGENTINA: RELATIONSHIP BETWEEN THE
PRICE INDICES FOR INDUSTRIAL GOODS AND SERVICES PRICES, 1987-2000
(Indexes, first quarter of 1991 = 100)



Source: ECLAC Office in Buenos Aires, on the basis of official figures.

Memo: Industrial prices are measured by the national non-agricultural Wholesale Price Index (WPI) after excluding derivatives of goods typically from the Argentine *pampa* from that index. The services prices used are components of the consumer price index (CPI).

Table 1
ARGENTINA: AVERAGE ANNUAL GROWTH OF GROSS
DOMESTIC PRODUCT (GDP), IMPORTS AND EXPORTS BETWEEN 1990 AND 2000
(On the basis of constant 1995 dollars)

	1991-1994	1995-1998	1999-2001
Gross domestic product (GDP)	8.0	3.6	-2.8
Imports	54.3	12.8	-10.9
Exports	2.9	15.4	1.3

Source: ECLAC, on the basis of official figures.

Ready access to foreign capital was a very important factor in the economy's performance. The launch of the convertibility plan coincided with the return of foreign capital inflows to Latin America.⁵ The access to external financing was made easier by an early re-negotiation of external debt obligations, within the terms of the Brady Plan.

⁵ Between 1982 and 1990, Latin America registered a negative net transfer of resources amounting, on average, to US\$ 24.4 billion each year. From 1991 on, these transfers became positive: between 1992 and 1998, they amounted to US\$ 24.2 billion, on average, annually. In 1999 and 2000, they were once again negative, but the shortfall was much smaller in size than before (ECLAC, 2000).

Regarding prices, the establishment of a fixed exchange rate in Ecuador did not lead, as it did in Argentina, to rapid disinflation. On the contrary, inflation accelerated during 2000, when the consumer price index (CPI) showed a cumulative increase of 91% from December to December, compared to an increase of 61% in 1999 and of 43% in 1998. However, during 2001, inflation decelerated to 22.4%, and an inflation rate of around 10% (accumulated to December) is expected for 2002.⁶

The contrast between the rapid deceleration of inflation in Argentina after the exchange rate was pegged, and the continuous inflation in Ecuador, must be considered in the context of different initial conditions. In fact, the starting point of each case is clearly different: the exchange rate of 25,000 *sucre*s to the dollar was established following a very steep devaluation, rather than following a year during which the rate of inflation was systematically higher than the rate of devaluation (as in the case of Argentina in 1990). Between January 1999 and January 2000, the *sucre* devaluated by 244.4%; inflation measured by CPI was 78.1%, but producer prices of goods (PPI) increased 268.8%. Between January 2000 and January 2002, CPI grew 108.2%, and PPI only 18.1%. With these figures, consumer prices inertia can still be seen as a lagged adjustment to the rise of producer's prices.

Ecuador embarked on the dollarisation of its economy under domestic and international conditions that make access to external credit difficult, but started the process with a comfortable level of foreign currency due to high international oil prices and a wide current account surplus, which reflected a very low level of imports. First, capital supply for emerging markets is far more limited than in the early nineties; second, Ecuador faces particular constraints, given the high level of its existing external debt and the fact that it already had to restructure its maturities. Ecuador will also have to face important amounts of payments related to its external debt, even if it obtained a reduction on the amount of the face value. External debt is still very important, around US\$ 13.5 billion. Even though the relation between external debt and GDP has decreased from 99.7% in 2000 to 75.5% in 2001, due to the increase of GDP measured in current dollars, it is still in a high level (237% of exports).

Ecuador is committed to gradually purchase its own Global Bonds in the secondary market; interests on those bonds will progressively rise from 4% to 10% in 2006; and if Ecuador incurs in arrears or does not buy its bonds as scheduled, it will lose some of the nominal reduction of the debt. As a result, the doubts about Ecuador's capacity to face debt payments have not disappeared, making unlikely a renewed access to international capital markets.

During the last two years, (the first two years of the dollarisation regime) both overall GDP and GDP *per capita* grew at rates not seen in Ecuador in several years. Most of this growth represented a recovery from the strong recession of 1999 and has been sustained principally by the investment in the Oleoducto de Crudos Pesados (OCP) (an oil pipeline), and some recovery in the private consumption levels. This however, has reflected in the rise of imports during 2000 and 2001 — imports of goods raised 24.5% in 2000 and 45.1% during 2001. In 2001, trade balance became once again negative (exports fell 6.8% during the year) and, despite the rise in the value of migrant's transfers, current account became negative again and amounted to -3.2% of GDP.

⁶ Even though inflation rate has decelerated from the figures of last years, it has not converged to US levels. That convergence could be further delayed considering that subsidies on consumer goods and services have not been eliminated, and the prices of fuel, gas and some public services have not been yet raised up to international levels.

Table 2

**ECUADOR: AVERAGE ANNUAL GROWTH OF GROSS DOMESTIC
PRODUCT (GDP), IMPORTS AND EXPORTS BETWEEN 1990 AND 2001 (PROJECTED)**
(On the basis of 1995 dollars)

	1991-1994	1995-1997	1998-1999	2000-2001
Gross domestic product (GDP)	3.6	3.1	-4.2	4.1
Imports	13.7	10.6	-15.5	28.5
Exports	12.2	7.4	-4.1	-0.9

Source: ECLAC, on the basis of official figures.

III. Phase-2: mounting *desequilibria*

In Argentina, the convertibility regime proved to be an eager consumer of foreign currency. It started, it is true, with a very low level of imports, but external purchases then began to increase at a much faster rate than exports during the first years, thus turning a large surplus on the merchandise trade balance in 1990 (US\$ 8.0 billion) into a deficit of almost the same size in 1994 (US\$ 7.8 billion). Current account deficit reached US\$11 billion in 1994. During the recovery phase, the bulk of foreign financing flew to the private sector, mainly in the form of short-term capital, placement of bonds, portfolio investment and foreign direct investment (FDI). Between 1992 and 1994, only 27% of total net capital inflows came from public-sector operations (essentially privatisations).

According to official assertions, these imbalances were not worrisome. It was stated that reforms and privatisations under course would generate such sizeable productivity gains that the initial imbalances on the current account of the balance of payments would soon disappear, thanks to a rapid increase in exports and to the greater competitiveness of tradable sectors in general. All this, without the need to modify the exchange rate. In fact, imbalance in the current account has proven very difficult to reduce, since remittance of utilities and interest payments rose in step with the increase in external debt and in FDI during the 1990s (chiefly as a result of the acquisition of public and private firms by foreign investors). Dependency from capital inflows remained at similar levels during the following phases, even when recession had already led to trade surplus.

Mexican crisis of 1994-1995 marked the end of the recovery phase. Argentina was the most affected country in Latin America by Mexican “contagion”, given the overvaluation of its currency and the growing external imbalance. During the first months of 1995, there were massive deposit withdrawals from banks and a severe loss of international reserves. This triggered a “crucial experience” concerning the alleged automatic mechanisms of Convertibility. According to such mechanisms, the loss of reserves would reduce monetary base, and hence the liquidity of the banking system; credit would then contract, and economic activity would decline. The weaker demand for imports, on the one hand, and the inflow of foreign capital attracted by higher interest rates, on the other, would eventually put the balance of payments back into equilibrium, and a recovery could begin. This link between the balance of payments and liquidity would thus entail a tendency to form economic cycles, but it would also bring an automatic mechanism of adjustment into being.

Reality stood far from those conceptual mechanisms. In theory, the monetary base should have contracted to the same amount than the reserves; it did not. Between November 1994 and May 1995, the decline in international reserves (-2,706 billion pesos), was substantially greater than the contraction in the monetary base (-886 million pesos).⁷ At the same time, the outflow of deposits from the banking system was much more important than the reduction of credit balances. Demand deposits decreased relatively little (-482 million pesos, representing a reduction of 4.4% of such deposits), but time deposits fell much more sharply (by 26.6% in the case of peso deposits and 12.5% in that of dollar deposits), for a total of nearly 6.5 billion pesos. As can be seen, the pressure on international reserves came from time deposits, which fell sharply, rather than from M1 or the monetary base. This point is conceptually important, since the commitment to the convertibility system, according to which the value of the monetary base may not exceed that of international reserves, it does not mean that all the money that could be exchanged for dollars (that is, M3, not the monetary base) is “backed” by those reserves.

Concerning credits, the automatic adjustment would have led to a process of debt deflation. It didn't occur either. In spite of the reduction of deposits, which amounted to 7 billion pesos, the global balance of credit to the private sector only went down by 320 million pesos. As a consequence, financial institutions were confronted to a severe liquidity problem. In order to cope with the reduction of deposits, they had to make use of their cash balances and reserves, both in the Central Bank and abroad; this was far from sufficient to meet the demand for the return of deposits, although it was excessive with respect to their obligation to maintain minimum legal reserve requirements. In fact, a large scale rescue was necessary to avoid a banking collapse, with the Central Bank reducing the requirement of bank reserves and reassuming the role of lender of last resort: by May 1995 the financial system had received nearly 3.5 billion pesos from the Central Bank in rediscounts and swaps.⁸

This monetary supply took full advantage of the margin left by the Convertibility Act to “back” part of the monetary base with Argentine public bonds instead of true reserves, but would have led Convertibility to its end without the access to fresh foreign capital. But now, the main recipient was no longer the private, but the public sector. During the last three quarters of 1995, both the Central Bank and the national government increased their external indebtedness, by a total of US\$ 8.3 billion. This amount may be compared with the recovery of the Central Bank's international reserves, which rose from some US\$ 10 billion at the end of March 1995 to almost US\$ 16 billion at the end of December.

⁷ The loss of reserves was the most intense between the end of December and the end of March: it amounted to -5.8 billion dollars, or 36.3% of the balance as of the end of 1994. In April 1995, Argentina began to receive external financial assistance from multilateral agencies (1.9 billion dollars).

⁸ For a more detailed presentation of the 1995 Argentine bank crisis and the role of the Central Bank, see Calcagno, 1997.

The crisis of 1995 was a turning point in the access to foreign financing, and from this point of view, a critical element in the passage to phase-2. Financial requirements remained roughly at the same level, even though the average growth rate of GDP fell abruptly, and in spite of an increase in exports: during this phase, overvalued currency had a greater effect in increasing imports than in hindering exports, most of which are intensive in natural resources or benefited from Mercosur agreement and from Brazilian expansion. Also, the composition of that financing changed radically. Total capital flows to private sector fell sharply, and net flows of short-term capital became strongly negative (see table 3).⁹

Table 3
ARGENTINA: FOREIGN CAPITAL INFLOWS, 1992-2001
(Annual averages)

	1992-1994	1995-1997	1998-2001	1992-1994	1995-1997	1998-2001
	Billion dollars			Percentages		
Capital flows to the public sector	3.2	8.5	9.4	27.1	70.2	79.7
Privatisations	2.3	0.9	1.2	19.5	7.4	10.2
Foreign loans	0.9	7.6	8.2	7.6	62.8	69.5
Capital flows to the private sector	8.6	3.6	2.4	72.9	29.8	20.3
Foreign loans to financial sector (excl. Central Bank)	1.1	-0.1	1.1	9.3	-0.8	9.3
Foreign loans to non financial sector	3.3	5.1	1.5	28.0	42.1	12.7
Other capital movements	1.1	-6.5	-6.4	9.3	-53.7	-54.2
FDI & portfolio investment	3.1	5.1	6.2	26.3	42.1	52.5
Total	11.8	12.1	11.8	100	100	100

Source: On the basis of Secretary of Economic and Regional Programming, Ministry of Economic Affairs and Public Works and Services, *Informe Económico* (several issues) and *Estimaciones Trimestrales del Balance de Pagos y Activos y Pasivos Externos* (several issues).

Other types of capital continued entering the country as flows to the private sector, mainly in the form of net placements of private debt bonds (this source was especially significant in 1997, but it began to decline in 1998 and became negative in 2000), and FDI, which corresponded mostly to the purchase of Argentine banks and other companies by foreign investors. However, in this second phase, it was the public sector that provided 70% of total external financing, and it did so by placing external debt (there was little left to privatise). The total external debt balance jumped from US\$ 59 billion in 1991 to US\$ 147 billion in 2000, with 60% of this figure corresponding to the public sector.¹⁰

These developments were not innocuous for fiscal balances: interest payments went up steadily, absorbing an increasing share of public receipts. At the same time, a far-reaching reform of the social security system was launched, which intended to replace the distribution public system with a capitalization private one. As a result, a significant part of contributions were transferred from the public system to private financial institutions, without any reduction in pension and retirement payments by the public sector. A third factor in the deterioration of fiscal accounts is the lower average growth rate during this phase, which affected tax revenues, while capital income (through privatisations) naturally diminished, for the State had hastily sold its public firms during phase-1.

⁹ The figures of table 3 do not include the "errors and omissions" of the balance of payments (presumably short-term private capital flows), which amounted, on average, -0.8 billion dollars per year during 1992-1994 and -1.1 billion in the period 1995-2000.

¹⁰ See República Argentina, Ministerio de Economía, *Estimaciones Trimestrales del Balance de Pagos y de Activos y Pasivos Externos*, several issues. According to other sources, the 2000 total debt amounts to 152.1 billion dollars (J.P.Morgan, 2001).

Summing up, since 1995, convertibility has been maintained essentially thanks to increased external borrowing by the public sector. The high level of liabilities with foreign agents (external debt as well as FDI and portfolio investment) has generated a structural deficit on the balance of investment income, which has been as high as 40% of exports. Moreover, if payments on the debt principal were added, the amount would exceed total exports. Simultaneously, fiscal balance deteriorated, not only as a consequence of the end of phase-1 recovery and privatisations, but mainly as a result of growing public indebtedness and of the “market friendly” reform of the social security system. External and fiscal imbalances, thus intimately related together, were to play a central role in the dynamics of phase-3: the crisis.

In the case of Ecuador, dollarisation was adopted shortly after a default on its external debt, with no access to the international financial markets. This poses a restraint to finance relatively large imbalances, fiscal or external, with additional debt. Therefore, the maintenance of the dollarisation depends on the inflow of foreign currency from exports, FDI or loans from multilateral organizations. In order to do so, economic authorities are negotiating a deal with the International Monetary Fund (IMF), are trying to impulse fiscal reforms (the end of subsidies to fuels and gas, and a raise in VAT tax) and are putting their hopes on a new oil pipeline that is being built and that will allow the increase in the exported volumes of crude oil.

Regarding the fiscal sector, its revenue depends largely (around a third) on the export revenues of oil, and therefore, on the international price of crude oil. In 2001, government presented a small surplus on its fiscal accounts mainly achieved thanks to the growth of the economic activity and to the raise in the nominal values of the GDP, principally due to inflation. In the other hand, fiscal expenditures were not fully indexed to prices. Thus, if considered in real terms (after deflating with CPI), central government expenditures went down by 21.2% while its revenues only decreased 9.1%; this reduction is explained by decreasing oil revenues, non entirely offset by the rise of non-oil receipts.

The government needs to diversity its sources of fiscal revenues in order not to depend so much on oil. A fiscal reform under the agreements made with IMF is under way, but most of the reform aims at raising VAT tax and eliminating subsidies to fuels and cooking gas. Both proposals are strongly rejected by some sectors of the population; this could postpone the reform, at least until the general election of October 2002. Economic authorities also need to face the remaining costs of bailing out the financial system. In 2002, even though oil prices have remained quite above the price forecasted by the government at the beginning of the year, they still remain lower, on average, than those of 2001. In this sense, Ecuador will probably face difficulties in meeting the targets established with the IMF and will have probably to cut public expenses.¹¹ Ecuador faces during 2002 payments on external debt for US\$ 854 million (Reuters, 2002), and an agreement with IMF would help to open the door for loans from other multilateral institutions.

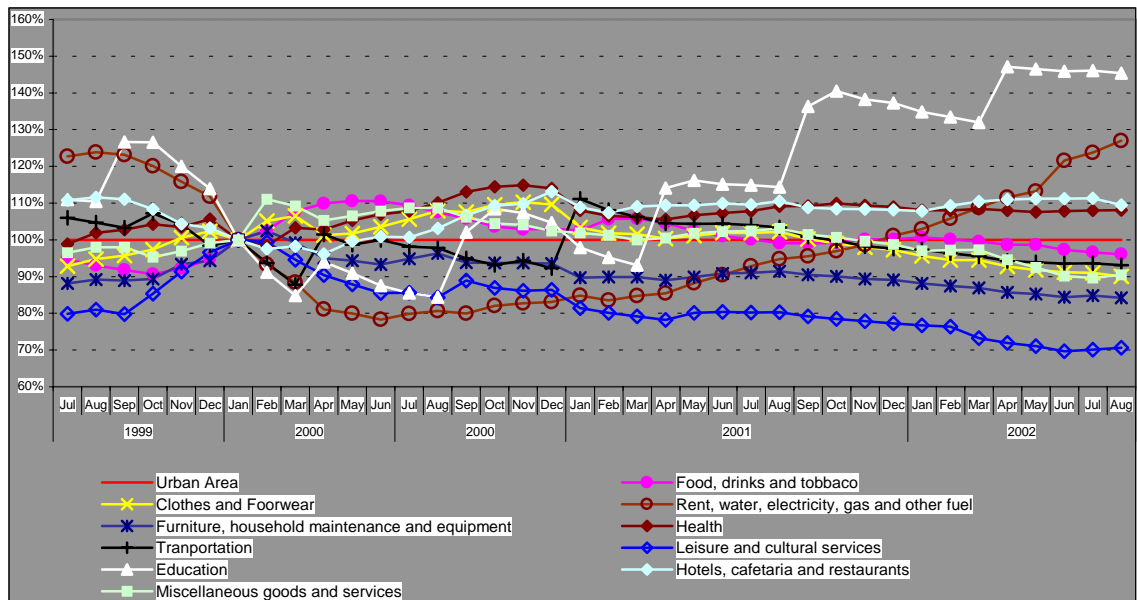
Considering prices, inflation rate in Ecuador fell significantly from the 2000 rate. However, it was still at a 22.4% (accumulated to December), still high in a fixed exchange rate scheme. Figure 2 shows the evolution of prices of different sectors in comparison with general CPI, since July 1999. It seems useful to distinguish two periods in inflation dynamics: between mid-1999 and mid-2000, and from mid-2000 on. During the first period, inflation is still very high (its monthly average is 6.2%), especially in the case of food, beverages and tobacco; clothing and footwear; miscellaneous goods and services; furniture, household maintenance and equipment; and health care services. Therefore, among the “winners” (those sectors where prices increased faster than the general consumer price index) we find a sizeable number of presumably tradable goods, but also

¹¹ In late March 2002, the government revised its estimation of Ecuadorian oil price to US\$ 17 per barrel, and decided a reduction of US\$ 500 million in its expenditure. However, the evolution of the oil price has been favourable with an average price for the Ecuadorian crude of almost US\$ 23 per barrel as of September 2002.

some services. Conversely, the sectors that appear to have lost ground during the same period are education; rental payments, water, electricity, gas and other fuels; hotels and restaurants; and transportation. This is, mainly non-tradable services, and/or sectors with administered prices and whose readjustments have lagged behind global inflation.

Since mid-2000, with a much lower rate of inflation (2.0% per month in average) “winners” generally became “losers”, and vice-versa. One explanation would be that the devaluations of 1999 had a favourable effect on tradable goods and an unfavourable one on some non-tradable sectors but that these effects were far from instantaneous and lasted for about a year, thereby prolonging inflation (particularly in the case of tradable goods) far beyond the point in time when the exchange rate was pegged. This is an important difference with respect to the situation in Argentina, where all the remaining inflationary inertia after the parity rate was established, was reflected in the prices of services. From the second half of 2000 to mid-2002, it can be seen that the relative prices of goods are tending to decline while the relative prices of services are tending to rebound (transportation, education, hotels and restaurants, as well as rent, water, electricity and other fuel). If this trend remains in evidence over time, that is, if “inflationary inertia” in services not exposed to external competition should persist, then Ecuador may witness the deterioration in the relative prices of goods which has been a characteristic of all Latin American experiences with the use of exchange-rate anchors. Such a configuration of relative prices could generate problems in the external sector, even though many exports are not very sensitive to the real exchange rate.

Figure 2
TRENDS IN THE VARIOUS CONSUMER PRICE INDEX (CPI) COMPONENTS IN RELATION TO THE GENERAL CPI
(January 2000 = 100)



Source: On the basis of Central Bank of Ecuador (BCE), Boletín Estadístico Mensual, several issues.

The evolution of interest rates shows that referential interest rates fell from 13.6% in February 2000, to 5.2% in February 2002. Interest rates for loans with a term shorter than a month shows a decrease in the same magnitude as referential rates —from 17.7% in January 2000, to 8.0% in December 2001; however, for loans with higher maturities interest rates have stayed more

or less on the same levels (around 13% and 14%) and interest rates for loans to other debtors than corporations with maturities over a month actually raised (from around 17% to around 20%). Regarding deposit rates, short-term deposit rates tend to show a slight decrease while deposit rates over a year tend to show a slight increase. This means that banks expect that long-term interest rates will, at least, not decrease.

Domestic credit to the private sector, in nominal values, increased from US\$ 3,589 million in December 1999 to US\$ 4,422 million in January 2002, but decreased in almost 50% in real terms (that is, at dollars of December 1999), with real GDP growing 7.9% in the same period. Since there is not longer a lender of last resort and banks still perceive the risks that affected the banking system recently, private banks tend to be very conservative at the time of awarding credit and prefer to stay liquid.¹²

At the moment, the country's main source of foreign currency is the inflow of foreign direct investment related to the construction of the new oil pipeline. This should entry in operation in mid-2003 and economic authorities expect that the increased volume of oil exported together with a recovery of primary exports such as bananas and shrimps will provide the necessary inflow of foreign currency to sustain convertibility in the short-term. However, the expected recovery of the consumption levels and the change in relative prices towards imported goods will put pressure on the commercial account. Therefore it is important to define under what conditions it will be feasible to maintain a surplus of foreign currency over the long run, taking into account the high level of the interest payments that are already scheduled.¹³ Transfers from immigrant workers have been gaining importance. Non-oil exports showed a moderate growth of 8.4% in 2001, but the economic situation of Ecuador's major trading partners for this type of goods, basically its neighbours, will limit their growth in 2002. On the other hand, the lower price expected for oil exports together with a positive growth on imports will make a deficit in the trade account more likely in 2002. Such a trend could not be sustained much longer, if Ecuador is to avoid the phase-3, which Argentina is experiencing.

¹² "Something that is worrisome is that there is not, until now, a clear relation with the fall in interest rates, the fall in inflation and the recovery of credit. Specifically, in the months where referential interest rates have fallen, a rise in the credit did not occur. We have to find, together with the financial sector, the way to channel that liquidity to the productive sector". Carlos Julio Emanuel, Minister of Economy, *El Comercio*, December 31, 2001.

¹³ Experience points to the necessity, in the long term, of developing exports of goods and services, since capital inflows that can be obtained through FDI or portfolio investment tend to generate a structural deficit on the investment revenue balance.

IV. Phase-3: crisis strikes

It is not easy to define the precise moment when crisis stroke in Argentina. If we look at the real outcome, we could point out 1999 as the beginning of depression. If we look primarily to the financial dynamics that led to the collapse of convertibility, we should prefer a later date: the end of 2000 or the beginning of 2001.

The debate concerning the sustainability of convertibility has now been replaced by another one, no less intense, concerning the causes of its collapse: should we blame external shocks and policy mistakes, rather than factors intrinsic to the “model”? This discussion is influenced by the occurrence of several crises during the nineties, in Latin America as well as in other emergent countries. In those crisis, financial issues played a key role in the running up and unfolding of economic crisis. In this context, the dynamics of crisis are triggered by a change in expectations causing a process of capital flight and balance sheet collapse, one that is very hard to stop once it starts (Krugman, 2001, and Dornbusch, 2001).

Risk perception of an economy can change due to factors that are exogenous to the country itself (contagion phenomena, herd behaviour of investors, etc). However, there are very important variables that are the result of domestic policy and strongly influence the mood of foreign investors. Currency and maturity mismatch between liabilities and assets, together with exchange rate misalignments can imply very bad news for foreign investors expectations. Also significant current account deficits, and unsatisfactory growth rates do not give good economic signals, and put pressure in the exchange markets (Eatwell and Taylor, 2000).

Even though macroeconomic policies in emerging economies are constrained by financial integration, countries still have some room to try different policy mix related to exchange rate regimes, monetary and fiscal policies, and capital account opening. The experience of Asian countries, as well as that of Latin American economies, shows that the way countries have been affected by financial turmoil and the velocity of their recovery are highly correlated with domestic policy and the magnitude of accumulated *disequilibria* before the crisis.

In this sense, Argentina's current crisis (phase three) can not be understood only as a problem of change in the direction of capital flows due to a change in foreign investors risk perception, but as the accumulation of important and deep *disequilibria* generated during what we called phase one and two of the convertibility scheme.

In spite of the above, the official interpretation of the 1995 crisis was that the convertibility system had proven to be impregnable, and that only some complementary measures were required in order to strengthen the capacity of the financial system to cope with a new episode of deposit withdrawals and loss of reserves. With this aim, the Central Bank encouraged the denationalization of local banks: it was thought that a foreign bank would be less vulnerable to public mistrust, and that if necessary, it could count with the support of its central office. As a result, in a very short period of time, the participation of foreign banks in Argentine financial system (measured by the share in total deposits) passed from 16% in the verge of 1995 crisis to 48% in 2000. Moreover, Argentina obtained the commitment from a group of 13 international banks for a credit up to US\$ 6.1 billion, which would be available "if there was generalized lack of confidence in the Argentine financial system or if the system required additional international liquidity over and above the funds already at the disposal of the banks".¹⁴ Finally, a new system of bank reserves was implemented, according to which banks had to build up "liquidity requirements", mainly in the form of liquid deposits in foreign banks, up to 15% of their total deposits. As a result, it was thought that Argentina had no longer need of an official lender of last resort, and that the financial system was ready to cope with a capital flight even stronger than that of 1995. This would have completed the automatic adjustment mechanism.

Net capital flows to Latin America recovered rapidly after the 1995 low levels (US\$ 25 billion), and reached its historical record in 1997 (US\$ 83 billion). Argentina was one of the most important destinations of such funds, due to the issuance of public debt and to the acquisition of local private firms and banks by foreign investors. Argentine GDP recovered sharply from 1995 recession, showing once again the high correlation between the net transfer of resources and the rate of growth (figure 3). When Asian crisis and, more important, Russian default took place, net transfer of resources to Argentina (as to the whole region) diminished, while remaining positive; this was enough to put a break in economic activity. Brazilian devaluation in January 1999 made evident how much the exchange rate policy had hampered the competitiveness of Argentine industry, as a growing number of firms emigrated to the big Mercosur partner. Since the second half of 1998, Argentina's GDP has been contracting.

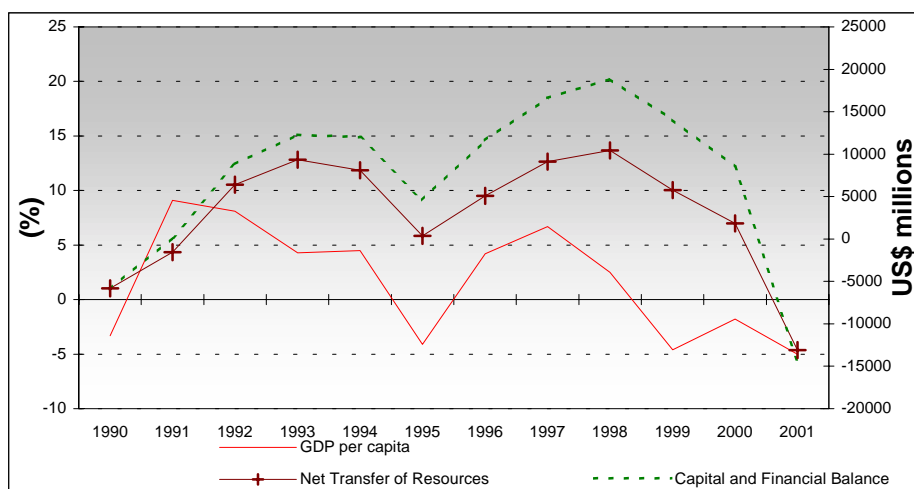
The crisis in Argentina was then explained in very different ways, as it still happens now. The basic interpretations were clearly stated by Arturo O'Connell, 2000:

"As to the prolonged recession, an ongoing debate was under way at the beginning of this year (2000) as to the character and best instruments to overcome the recession in Argentina. On one side stood those that placed all the blame of the recession on the foreign investors' mistrust arising out of the figures for fiscal deficit. On the other side a less influential sector of opinion held that it was external deficit that stood on the way of a recovery as the accumulation of external debt and the exhaustion of the privatisation process had made it

¹⁴ Statements by Roque Fernández, Ministre of the Economy, on 20 December 1996 (*Reuters*).

increasingly difficult to finance further imbalances on current account. The new elected government, that took place in December 1999, chose the first line of action.”

Figure 3
ARGENTINA: PER CAPITA GROSS DOMESTIC PRODUCT (GDP)
GROWTH, NET CAPITAL FLOWS AND NET RESOURCE TRANSFERS, 1990-2001
(Growth rates and millions of dollars)



Source: ECLAC, on the basis of official figures.

Since 1998, a great deal of efforts have been made in trying to demonstrate the differences among Argentine convertibility and other experiences of fixed exchange rate regimes, which were failing one after the other. The abandonment of the convertibility regime was banned from respectable debate. According to the government (both of Menem and De la Rúa) and to its successive economic teams, it was, literally, “unthinkable” to exit convertibility. On one hand, it was alleged, such step would be very costly, considering the large amount of contracts and liabilities stated in US dollars (dollar-denominated assets held by residents were hardly ever considered in such analysis). On the other hand, convertibility could resist any attack, thanks to the “full backing of money with international reserves” and the robustness of the banking system. Thus, the specific rules of convertibility were put forward to prove that “Argentina is not ...” (subsequently, Thailand, Korea, Russia, Brazil and Turkey), and could face any contingency without changing that system.

By considering that convertibility was unthinkable, and exiting from it unthinkable, then the economic policy was aimed at recovering the element that had made it possible to grow and to cope simultaneously with the external imbalances which stem from that growth: huge capital inflows. It was, in this view, critical to recover the trust of foreign investors. To reach the “investment grade” in the qualification of risk agencies became an official target, and a sort of pro-financial sector demagoguery began to guide government actions: almost everything that was believed to have the approval of potential financial investors was then considered a reactivating measure, even if it hampered local demand. And ranking first in such a list, was fiscal adjustment.

As it was already stated, fiscal balances passed from equilibrium in the first phase to deficit since 1995. That deficit, however, was rather low until 2000 (1.3% of GDP in average for the Public National non-Financial Sector).¹⁵ In 2000 and 2001, it increased to 2.4% and 3.5% of GDP,

¹⁵ This is an intermediate concept, between Central and General Government, for it includes all the Central Government, the Public Social Security and remaining Public Firms, and approximately 50% or 60% of Local Government (*provincias*) budget.

respectively (and one supplementary point of GDP if we include total local governments' accounts). That deficit was not mainly due to a reckless populist expenditure, as it is frequently said, following the dismissing of Minister Cavallo in June 1996. In fact, if one excludes interest payments from current expenditure, the latter was almost stagnant between 1996 and 2000, while interest payments rose 67% in 4 years. In other terms, the increase in interest payments explains 85% of total increase of current fiscal expenditure between 1996 and 2000. As a result, the burden of interest payments (essentially from external debt) passed from 6.3% of current income in 1994 to 17.3% in 2000 and 18.9% in 2001. On the income side of fiscal accounts, two factors showed a substantial deterioration: contributions to the social security system fell markedly after 1994 (since the State transferred an important amount of them to the new private system), and VAT receipts were directly affected by economic depression since the mid-1998.

Even if there has been during the period under consideration evident misuses of public resources, it seems that the bulk of fiscal problems are related to intrinsic problems of the economic model put in place during the nineties. Social security reform was an important factor. Another one, which became apparent since phase-2, is the practical impossibility to achieve simultaneously, within convertibility, both fiscal and current account *equilibria*. When the economy grows, as in phase-1 and 2, it produces a sharp increase of imports and a trade deficit; when it does not grow, it produces a fall in tax revenues, which leads to a fiscal deficit. Since the Mexican crisis, the way to elude this contradiction was the increasing of public external debt. Contrary to what was suggested, the convertibility system stimulated public external indebtedness instead of forcing a move towards fiscal discipline. As a final result, Argentina had to face in phase-3 severe deficits both in the fiscal and external sectors, with an unbearable burden of debt services.

Efforts made to curb the fiscal deficit through the adjustment of expenses failed. In December 1999 and May 2000, tax packages were passed by Congress and two basic rounds of cuts in fiscal expenditure were introduced. Business and families reacted to the fiscal crunch with a visible cut on expenditure. As a result, a pick-up in economic activity that was proceeding at quite a fast pace in the second half of 1999, was aborted (O'Connell, 2000). The government changed twice its economic team in 2001, but insisted with the same policy. In March 2001, after a failed attempt by the new Minister López Murphy to impose heavy cuts in public expenditures (some of which were hard to explain, like those in education), Dr. Cavallo reassumed as Minister of Economy. As he was identified with the achievements of the phase-1, he was viewed as a kind of "economist of last resort", and thus reassumed with an impressive political support. Even if both his reputation and political support weakened dramatically until his dismissal nine months later, he was able to make the President and the Parliament approve every plan or measure he submitted to them.

Cavallo admitted openly that there was a problem of overvaluation of the peso, and that some active policies were necessary for a recovery to begin. There was more than a nuance between those statements and his previous assertions, in which he considered that the gains in productivity achieved with his reforms actually offset the "exchange rate gap".¹⁶ This meant also the abandonment of the strategy of correcting relative prices through deflation; such a strategy was failing since price deflation was entirely due to the reduction of tradable goods prices. In fact, that trend only changed when devaluation took place (see figure 4).

He thus modified the exchange rate rule, by introducing the euro, along with the dollar, in the definition of the exchange rate for imports and exports; this meant a devaluation—for the foreign trade only— of 8% at that time. A supplementary trade protection was provided by an

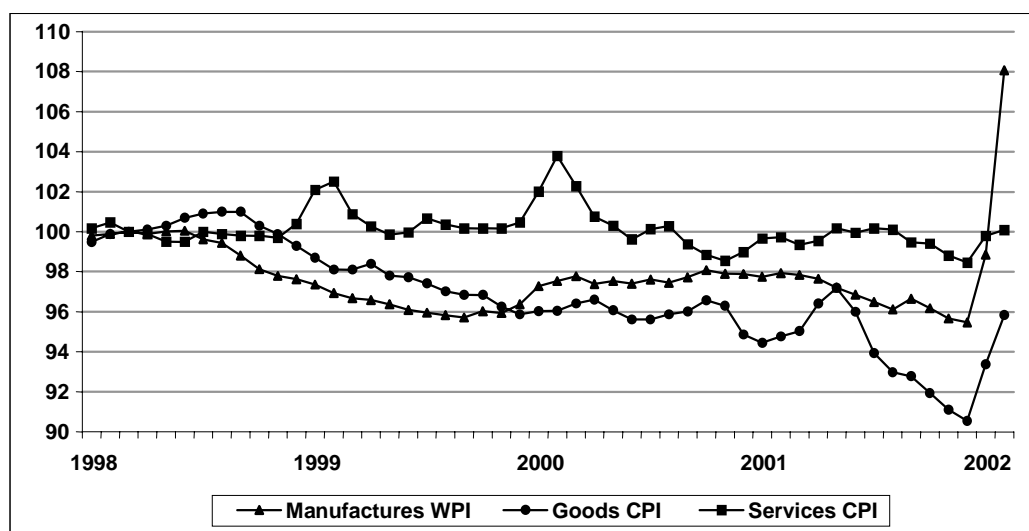
¹⁶ He even considered that, thanks to those gains in productivity, a future exit from convertibility with a floating peso could lead to its appreciation *vis-à-vis* the dollar (Cavallo, 2001).

increase in some import tariffs up to the maximum allowed by WTO agreements, while tariffs on imported capital goods were eliminated.

Another measure aimed at improving the situation of producers on some economic sectors was the implementation of “competitiveness plans”. They consisted basically in an intricate system of tax reductions, in exchange of a commitment by the favoured firms to avoid the dismissal of workers and of a vague engagement to increase productivity. These measures involved a fiscal cost, not only by loosing some tax income, but also by disorganizing the tax collection system. These measures were not the fruit of improvisation: Cavallo had already presented them in October 2000, as a part of his party’s economic plan, and he believed in the soundness of eliminating some “distorting” taxes. But simultaneously, in view of the mounting fiscal deficit, he passed an Act, which established a new tax over bank transactions.

Figure 4

ARGENTINA: TRENDS IN PRICES OF GOODS AND SERVICES AS MEASURED BY THE CONSUMER PRICE INDEX (CPI) AND IN PRICES OF MANUFACTURES MEASURED BY THE WHOLESALE PRICE INDEX (WPI), JANUARY 1998 THROUGH FEBRUARY 2002
(Indexes, March 1998 = 100)



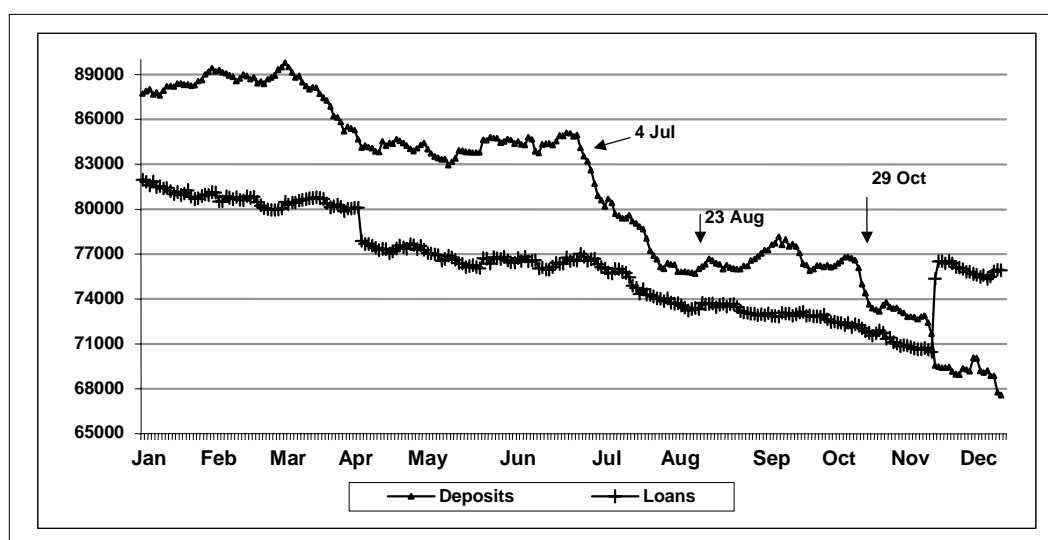
Source: National Institute of Statistics and Censuses (INDEC), Argentina.

All these measures proved to be ineffective in order to reverse the recessive tides. They did not incentive firms to hire new workers or to develop investment, while idle productive capacity was high and domestic demand was lacking. Regarding the exchange rate reform, it introduced a marginal improvement in the real exchange rate, while it broke the dogma that stated “one peso is one dollar”. In any case, the government had to cope with a rapidly deteriorating external situation, and could not count in its predicament on the expected results of an hypothetical revival of competitiveness.

Argentina was in the impossibility of servicing its external debt without a permanent inflow of capital since at least the beginning of phase-2 but, as usual, financial crisis do not break out as long as the debtor can service its debts with new credits. The solvency problem of Argentina became evident when its access to the voluntary credit markets was dramatically reduced. In December 2000, a financial aid of almost 40 billion dollars for the next two years was announced, and the threaten of a default seemed to have been eliminated. However, only a part of that package

consisted in disposable funds (the remainder was just commitments of a future renewal of credits coming to maturity), and it became soon clear that it would not be enough to service the debt and to face increasing capital outflows. Henceforth, Minister Cavallo arranged in June 2001 a partial re-scheduling of the external debt in order to obtain larger maturities, though at higher spreads. None of these measures improved the situation of the external sector, confronted with successive waves of capital outflows. As in the 1995 crisis, capital outflows were originated in the withdrawals of time deposits from banks. In February, July-August and November, important runs on deposits took place (see figure 5); “good news” as the return of Cavallo in March and an extraordinary IMF credit of US\$ 8 billion in September stopped temporarily the loss of deposits, but did not revert the process.

Figure 5
TOTAL DEPOSITS AND LOANS OF THE FINANCIAL SYSTEM IN 2001, DAILY VALUES
(Millions of pesos)

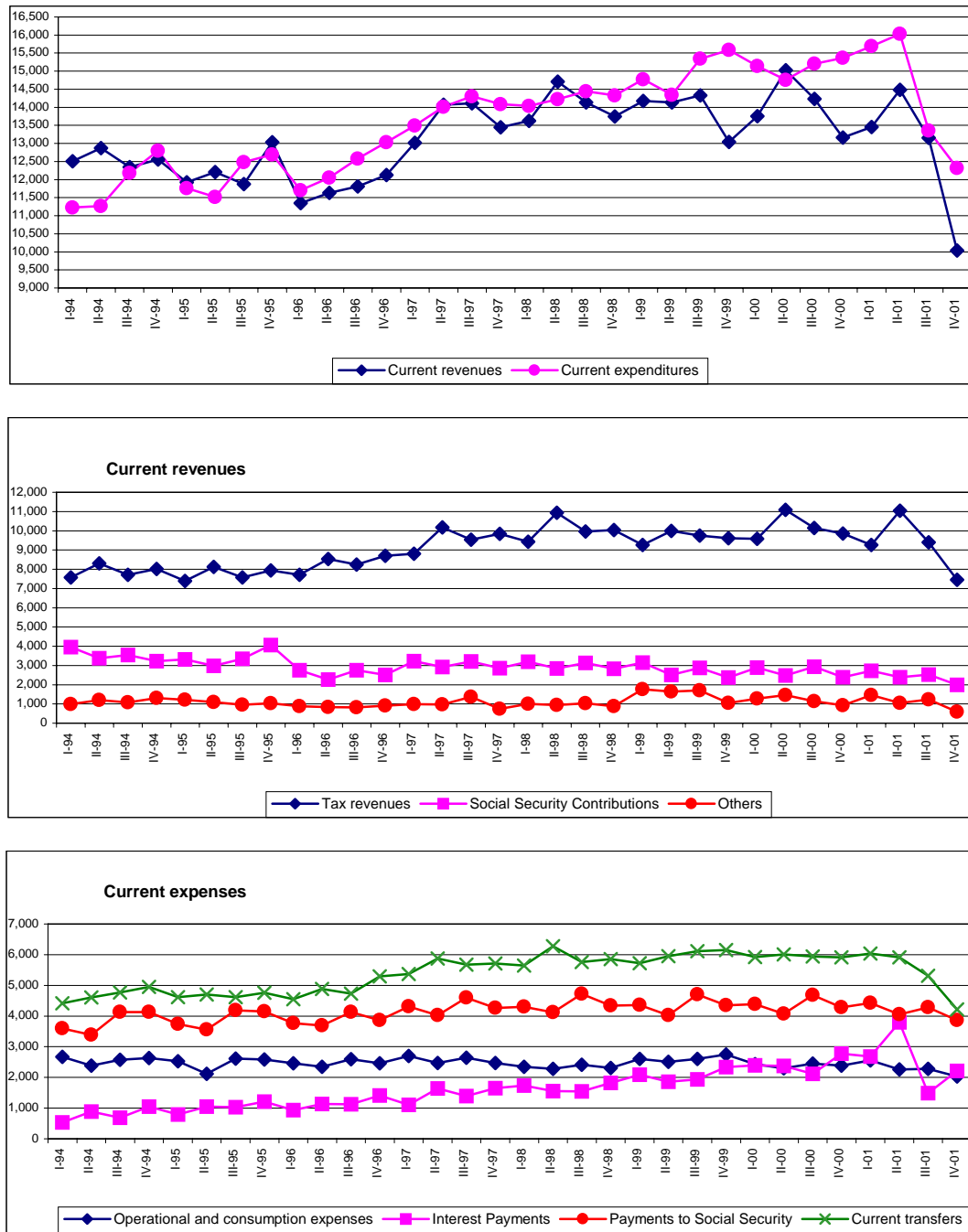


Source: On the basis of Central Bank of the Argentine Republic, *Boletín Estadístico*, several issues.

One of the most radical steps in order to restore investor’s confidence was the “Zero Deficit” law of July 2001. It stipulated that, among its due current expenses, the State had to pay in priority the interests of its debt, and to reduce —if necessary— all the other payments in the proportion needed to adjust total expenses to total fiscal revenues. As a result, all pensions, salaries and other payments were lowered by 13% (only lower salaries and pensions were excluded from the reduction).

The idea of eliminating the fiscal deficit by reducing the expenses to the level of receipts rested on a static view of the economic situation. It is a remarkable example of the wrong use of the *ceteris paribus* clause, since it didn’t consider the consequences of further cuts in fiscal expenditure on GDP and on fiscal revenues. As a consequence, the “Zero Deficit” fiscal policy led to the deepening of the economic recession, to a severe undermining of social and political situation (the governing alliance was badly beaten in a legislative election in October) and to a further widening of fiscal deficit (figure 6).

Figure 6
CURRENT INCOME AND EXPENDITURE OF THE NATIONAL NON-FINANCIAL PUBLIC SECTOR, 1994-2001
(Quarterly, millions of pesos)



Source: Argentine Ministry of Economy, Secretary of Finance.

The spectre of debt default haunted the financial markets again; Argentine “country risk” measured by J. P. Morgan’s EMBI+ indicator soared to more than 4,000 basis points (compared to an average of 706 basis points in February 2001). The government then put heavy pressure on the financial system in order to accomplish a second debt restructuring. Banks and private pension

funds were invited to exchange their public debt bonds (which yielded in average an interest of 12% or 13% but whose market value was under 30% of face value) against credits yielding 7%. The swap was accepted by the banks since the credits were free of income taxes over interests (in fact, the swap provided little gains to the State), and avoided the recognition of heavy losses in banks balance sheets due to the depreciation of public debt bonds

As a final attempt to recover depositor's confidence, the government passed a new Act that guaranteed the "intangibility" of all bank deposits. That is, depositors received the formal guarantee that they could freely dispose of their funds, which could neither be frozen nor changed in assets that could be denominated in other currencies, yield different interest rates or have different maturities.

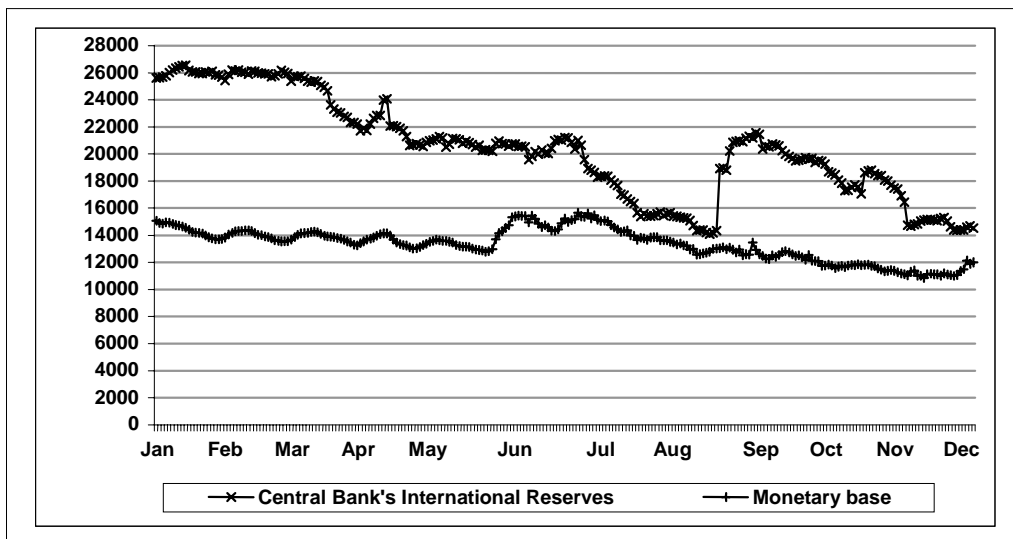
Investor's confidence was not met by just passing more legal commitments. The combination of the initial Cavallo's hints of heterodoxy and his later orthodox adjustments brought the worst of both worlds. The pro-competitive measures were not effective in recovering the economic activity since they did not address the central problem of the lack of demand, but they hindered the tax collection and introduced a doubt in the continuity of convertibility. On the other hand, the cut of fiscal expenditure weakened further the internal demand and, as it deepened depression, did not reestablished any kind of confidence.

As a result, in November, depositors resumed their run from the banking system and international reserves continued to melt (figures 5 and 7). Once again, no automatic adjustment was at sight. The foreign banks that were engaged in delivering a contingent credit to the Central Bank when a loss of reserves occurred, and that had punctually received the corresponding commitment fees, found pretexts for eluding their obligation. And the local subsidiaries of international banks did not receive from their central houses the amounts of dollars needed to return the deposits. The particular "lender of last resort" that each of these banks were thought to have was not there when it was needed. Private banks, both local and foreign-owned, asked to the government exceptional measures to stop the deposit drain.

On December 3rd, Cavallo announced that depositors could no longer retire their money from the banking system, while they still could use them for making payments with credit cards and checks: the so-called *corralito*. The impossibility of withdrawing funds from the banking system meant a severe blow to informal economy and a supplementary hampering to economic activity. The convertibility system, already weakened by the formal end of the rate 1 peso = 1 US dollar (by the introduction of the euro in the definition of the exchange rate) and by the emission of a variety of local currencies without any backing of international reserves, came in fact to an end: people could no longer freely change pesos to dollars at a fixed rate, simply because they could not dispose of their money. Should they be allowed, there would not be enough dollars in the Central Bank nor in the commercial banks for the conversion to be realized. This desperate step ruined the public trust that could still exist in the banking sector and in the convertibility regime. Cavallo's bet that he could reverse adverse expectations just by throwing his reputation and skills in the balance proved vain. He apparently gave too much importance to psychological factors, in the sense that much of his measures were designed to strike investors' mind rather than to improve macroeconomic variables. In the end, after the massive demonstrations that provoked his dismissal and forced the President De la Rúa to resign, he still refused to admit any mistake in his economic diagnosis or policies, and insisted on a psychological explanation of facts: "when deprived of money, people go mad".¹⁷

¹⁷ See Clarín, "Último Momento", December 24th 2001.

Figure 7
CENTRAL BANK INTERNATIONAL
RESERVES AND MONETARY BASE, JANUARY-DECEMBER 2001
(Millions of pesos)



Source: On the basis of Central Bank of the Argentine Republic, *Boletín Estadístico*, several issues.

V. Summary and conclusions

The experiences of Latin American countries with fixed exchange rate regimes have been, for the most part, successful in cutting inflation rates down, but have not been able to provide a stable path for economic growth. These experiences can be stylised in three different phases. The first one is dominated by a “virtuous circle” between capital inflows, domestic credit booms, consumption expansion, significant growth rates and low inflation, together with an increasing external deficit. In a second phase, the virtuous circle ends, mainly due to the misalignment of the real exchange and to trade and current account deficits; this phase shows a significant slowdown in economic growth. It culminates in a third phase, in which crisis strikes and the economy has to go into, usually, very painful adjustment process.

This paper argues that apart from the specificities of hard peg regimes, Argentina’s convertibility experience can be also described under these three phases. Phase one from 1991 to end of 1994. Phase two roughly from 1995 to 1999, followed by a third phase, which culminates in a financial crisis and the collapse of the regime in 2001. Argentina’s present crisis cannot be understood simply as the outcome of a drastic reduction in the availability of international capital flows, but as the result of a long process of imbalance accumulation. Of course, the sudden stop in the capital inflows is a key issue in triggering the current crisis. However the intensity of the crisis, and the fragility of the economy are not independent of the convertibility regime and the *disequilibria* it produced.

In this context, today's economic crisis does not only respond to a change of mood in international investors but mainly to the economic policy applied during the nineties. Convertibility generated a dramatic change in relative prices of tradable and non-tradable causing serious problems in the international competitiveness of the economy. Also, currency and maturity mismatches left the productive, the fiscal, as well the financial sectors, in a very fragile situation and highly vulnerable and dependent to capital inflows.

The trade deficits, the increasing foreign exchange requirement to keep honouring foreign debt and the banking system exposure to currency mismatches negatively affected, in spite of the convertibility, the exchange and country risks, and hence capital inflows. Even though psychological factors are very important in expectation formation, economic variables play an equal or more important role not only in shaping expectations but also in defining economic performance and the intensity of the crisis.

The convertibility system was very successful as an anti-inflationary program. However price stability is not a synonym of economic stability. Argentina shows that it is not possible to sustain in the long run a hard peg regime together with long lasting fiscal or current account deficits; either fiscal or current account equilibrium have to be achieved, which as it was seen is not an obvious outcome of hard peg regimes. In Argentina, this simultaneous equilibrium was not attained: when the economy grew, it produced an increase of imports and a trade deficit; when it did not grow, there was a fall in tax revenues, which led to a fiscal deficit. Increasingly since the Mexican crisis, the way to elude this contradiction was the increasing in public external debt. In this sense contrary to what was suggested, the convertibility system stimulated public indebtedness instead of forcing a move towards fiscal discipline.

The automatic adjustment mechanisms of the external sector and of domestic expenditure that were supposedly embodied in the convertibility system did not work as expected. After the Mexican crisis, the rapid losses in international reserves, experienced by the Central Bank, did not materialize in an equivalent contraction of the monetary base. At the same time, a drop of bank deposits was not accompanied by an equivalent reduction of bank loans. As the only way to avoid a deep banking crisis, the Central Bank was forced to act as a lender of last resort. In 2001, the loss of international reserves could only be stopped with the freezing of deposits inside the banking system. Thus, the convertibility system proved to be vulnerable to a massive run against deposits. In fact, hard pegs have proven to push the economy towards increasing vulnerabilities to financial shocks and showed no instruments at all to face real shocks. Adopting dollarisation would have not been an answer to the insolvency problem, and would have probably deepened the crisis.

Finally, the question mark that appears in the title of this article brings a word of caution regarding the Ecuadorian case. Today, there are some indications that the recovery phase is getting to an end, and it is not clear that the economy will continue to grow, and if so, at what rates. In any case, economic authorities should be very careful in avoiding the phases here described.

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