Documento CEDES/99
Serie Economía

CAPITAL MOVEMENTS IN ARGENTINA

José María Fanelli
José Luis Machinea

CEDES
Buenos Aires, 1994

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Introduction

Exogenous factors seem to play a determinant role regarding capital movements in Latin America. The most important among them being the evolution of international interest rates, changes in financial regulations and forms of operations in foreign capital markets and the level of the United States' current account deficit. (Culpeper and Griffith-Jones, 1992; Calvo et. al., 1993; Damill et. al., 1993). Even though the recently achieved greater degree of macroeconomic stability and the implementation of market-friendly policies in many countries of the region can be considered important factors influencing the availability of external financing, their contribution to fostering capital inflows seems to be much less relevant. They do not seem to be able to account for the striking change in the direction and the quantity of capital inflows in recent years.In supporting this argument the experiences of Chile and Brazil are often cited. Chile has succeeded in stabilizing its economy and has consistently implemented profound structural reforms since the mid-eighties; it neverthless did not receive a significant amount of private capital inflows during the eighties[1]. On the other hand, there has recently been a marked increase in capital inflows in Brazil, a country which has neither stabilized its economy nor succeeded in implementing market-oriented structural reforms.

This paper aims to analyze capital movements in Argentina and, consequently, international factors will be considered exogenous. But even if everything could be explained by external factors alone -which we believe is not the case- we would still have a task ahead of us. This task is to identify and analyze the effects of a sudden and exogenous change in the amount and characteristics of capital inflows on macrostability and in the financial and real structures of the domestic economy.

Indeed, the analysis of these effects would be important even if capital inflows were endogenously induced by domestic reforms. If there is a specific kind of reform (and not others) capable of ensuring a significant amount of capital inflows, a valid question is whether such a reform can also ensure stability and sustainable growth. For instance, if financial liberalization were a **sine-qua-non** condition, would a free financial

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[1] It should be mentioned, however, that Chile received strong financial support from multilateral organizations (such as the World Bank, the IMF and the IDB) during the process of stabilization and structural change in the eighties. In fact, the far better performance of the Chilean economy during the eighties as compared to the ones in Argentina, Brazil or Mexico, could have been due to the much greater financial aid received by Chile vis-à-vis the afore-mentioned countries. The arguments supporting this view appear in Damill et. al. (1991)

regime coupled with massive capital inflows be compatible with the level of the real exchange rate and the interest rate needed for assuring growth?

The analysis of past experiences in financial and capital account liberalizations is a valuable source for the identification of stylized facts regarding the interactions between capital movements and internal equilibria. This is specially true in the case of Argentina. Between 1979 and 1981 there was an integral attempt at liberalizing the financial structure that presented some similarities with the policies that are now being implemented. That policy package had profound consequences on short-run stability and induced long-lasting effects on savings, investment and financial intermediation.

The first part of the paper analyzes the reform implemented in the late seventies and draws some lessons from that experience. There is also a brief examination of the "debt-crisis" period that followed the collapse of the liberalization attempt. The main objective is to show the sequels left by the debt crisis which would severely constrain the growth potential of the Argentine economy when the reversion of capital inflows began in the early nineties.

The second section studies the anatomy and magnitude of present capital inflows and its interaction with the financial structure of the economy. Firstly, we analyze the structural reforms that preceded -or were simultaneous to- the reversion of capital flows. Secondly, we show the most important changes in the magnitude and composition of capital inflows. Thirdly, in spite of the deficient available data, an attempt is made to identify the sectors which benefited from the increase in the supply of external financing (private vs. public sectors, tradable vs. non-tradable sectors, and large vs. small economic units). Lastly, we study the effects of the accrued capital inflows on financial intermediation.

The last section examines the consequences of capital inflows in terms of stability and growth. There is an evaluation of the role played by the so-called Convertibility Plan, implemented in April 1991 and, in order to assess the growth potential of the economy, we examine the relationship between savings, investment and capital inflows and present some quantitative projections.

I. Financial and Exchange Rate Policies in the Period Previous to the Current Reform.

The first program to open the capital and current accounts in the context of a liberalized domestic financial market was implemented in December 1978. The experience ended in a complete failure in the first quarter of 1981 when there was a speculative attack against the peso fed by capital flight. The collapse of the program was followed by several maxi-devaluations and the complete reversal of the reforms: imports and external financial transactions were put under a tight control. In what follows we identify some stylized facts and lessons that can be drawn from these experiences.

The Architecture of the Liberalization Program.

The program reduced the restrictions on capital movements to a minimum,[2] some -but not all- quantitative restrictions on imports were eliminated and import tariffs were markedly cut[3]. In order to ensure macrostability during the liberalization process, a stabilization plan was launched in December 1978. The program was based on a modified version of the monetary approach to the balance of payments and its core was the pre-announcement of the future nominal exchange rate[4]. It was assumed that, in a context of increasing integration with foreign markets and with the future value of the nominal exchange rate fixed, purchasing-power parity would ensure an increasing convergence between domestic and international inflation rates. When the pre-announced devaluation rate reached zero, the domestic inflation rate would equal the international one.

On the monetary side, it was expected that the liberalization of capital flows would

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[2] The liberalization measures eliminated the obligatory non-interest deposit for any external credit. The minimun period for debt repayment was reduced to one year, and later completely eliminated. The restrictions on the purchase of foreign exchange were gradually diminished. At the beginning of the program 5,000 dollars could be acquired without justification; this amont was later raised to 20,000.

[3] Because of the active lobbying pressure of producers, the liberalization of trade did not seriously affect intermediate goods. As a consequence, the profitability of firms producing final goods was severely damaged. They were obliged to cope with international competition but did not have access to imputs at international prices.

[4] The future dollar quotation -guaranteed by the government- was set by the so-called "tablita cambiaria". The nominal exchange rate for the following eight months was announced at the beginning of the program and as time elapsed, the "tablita" was consistently extended.

render the money supply endogenous depriving the Central Bank of an independent monetary policy which could introduce a wedge between domestic and international interest rates[5]. In order to preserve international reserves, the rate of expansion of domestic credit was set in accordance to the pre-announced devaluation rate. The policy regarding secondary expansion within the banking system, however, was not as tight as the one related to the expansion of the monetary base. The minimum reserve requirements on bank deposits were significantly reduced[6]. The purpose was to induce an expansion of the credit supply which would favor the private sector because the "repression" on the financial system had been eliminated by the financial reform which had been implemented in 1977, before the opening of the capital account[7]. Under the new regime, allocation of credit and interest rates were both determined by the market[8].

The Evolution of the Economy under the Liberalization Program.

Immediately after the liberalization of the capital account and the pre-announcement of the devaluation rate, there was a substantial increase in **private** capital inflow(Table 1).

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5 Obviously, for this to be true, domestic and foreign assets have to be close substitutes. On the effectiveness of monetary policy in a context of imperfect substitution between domestic and external assets, see Obstfeld (1982).

6 The minimum reserve requirements were 45 percent when the reform was launched in 1977. In 1978 they had been reduced to 29 percent and at the end of 1979 they reached a level of 16.5 percent.

7 This objective, however, was only partially met. Authorities allowed public enterprises and certain government-run institutions to compete for credit in the financial system on the same footing as private enterprises.

8 The liberalization of the financial system followed the Mc Kinnon approach. In fact, we should say the "first" Mc Kinnon. In his most recent writings, this author seems to be much more cautious in his analysis of the virtues of financial liberalization attempts, see Mc Kinnon (1991) and Fanelli and Frenkel (1993).On the 1977 financial liberalization in Argentina, see Feldman and Sommer (1984), Feldman (1983) and Damill and Frenkel (1987). On the liberalization experiences in the Southern Cone, see Ffrench-Davis (1983), Machinea (1983) and Diaz Alejandro (1985).

Table 1.

Period	Autonomous Capital Movements			Risk Premium	Real Exchange Rate*	Credit (in Real Terms)**
	Total	Private	Public	(% yearly)		
Total 1978	1366	-83	1449		100.0	100.0
1979.1	1029	866	163	1.1	76.8	100.0
1979.2	1033	773	260	1.2	73.1	108.8
1979.3	1335	973	362	2.7	66.6	123.3
1979.4	1517	1027	491	2.5	64.2	159.3
Total 1979	4915	3639	1276			
1980.1	1126	398	728	1.8	61.3	183.8
1980.2	-793	-1439	646	2.2	57.4	193.8
1980.3	1455	1103	352	3.6	53.6	224.0
1980.4	465	-805	1270	3.1	48.6	244.0
Total 1980	2253	-743	2997			
1981.1	-1236	-3797	2561	4.2	48.7	231.6

(*) Deflated by the Consumer Price Index.
(**) Deflated by the Wholesale Price Index.

Source: Elaborated on the basis of Central Bank data.

The upward trend of private capital inflows, however, reverted later on. After reaching a maximum in the last quarter of 1979, private flows became negative for the first time under the program in the second quarter of 1980. In the first quarter of 1981, the outward flow of private funds reached the unprecedented amount of 3.8 billion dollars. As a consequence, there was a rapid depletion of Central Bank reserves which ultimately led to the collapse of the program. The lack of international reserves obliged the authorities to abandon the pre-announcing of the future nominal exchange rates.

The public sector's behaviour followed a "countercyclical" pattern. In the period in which the inward flow of private funds was high, the demand for external credit by the public sector stagnated but, when private capital outflows began to increase, the

authorities tried to compensate private outflows by raising their foreign credit demand (Table 1). In a context of mounting uncertainty, the capital account's liberalization resulted in higher public indebtedness and capital flight.

The credibility in the authorities' capacity for maintaining the anticipated devaluation rate played a key role in determining the direction of private capital movements. At the beginning of the program, credibility was strong because the Central Bank held a significant amount of international reserves and the economy had been showing substantial current account surpluses in the previous years. In such a context, the pre-announcement of the devaluation rate acted like a free exchange rate insurance for the private sector and, consequently, this sector was able to reap the benefits resulting from the difference between domestic and international interest rates without incurring in additional costs in terms of risk bearing. As time elapsed, however, credibility in the announced exchange rate eroded, giving way to a growing level of uncertainty, in spite of the "tablita." The mounting level of uncertainty reflected in a continuous increase in the country risk premium (Table 1)[9]. Two main factors, endogenously generated by the program, were behind the gradual increment of uncertainty: the widening of the current account disequilibrium and the "credit cycle" triggered by both capital inflows and domestic financial liberalization.

The increase in the current account disequilibrium was caused by a booming demand for imports. Imports in 1980 were 2.7 times higher than in 1978 and hence, the trade account showed a surplus of US$ 2.6 billion in 1978, and a deficit of 2.5 billion in 1980. The primary causes of this spurt in imports were the rapid liberalization of external trade and the appreciation of the domestic currency provoked by the fact that the internal inflation rate was systematically greater than the sum of the international inflation rate and the devaluation rate. Table 1 shows that the program induced a remarkable distortion in the structure of relative prices of the economy.

The sharp and sudden increase in capital inflows that followed the deregulation of foreign exchange and financial markets in a context of weak supervision of the financial institutions by Central Bank authorities gave way to a marked expansion of credit. The monetary authorities not only acted passively by failing to sterilize the increased flows but also made the monetary impulse stronger by reducing the reserve requirement ratio.

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9 Risk premiun is measured as the difference between the LIBO rate and the return of Bonex (a public bond). On the relationship between risk and current account disequilibrium, see Frenkel (1983). Damill and Frenkel (1987) analyse the financial evolution of the economy during this period in detail.

Real interest rates became negative at the beginning of the program.

The easy-credit phase, nonetheless, tended to exhaust rapidly. First, real interest rates began to show an upward trend at the end of 1979 **pari-passu** with the weakening of the credibility in the preannounced exchange rate. Second, given the high speed of credit expansion and the private banks' lack of experience in a free system, the allocation of available loanable funds deteriorated and hence the quality of the banks' balance sheets worsened. A good part of the new credit supply was allocated to the acquisition of real estate and to speculative stocks of goods. Third, the weakness of the Central Bank's supervision allowed a disproportionate expansion of the "groups" related to some domestic banks. Fourth, the level of financial fragility of the system was accentuated by shrinking profits in those sectors competing with imports and by the incipient recession.

Even though the financial reform increased the economy's monetization level, it was unable to extend the maturity term of domestic deposits. Almost all of the existing term-deposits showed a maturity of less than one month. This facilitated the rapid reallocation of the private sector's portfolio. When credibility weakened, dollars were increasingly substituted for pesos. The counterpart of the higher demand for foreign exchange was the reduction in domestic bank deposits. In order to maintain the equilibrium between their assets and liabilities, the banks should have reduced the existing stock of credit **pari-passu** with the decline in deposits. Private firms however, were unable to cancel their existing bank loans as quickly as the decline in bank deposits. This generated severe imbalances between assets and liabilities in the private banks' balance sheets.

In such a context, monetary policy proved to be completely ineffective. When international reserves began to fall, the authorities tried to use monetary restraint -mainly via an increase in reserve requirements- to stop the depletion of international reserves[10], but this accentuated the lack of liquidity that capital outflows were producing and further aggravated the weak situation of commercial banks. To avoid a deepening of the financial crisis, the Central Bank had to act as "lender of last resort" and the money supply began to be endogenously determined by the financial crisis.

In Argentina, the financial crisis of 1980-81 anticipated the "debt crisis" that the

[10] As a complement, the minimum term for foreign debt repayment was eliminated. At the cost of a reduction in the average maturity of the outstanding debt, this measure induced a short-lived reversion of capital outflows in the third quarter of 1980.

countries of the region would experience from 1982 on. Indeed, for Argentina, the debt crisis meant that the rationing of foreign credit, which the private sector had begun to face as a consequence of the domestic financial crash in 1980-81, would be extended to the public sector as well. And when this did happen, the government was unable to continue increasing public foreign debt in order to sustain the fiction of an "open" capital account. In 1982 the authorities were obliged to "close" the economy again in order not to run out of international reserves[11].

Some Lessons from the Liberalization Experience.

The most relevant lessons that can be extracted from this liberalization experience are the following. Firstly, private capital flows show a high degree of volatility. This volatility seems to be greater in periods of deregulation of the capital account. The negative effects of volatility on domestic markets can barely be offset by resorting to the available short-run macroeconomic tools. Even though there is a positive correlation between capital inflows and internal monetization, this does not necessarily mean that there will be a lengthening in the maturity of domestic deposits. Secondly, capital movements have important macroeconomic effects. The transmission mechanisms are domestic currency appreciation and the triggering of internal credit cycles. This tends to generate unsustainable disequilibria in the current account and to increase domestic financial fragility. Thirdly, the magnitude of the inward flow of capital tends to be excessive as compared to the size of the national capital market. The domestic financial system is usually unable to efficiently intermediate a sudden and high increase in the supply of loanable funds; and, it cannot smooth out the volatility of such funds either. These facts are aggravated if the Central Bank's authorities act passively regarding both the sterilization of capital inflows and the supervision of private banks' balance sheets. Fourthly, when there exists a severe deterioration in the financial system's position that seriously threatens the payment and credit systems, the government is forced to act in a compensatory way. The authorities are **de facto** obliged to act as lender of last resort

11 From April 1982 on, any operation involving foreign exchange had to be previously authorized by the Central Bank. At that point arrears in payments of the services of the foreign debt began to accumulate. The payments associated to profit, dividends and royalties abroad had to be made in Bonex instead of foreign exchange. These strict measures were flexibilized afterwards, in 1983 and 1984. At the end of 1984, it was established that the minimum period of amortization for foreign loans would be six months, but services comprising both interest and amortization could be made without the previous authorization of the Central Bank.

through the Central Bank in order to preserve stability. If this fact is internalized by the private sector, it may give rise to the existence of a "moral hazard" problem. The private sector behaves as if there were an implicit and free private deposit and/or exchange rate insurance. Finally, the schemes based on a fixed or pre-announced nominal exchange rate when inflation is still uncurbed can "buy" some credibility in the short run but at the cost of increasing uncertainty in the medium run. Regarding this, it is worthwhile mentioning that the current Chilean policy of augmenting the short-run exchange rate uncertainty while ensuring a stable level for the long-run real exchange rate seems to be a wiser choice. This may greatly help discourage short-run speculative capital inflows and provide firm incentives for real investment in the tradable goods sector[12].

Capital Movements during the "Debt Crisis" of the Eighties.

The behaviour of capital flows during the eighties showed noticeable differences with the period that we have just analyzed and with the current situation as well. Beyond the "endogenously" generated crisis that the Argentine economy was undergoing in 1982, the new dynamic of capital movements was strongly determined by two exogenous changes occurred in the international setting in the early eighties: the marked increase in the interest rates and the increasing rationing of foreign credit markets.

The impact effect of the negative shock was first felt on the external sector because the country was obliged to generate unsustainable trade surpluses in order to compensate for the increased deficit in the financial services account. However, it readily propagated to the whole economy. The effect was of unprecedented magnitude, not only because of the size of the external shock but also because of the occurrence of the shock in the context of the macroeconomic, fiscal and financial crisis produced by the collapse of the liberalization model. In spite of adjustment efforts, the Argentine economy could only reach an acceptable degree of stability after the flexibilization of foreign credit rationing in the present decade.

A few figures will be enough to show the magnitude of the external gap during the eighties. Between 1982 and 1990, the Argentine accumulated current account deficit

[12] It should be mentioned that, in the Argentine case, the flaws of the liberalization experience were aggravated by the presence of a significant fiscal deficit. The public budget disequilibrium made the control of monetary aggregates more difficult. Additionally, the increment in public expenditures induced a further increment in the domestic demand for non-tradables, thereby contributing to worsening the existing relative price disequilibrium.

amounted to US$ 16.3 billion. Contrasting with the liberalization period, there were continuous current account deficits in spite of the substantial generation of trade account surpluses induced by the successive adjustment efforts. In the 1982-90 period, Argentina generated an accumulated trade surplus of 34 billion dollars. That is, the country effected an external transfer equivalent to 3.5 percent of each year's GDP. The reduction in the domestic absorption resulting from such trade surpluses, however, was not enough to compensate for the increment in the services on the foreign debt which amounted to US$ 48 billion in the period under analysis.

During this period, the net result of autonomous capital movements was **negative**[13]. As a consequence, the deficit in the capital account added 5.1 billion[14] dollars to the borrowing requirements originating in the current account deficit, as can be seen in Table 2.

[13] We classified capital inflows following the balance of payments definitions. According to such definitions, the funds coming from the IMF are classified as "compensatory" and those from the World Bank and the IDB as autonomous. In recent years, however, much of the financing provided by the latter two institutions has been compensatory rather than autonomous.

[14] This figure includes the funds associated to the consolidation of public debt. If the amount corresponding to the consolidation of public debt is subtracted, the net capital outflow is lower (1.7 billion). On the other hand, via underinvoicing of exports and overinvoicing of imports, capital outflows have been greater. These kinds of capital movements cannot be identified on the basis of the balance of payments statistics.

Table 2. Sources and Destination of Foreign Funds, 1977-1993. (In millions of US dollars)

Period	Trade account surplus (1)	Current account deficit (2)	Changes in foreign reserves (3)	(3)+(2) = (4)+(5)	Compens. capital movements (4)	Autonomous capital movements (5)
1977	1,488	-1,290	2,226	936	-253	1,189
1978	2,566	-1,833	1,998	165	-1,201	1,366
1979	1,100	537	4,442	4,979	65	4,915
1980	-2,529	4,768	-2,796	1,972	-281	2,253
1981	- 287	4,714	-3,521	1,193	38	1,155
1982	2,287	2,358	-715	1,643	5,451	-3,808
1983	3,331	2,461	1,684	4,145	4,256	-111
1984	3,983	2,391	99	2,490	1,843	647
1985	4,582	953	2,017	2,970	2,573	397
1986	2,128	2,859	-514	2,345	1,561	784
1987	540	4,238	-1,274	2,964	2,826	138
1988	3,810	1,572	1,961	3,533	3,342	191
1989	5,374	1,292	-1,559	-267	5,326	-5,593
1989 (*)	5,374	1,292	-1,559	-267	1,937	-2,204
1990	8,275	-1,789	2,751	962	2,072	-1,110
1991	3,703	2,803	1,880	4,683	6,566	-1,883
1991 (*)	3,703	2,803	1,880	4,683	1,109	3,574
1992	-2,637	8,311	4,337	12,648	1,185	11,463
1992 (*)	-2,637	8,311	4,337	12,648	1,293	11,355
1993 (**)	-3,696	8,300	3,808	12,108	-3,151	15,259
Sum.82-90:	34,310	16,335	4,450	20,785	25,861	-5,076
82-90 (*)	34,310	16,335	4,450	20,785	22,472	-1,687
Sum.91-93:	-1,964	19,414	10,025	29,439	4,600	24,839
91-93 (*)	-1,964	19,414	10,025	29,439	-749	30,188

(*) Net of operations of consolidation, see footnote Table 3.
(**) Estimated.

Source: Elaborated on the basis of Central Bank data.

The net result of the autonomous capital account, however, conceals different patterns of behaviour of the private **vis-à-vis** the public sector. Table 3 shows that the account corresponding to the private sector registered a net capital outflow of US$ 12.1 billion. All the items that correspond to the private sector are systematically negative, with the exception of that corresponding to foreign direct investment. The public sectors' account, on the contrary, records a surplus of 7 billion dollars. To a certain extent, this behaviour of the public and the private sectors reproduces the pattern observed during the collapse of the liberalization attempt. The net outflow of private funds is partially offset by the inflow of public external credit. The task of closing the external gap was faced exclusively by the government.

However, given the existence of credit rationing, the authorities were unable to raise the funds needed to close the external gap by resorting only to voluntary sources of finance in the international markets. Consequently, "compensatory" finance played a key role in financing the disequilibrium in the current account. We quote the word compensatory because a good part of the compensatory funds consisted of payments of services on the foreign debt that were in arrears. This kind of financing should be considered "forced" rather than "compensatory".

Table 3. Autonomous Capital Movements, 1977-1993. (In millions of US dollars)

Period	Autonomous Capital (1)=(2)+(7)	Private (2)=3+4+5+6	Privatization and FDI (3)	Bonds and Loans (4)	Trade credit (5)	Other (6)	Public (**) (7)=(8)+(9)	Bonds and loans (8)	Loans to public enterprises (9)
1977	1,189	216	52	393	-81	-149	973	5	968
1978	1,366	-83	295	514	-398	-494	1,449	624	825
1979	4,915	3,639	235	3,543	772	-912	1,276	585	691
1980	2,253	-743	739	3,886	-86	-5,283	2,997	1,016	1,981
1981	1,155	-3,469	927	3,112	-3,386	-4,122	4,624	2,695	1,929
1982	-3,808	-4,017	257	-521	-2,720	-1,032	209	481	-272
1983	-111	-2,514	183	-1,831	-411	-456	2,403	2,249	154

1984	647	-1,558	269	-2,674	500	347	2,205	2,210	-5
1985	397	-894	919	-1,733	-812	732	1,291	1,098	193
1986	784	420	574	-459	-539	844	364	318	46
1987	138	-695	-19	-24	-492	-160	833	421	412
1988	191	393	1,147	-228	-693	167	-202	-305	103
1989	-5,593	-5,242	1,028	111	-2,228	-4,153	-351	-391	40
1989 (*)	-2,204	-1,853	1,028	111	-2,228	-764	-351	-391	40
1990	-1,110	-1,361	1,141	92	451	-3,045	251	255	-4
1991	-1,883	-2,636	2,439	345	1,758	-7,178	753	647	105
1991 (*)	3,574	2,821	2,439	345	1,758	-1,721	753	647	105
1992	11,463	11,620	2,283	611	3,190	5,536	-157	55	-212
1992 (*)	11,355	11,512	2,283	611	3,190	5,428	-157	55	-212
1993	15,259	11,707	3,164	3,318	386	4,839	3,522	3,567	- 15
Sum.82-90:	-5,076	-12,079	5,499	-7,267	-6,944	-3,367	7,003	6,336	667
82-90 (*)	-1,687	-8,690	5,499	-7,267	-6,944	22	7,003	6,336	667
Sum.91-93:	24,839	20,691	7,886	4,274	5,334	3,197	4,148	4,269	-122
91-93 (*)	30,188	26,040	7,886	4,274	5,334	7,546	4,148	4,269	-122

(*) The asterisk indicates that the figures corresponding to the year are measured net of the operations of consolidation of public debt. In 1989, under the "Bonex Plan", a proportion of the domestic financial assets held by the private sector was converted into foreign assets (Bonex) issued by the government. Consequently, column six disaggregates in: -4,153 = -764 -3,389; where the latter figure (3,389 million) represents the outward flow of funds associated to the issue of Bonex. Consistently, the private capital account net result can be disaggregated as: -5,242 = 1,853 - 3,389. When this operation is deducted, the overall result of the autonomous capital account becomes -2,204 million. In order to preserve the consistency of the balance of payments accounting in Tables 2 and 3, the net result of the compensatory capital account has also been corrected.

In 1991, there was an operation of consolidation of public debt that affected the figures recorded in the balance of payments in a similar way. In that year, there was an issue of government bonds for 5,457 million. When this operation is deducted, the private and autonomous capital accounts show a surplus of 2,821 and 3,574 million respectively.

Finally, in 1992, the Treasury amortized 108 million of its outstanding debt. This amount was recorded under the item "other private capital movements" with a positive sign and under "other compensatory capital movements" with a negative one. If both records are eliminated, the net result of the private capital account falls from US$ 11,620 to 11,512 million, while the surplus corresponding to the autonomous capital account declines from US$ 11,463 to 11,355 million. To preserve accounting consistency, the net

result corresponding to compensatory capital must be corrected upward, from US$ 1,185 to 1,293 million. All these operations can be seen in Tables 2, 3, and 4. It must be mentioned, on the other hand, that the debt-equity swaps associated to the privatization process have been eliminated. These operations of conversion amounted to US$ 895 million in 1990 and to 1,819 million in 1992.

(**) This column includes the Use of the "Trade Credit Facility".

Source: Elaborated on the basis of Central Bank data.

The continuous outflow of private capital and the systematic use of compensatory finance proved to have marked consequences on macrostability and on the financial structure.

Throughout this period there was a direct relationship between the availability of compensatory finance and the real exchange rate: the lower the supply of foreign financing, the greater the trade surplus needed to close the external gap, and hence, the higher the "equilibrium" real exchange rate. Given that the correction of the real exchange rate level meant an upward shift of the nominal exchange rate that tended to fuel inflation, the uncertainty regarding the "equilibrium" real exchange rate affected not only the expected devaluation rate but also the expected rates of both inflation and nominal interests[15].

The existence of a permanent deficit in the private capital account, together with a high rate of inflation, on the other hand, induced a systematic tendency for the domestic financial system to become smaller. The use of the dollar as a mean to denominate contracts generalized during this period. In this sense, "dollarization" and demonetization are alternative names for the same phenomenon.

In addition to exchange rate uncertainty and financial de-intermediation, a third factor generating instability was the public sector's marked financial fragility. The public sector's financial deterioration had one of its important roots in the debt crisis, which, in turn, gave rise to the appearance of the "domestic transfer" problem[16]. The inability of the

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15 Indeed, it can be said that one of the most perverse sources of macroeconomic instability during the eighties was the fact that the result of external negotiations regarding the public foreign debt entered as a crucial argument in the function that determined the equilibrium real exchange rate. More often than not, this fact made economic calculation based on expectations with a reasonable degree of confidence impossible.

16 On the "domestic transfer problem", see for example, Fanelli et. al. (1992).

public sector to resolve this problem implied that throughout the decade there would be substantial government deficits in spite of the strong reduction in government expenditures (specially in public investment).

The persistence of the disequilibria in the balance of payments and in the government budget determined the failure of the successive stabilization packages that were to be launched during the decade. In the late eighties, when political uncertainty originating in the change of administration added to the existing economic uncertainty, the country experienced two short periods of hyperinflation. Indeed, macroeconomic instability was dramatically reduced only in the present decade after the implementation of the so-called Convertibility Plan in April 1991, when a new and sharp change in the international setting made the new stabilization package viable.

II. Capital Flows in the Nineties.

The dynamics of capital movements greatly changed in the ninenties because of the changes on the international and domestic fronts .

Regarding the international setting, the most significant changes were, on the one hand, the flexibilization of the existing credit rationing and, on the other, the marked reduction in international interest rates. Both the income and substitution effects induced by the falling interest rates contributed to deactivating the debt crisis. The income effect weakened the external constraint by reducing the deficit in the financial services account. Likewise, two other facts are connected with this effect. First, there was, **ceteris paribus**, an overall increase in the national income. Second, given that the public sector held more than 90 percent of the outstanding foreign debt, the primary beneficiary of the increase in national income induced by the falling interest rate was the public sector. In this way, the pressure exerted by the "domestic transfer" became much weaker than it had been during the eighties.

The substitution effect was no less important. The deterioration in the rate of return on financial assets abroad heavily contributed to inducing a reversion in the capital flight process. Besides, the reduction in the return rate on financial assets **per se** acted in favor of investment in **real** assets. Indeed, the higher rate of return perceived on real assets greatly helped Argentina's stabilization and structural reform by enabling a massive process of privatization to take place that could not have been possible without the participation of foreign investors.

On the domestic side, the most relevant facts were the increasing success of the Convertibility Plan from the beginning of 1991 on, and the deepening of the structural reform process oriented towards market deregulation and liberalization put into practice by the new administration which took office in July, 1989.

Since capital inflows basically began to be important after the implementation of the Convertibility Plan, the following will focus on the period that begins with the Plan, with due references to the previous periods when necessary.

Internal Factors and Capital Movements: Reforms in the Economic, Institutional and Legal Frameworks.

From the point of view of capital flows, the most influential elements of the structural reform package were: the new rules governing monetary policy, the deregulation of both the financial system and the stock exchange market, and the public sector's structural reform.

Among the normative changes that directly influenced capital flows one of the most relevant was the "Ley de Emergencia Economica" (the Economic Emergency Law) in August 1989 that establishes equal treatment for national and foreign capital invested in productive activities. The Law eliminated the requisite of previous approval for foreign direct investment (the only exception being investment projects related to defence); it gave foreign firms free access to the domestic credit market; it abolished the tax on the repatriation of foreign capital and instituted a common tax rate on profits of foreign and national companies. In order to eliminate obstacles in the repatriation of flight capital, the "Ley de Olvido Fiscal" (Amnesty Tax Law) was promulgated in April 1992. It established a special regime for individuals declaring their real and/or financial investments abroad or their holding of foreign currency within the country.

The development of a "dollarized" segment in the domestic financial system (the so-called "argendollars") was greatly reinforced by a series of norms dictated by the Central Bank (Comunicación "A" 1493 in July 1989 and "A" 1820 in March 1991). The portfolios' dollarization was also greatly helped by the liberalization of the foreign exchange market (Comunicación "A" 1589 in December 1989 and "A" 1822 in April 1991) and the establishment of a fixed exchange rate by means of the "Ley de Convertibilidad" (the Convertibility Law). Additionally, this Law instituted the validity of contracts denominated in any currency. In this way, deregulation of the foreign exchange market was complete. There are now no restrictions on buying and selling foreign currencies. Indeed, the lack of controls is so marked that there are even no reliable records of operations that take place in the foreign exchange market. In such a context, there is practically no cost for entering and exiting the market.

The main objective of the aforementioned measures was to serve as a signal that there would be an unrestricted respect for monetary stability and for currency convertibility. In order to stress this fact, in September 1992, a new law regulating the Central Bank's behavior was promulgated (the "Ley de Carta Orgánica del Banco Central.") In addition to instituting the strict independence of the Central Bank, the law prohibited the monetary financing of the fiscal deficit and established severe limits on

both rediscounts and the government's open market operations. This significantly reduced the "lender-of-the-last-resort" role of the monetary authorities and its autonomy in managing monetary policy as well. The possibility of establishing a scheme to guarantee domestic bank deposits was also virtually eliminated. Under this new regime, the lack of instruments in the hands of authorities could lead to a situation of serious financial instability if the level of financial fragility of large -or even medium- sized financial institutions should reach a critical point. It is worthwhile mentioning that Central Bank regulations have improved during 1993, specially in relation to capital requirements. However, as in past experiences, there is still no tight supervision of commercial bank balance sheets by the Central Bank.

In this new setting of absolute financial deregulation, the Central Bank lifted, by the and of 1993, the only significant remaining restriction: the non-authorization of new entries into the financial system, a policy which had been in effect for more than ten years. The reform also comprises the stock market. In November 1991, the "Decreto de Desregulación" (the Deregulation Decree) was issued. This decree suppressed the tax on the transfer of equities, eliminated the "stamp" tax that affected contracts in capital markets and freed brokerage fees. There were, in addition, modifications in the legal framework regulating the institution which is in charge of supervising the transactions in the stock market. In order to increase the size of the market, the entry of new enterprises was encouraged and new forms of operations were introduced by law (Ley de "Obligaciones Negociables" in July 1991).

The reform of the public sector has had an important effect on capital movements. The "Ley de Reforma del Estado" (the Law for the Reform of the State) was specially relevant, because it set the bases for the privatization process and for the schemes of debt-equity swaps.

In addition to the aforementioned measures oriented toward structural reform, the Convertibility Plan greatly helped to stimulate capital inflows to the extent that it succeeded in ensuring a much greater degree of macroeconomic stability, and hence, improving the "economic climate" perceived by foreign investors.

The explicit objective pursued by the Plan was to reduce dramatically the inflation rate and to protect the existing stock of international reserves from a new speculative attack that could put into motion a new hyperinflationary episode. The Plan succeeded regarding both objectives. The huge increase in the trade account surplus in the previous

year played a crucial role in making this possible.

The program combined strictly "orthodox" measures regarding fiscal and monetary policy (implicit in the Convertibility Law[17] and in the law regulating the Central Bank's behavior) with "heterodox" ones such as prohibiting the indexation of contracts and freezing public prices and wages[18]. At the same time, several trade barriers were lifted and tariffs were reduced.

At first sight, the program appears to be similar to others implemented during the eighties which made use of certain key variables (especially the nominal exchange rate) as nominal anchors. The program, however, has shown important differences. First of all the opening up of the economy in the context of an overvalued real exchange rate has exerted a significant downward pressure on the prices of tradable goods. Second, the prohibition of resorting to monetary financing of the fiscal deficit was strictly enforced[19]. Third, the fixing of the nominal exchange rate by law had the expected effect in terms of enhancing the credibility of the exchange-rate regime and turned out to be a key element favoring capital inflows. Unlike the Mexican case where the exchange rate stability at the beginning of the "Pacto de Solidaridad" was based on the strong reserves position of the Central Bank, the main factor guaranteeing the sustainability of the fixed exchange rate in the Argentine case was the huge surplus in the trade account recorded in 1990[20]. A further element that acted in favor of credibility was the depth of the structural public sector reform via privatization and reductions in the number of public employees.

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17 The law establishes the free convertibility of the domestic currency at a fixed nominal exchange rate (one peso = one dollar).

18 There was not a generalized freezing of prices and it was announced that there would not be any control on prices in the future. In practice, however, there was a whole array of "hidden" punishments for those firms who increased their prices, such as a tightening of tax monitoring and/or access to public bank credits.

19 The issue of public bonds to finance the budget gap is not prohibited by the Convertibility law. Nonetheless, the government did not resort to this kind of financing because the private sector might have felt that the government was not adjusting their behaviour to the "spirit" of the law. Two factors greatly helped the authorities to close the budget gap without resorting to money or bonds in the first stages of the Convertibility Plan. First, the proceeds stemming from the privatization process and, second, the "forced" credit provided by foreign banks via payment arrears, which amounted to US$ 1.7 billion during the first year of the Plan.

20 A "positive" consequence of hyperinflation was that it induced an overshooting in the level of the real exchange rate. This encouraged exports and provoked a fall in imports (aggravated by the decrease in the GDP). This generated an unprecedented surplus of more than eight billion dollars in the trade account in 1990. This surplus allowed the country to accumulate a sufficient level of international reserves so as to launch the stabilization plan without waiting for the external support that would otherwise have been needed.

The Magnitude and Composition of Capital Inflows under the Convertibility Plan.

The strict credit rationing faced by Argentina in the eighties provoked a strong decline in domestic absorption while the stock of international reserves was reduced to a minimum. When the quantitative restrictions weakened, there was a sharp expansion in the use of foreign savings. In the 1991-93 period, the accumulated deficit in the current account reached 21.4 billion dollars. If the funds used for accumulating international reserves are added, the total demand for foreign finance was US$ 29.4 billion. This represented 40 percent more than the net flow of funds received between 1982 and 1990 (Table 2). The total amount of the aforementioned inflows occurred after the implementation of the Convertibility Plan.

Unlike the eighties, the increment in the current account deficit was not explained by an upward trend of interest payments abroad -the financial account deficit tended to decline **pari-passu** with the international interest rate- but rather by the mounting level of the trade deficit. This was primarily the result of domestic expansion of activity level. Likewise, the growth rate of imports tended to be greater than the to domestic global demand mainly because of trade liberalization and the decline in the real exchange rate. The latter was a consequence of the fact that the nominal exchange rate was fixed in a context in which the "residual" rate of inflation in the post-stabilization period was far from zero. Imports increased from US$ 4.1 billion in 1990 to US$ 14.9 billion in 1992 and around 16.4 billion in 1993. Following this increase in imports, the trade account surplus of 8.3 billion in 1990 became a deficit of 2.6 billion in 1992 and it is estimated in 3.7 billion in 1993.

In the capital account, the relationship between autonomous and compensatory finance also showed an abrupt change. In sharp contrast with what had happened in the eighties, capital inflows were led by the private sector. Between 1991 and 1993, the net result of the item corresponding to private capital was 26.0 billion dollars (Table 3).

If one takes a closer look, it is clear that the first signs of a reversal in capital flows appeared before the implementation of the convertibility regime.

Table 4. Autonomous Capital Movements, 1990-93

Period	Total	Private	Private*	Private**
1990.1	-195	-187	-187	-227
1990.2	-68	-27	-27	-125
1990.3	-1276	-1530	-1694	-1560
1990.4	429	383	-261	344
Tot. 1990	-1110	-1361	-2169	-1568
1991.1	-206	-163	-290	-165
1991.2	-25	-29	-362	-119
1991.3	616	236	-670	591
1991.4	3189	2777	2169	2954
Tot. 1991	3574	2821	847	3261
1992.1	2967	3073	2212	3062
1992.2	2165	2344	2616	2265
1992.3	2177	2045	1809	2147
1992.4	4046	4050	3040	4088
Tot. 1992	11355	11512	9671	11562
1993.1	3288	1679	1377	1739
1993.2	2495	1745	1745	2272
1993.3	4402	4086	2135	4361
1993.4	4874	3997	3707	4737
Tot. 1993	15259	11707	9164	13109

(*) According to destination.
(**) According to origin.

Source: Elaborated on the basis Central Bank data.

Table 4 shows that the private capital account recorded a surplus for the first time in the last quarter of 1990. This surplus is associated to the high level of the domestic interest rate registered from March of that year on. Nonetheless, due to the turbulence in the foreign exchange market that preceded the convertibility in the first quarter of 1991, net private capital flows again became negative in the first and second quarters of that year. The sign of private flows once more reverted in the third quarter of 1991 reflecting

an increasing degree of credibility in the new policy package.

It is worthwhile mentioning, however, that the balance of payments'classification acording to the public or private character of capital inflows is ambiguous. In effect, on the one hand, the account corresponding to private flows includes the funds originating in privatization which finance the public sector and, on the other, excludes government bonds which are flows of funds which originate in the private sector. In order to consider this , Table 4 includes two new columns corresponding to the private sector.

In the first column ("private*") the flow of funds show the amount **directed to finance** the private sector and, consequently, the funds stemming from privatization are excluded. As can be seen, the private sector has only received a positive net flow of credit from the fourth quarter of 1991 on, **after** this flow had became positive for the government. Notice that the reversal of flows is very sharp; while in the third quarter the private sector received a net negative flow of credit of US$ 670 million, in the fourth quarter it received a positive one of 2.2 billion. The second column ("private**") shows the total amount of inflows **originating** in the private sector, without considering whether these funds went to finance the public or the private sector. In this case, there are no important qualitative differences with the balance of payments records. The net result of capital flows is positive for the first time in the last quarter of 1990, then becomes negative and changes its sign again in the third quarter of 1991. An important conclusion that can be drawn from this is that capital inflows associated with the privatization process have "led" the movements of private capital, and consequently, the divestiture of public property has had a favorable effect on the expectations of foreign investors.

The Allocation of Foreign Capital Inflows.

Owing to the lack of data, it is very difficult to address the question of the domestic allocation of capital inflows. In spite of this fact, in this section we will make an effort to analyze the allocation of capital inflows on the basis of available data.

Table 5. Allocation of Foreign Funds to the Private and Public Sectors.
(Excluding debt-equity swaps associated to privatization)

	89	90	91	I	II	III	IV	92	I	II	III	IV	93	I	II	III	IV	Convert (**)
Private Sector	-1853	-2169	847	-290	-362	-670	2169	9671	2110	2147	1912	3502	9164	1398	1778	2152	3836	19982
Export credit	-717	1411	70	1100	213	-641	-602	-2175	-72	-409	-1007	-687}	1032	149	48	313	522	4908
Import.credit	-1511	-960	1688	-48	157	656	923	5365	919	1239	1790	1417}						
Firms	111	92	345	32	52	-10	271	611	317	56	88	150	3318	251	710	1047	1310	4242
FDI	1028	333	465	53	107	76	229	442	59	112	47	224	621	130	219	123	149	1475
Others	-764	-3045	-1721	-1427	-891	-751	1348	5428	887	1149	994	2398	4839	896	804	654	2494	9973
Public Sector	1586	3131	3836	-205	951	1627	1463	2977	640	742	1192	403	2944	2776	-2341	1912	597	9837
Privatization	0	808	1974	127	333	906	608	1841	963	197	133	548	2543	302	0	1951	290	6231
Autonomous Capital	-351	251	753	-43	4	380	412	-157	-106	-179	132	-4	3552	1609	750	316	877	4191
Others	-3389	0	-5457	0	0	0	-5457	108	0	108	0	0	0	0	0	0	0	-5349
Compensatory finance	5326	2072	6566	-289	614	341	5900	1185	-217	616	927	-141	-3151	865	-3091	-355	-570	4764
Arrears	2927	1912	1788	440	825	312	211	884	215	222	181	266	68	68	0	0	0	2300
Others (*)	2399	160	4778	-729	-211	29	5689	301	-432	394	746	-407	-3219	797	-3091	-355	-570	2464
TOTAL	-267	962	4683	-495	589	957	3632	12648	2750	2889	3104	3905	12108	-563	4174	4064	4433	29809

(*) Includes the operations of consolidation except for the regularization of arrears during the second quarter of 1993.

See footnote Table 3.

(**) The convertibility plan, i.e. from 1991 II to 1993 IV.

Source: Elaborated on the basis of Central Bank data.

In Table 5 we have reclassified the flow of foreign funds. The objective is to see whether these funds financed the public or the private sector and which kinds of expenditures were financed. The Table shows that under the convertibility regime, if the items corresponding to the Non-financial Public Sector and to the Central Bank were consolidated, the net flow of foreign capital received by the public sector would total US$ 9.8 billion while the private sector would receive US$ 20.0 billion.

From this total of 29.8 billion dollars, 9 billion were allocated to reserves accumulation and the rest covered the borrowing needs originating in the current account. Given that the primary cause of the increase in the current account deficit was the upward trend of the trade deficit, it follows that there was a continuous expansion in domestic absorption. When such an expansion is analyzed at a more disaggregate level, it is clearly seen that consumption growth played an important role: in the 1990-93 period it increased 29%. On the other hand, from 1990 to 1993, investment grew 85% although the investment rate of 1990 was the lowest of, at least, the last 40 years.

The Public Sector.

Undoubtedly, the most important source of financing for the public sector has been the funds stemming from privatization. From the aforementioned total of 9.8 billion dollars received, 6.2 billion originated in the divestiture of public enterprises and 3.6 billion represented inflows of autonomous and compensatory finance. These figures, however, underestimate the actual quantity of funds received by the government because the inflows originating in the debt-equity swap schemes are excluded. In Table 6, by resorting to alternative sources of data, we show the total amount of funds received by the public sector from privatization.

Table 6. Financial Results of the Privatization Process (1990-93)
(In millions of US dollars)

Sector	Form of the Transference	Amortizat.of Cash	Transferred Foreign Debt	Liabilities	Total	Amortizat. of Foreign Debt
		(Marker value)		(Nominal value)		
Telecommunications	Sale of stocks	2270.9	1257.0	--	3527.9	5000.1
Airlines	Direct sale	260.1	483.1	--	743.1	1610.1
Railways	Concession	--	--	--	--	--
Electricity	Direct Sale	524.0	1681.0	1071.0	3276.5	3362.4
Harbors	Concession/direct sale	13.6	--	--	13.6	--
Roads (1)	Concession	--	--	--	--	--
T.V.and Radio	Concession	13.9	--	--	13.9	--
Petroleum	Sale of stocks	2040.6	--	--	2040.6	--
YPF (Petroleum comp.)	Concession	3040.0			3040.0	
Gas	Direct sale	300.1	1541.1	1110.1	2951.1	3082.1
Water and sewage(2)	Concession	--	--	--	--	--
Industry						
Petrochemical	Sale of stocks	545.0	28.4	--	82.8	139.7
Ships	Direct sale	59.8	--	--	59.8	--
Steel	Direct sale	143.3	22.1	--	165.4	41.8
Public Real Estate	Direct sale	183.6	--	--	107.1	--
Others	Direct sale/Concession	65.2	2.4	--	67.6	12.1
Total Amount		8982.1	5017.7	2181.0	16180.8	13248.1

Source: Ministry of Economy.

In the 1990-93 period, as a consequence of the divestiture of public enterprises, there was a reduction in the nominal stock of public debt of US$ 13.2 billion. The market value of the amortized debt was US$ 5 billion. Likewise, in the privatization process, 2.2 billion dollars in commercial liabilities held by public companies were transferred to the private sector together with such enterprises. The cash payments received by the public sector, on the other hand, amounted to 9.0 billion dollars. Consequently, the overall

revenues stemming from privatization were US$ 16.2 billion (9 billion in cash, 5 in concept of swaps, and transfers of commercial liabilities for 2.2 billion). The participation corresponding to foreign investors represented 60 percent of this amount (9.8 billion dollars).

The data regarding the estimated rate of return on the privatized assets are unavailable. However, it is estimated that this rate declined after the sale of the public telecommunications company (Entel). Indeed, the privatization process has undergone three well defined stages. In the first, privatization had the primary objective of inducing a change in private-sector expectations. This stage was comprised of the worst-designed privatizations. There were high rates of return and poorly defined regulatory frameworks. In the second stage, the main objective pursued was to close the fiscal gap by resorting to the revenues originating in the privatization process. In the third and present stage, as from 1992, the rate of return has been lower and there has been much more concern regarding the consumer's interests. It is worthwhile mentioning, however, that in this third stage, the sale of the state petroleum company (YPF) was made in a manner that reflected the Administration's need to fulfill political aims, and consequently, it has had some common characteristics with the first stage[21].

The second item of government financing in order of importance was "forced" credit originating in interest payment arrears. After the implementation of convertibility, accumulated payment arrears amounted to US$ 2.3 billion (Table 5). The relevance of this kind of credit, however, has been steadily declining until it completely disappeared after the authorities signed an agreement to refinance the outstanding debt with foreign commercial banks in March 1993 under the Brady Initiative. When the funds coming from privatization and arrears are excluded, the remaining amount of foreign credit received by the public sector is very low, US$ 1.3 billion[22].

It is not possible, however, to trace the actual utilization of foreign funds by considering only the balance of payments. The funds originating in foreign sources could

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21 The sale of YPF was made in a very short period of time in order to partially amortize the long term outstanding debt of the social security system. The stock price of YPF increased around 50% in the four months following privatization.

22 The aggregate figures do not show the credit received by the gobernment during 1993 in order to make the cash payments related to the Brady Iniciative-Most of these credits are included under autonomous capital of the public sector; the payments appear as compensatory capital.

have been devoted to canceling the existing domestic public debt and/or to augmenting the stock of domestic assets held by the public sector. It is necessary, then, to examine the government balance sheet.

Table 7 shows the fiscal budget measured on cash bases. In 1990-91, the public sector ran a deficit while it showed a surplus in 1992-93. Since the amount of the deficit in 1990-91 was greater than the funds coming from privatization, it follows that a part of public expenditures was financed by the proceeds from privatization during that period. In 1992 and 1993, in contrast, the capital inflows generated by the sale of public companies was channeled to canceling government debt[23].

Table 7. National Public Sector Overall Surplus.(As a percentaje of GDP)

	1990	1991	1992	1993
I. Current Revenues	14.41	15.86	17.15	17.85
II. Current Expenditures excluding interests	11.99	14.3	14.96	15.15
III. Current Savings (I-II)	2.42	1.56	2.19	2.7
IV. Cash interest payments	-1.12	-2.12	-0.38	-1.18
V. Current Surplus (cash) (III-IV)	1.3	-0.56	1.81	1.52
VI. Investment	1.42	1.05	0.81	0.78
VII. Surplus of the Central Bank	-0.75	-0.36	-0.14	0
VIII.Cash Surplus(V-VI-VII)	-0.87	-1.97	0.86	0.74
IX. Unpaid interests	-2.98	-0.92	-0.68	-0.08
X. Surplus (VIII+IX)	-3.85	-2.89	0.18	0.66
XI. Proceeds from privatization (cash)	0.45	1.21	0.79	1.00
XII. Overall Surplus (X-XI)	-3.4	-1.68	0.97	1.66
Overall Surplus excluding arrears	-0.42	-0.76	1.65	1.74

[23] This does not mean that there was a reduction in the global stock of public debt. Simultaneously with the canceling of part of the existing debt, there were important operations of consolidation of the floating debt related to the social security system and the public sector suppliers. On the basis of the available data, it is not possible to disentangle the net effect in terms of the evolution of the stock of public debt.

Source: Ministry of Economy.

The Private Sector.

Table 5 shows that 24.6 percent of private capital inflows represented commercial credit, 7.3 percent was foreign direct investment (excluding funds originating in the privatization process) and 21.2 percent was credit directly received by firms operating in the domestic market. The remaining 47 percent appears under the heading of "others" and, consequently, represents unidentified inflows.

The net amount of commercial credit received during the convertibility period totalled US$ 4.9 billion. This amount is the result of a negative flow of US$ 3.2 billion in export credit and a positive one to finance imports of 7.1 billion dollars[24].

Therefore the expansion in imports after the implementation of the Convertibility Plan is a primary factor explaining the increase in the availability of external loanable funds. However, given the short-run character of commercial credit, the fall in the rate of growth of imports during 1993 produced a fall in the net flow of commercial credit. This led to added demand for other kinds of foreign credit because the current account disequilibrium persisted[25].

When the funds connected to privatization are excluded, it is clear that foreign direct investment has not been a significant component of capital inflows. FDI came to US$ 1.5 billion during the convertibility period and almost all of this was a reinvestment of profits.

After a long period of credit rationing, many financial and non-financial Argentine corporations were able to place US$ 4 billion in Euronotes and Bonds in foreign markets in 1991-93. As Table 8 shows, 41.9 percent of this amount was placed by domestic banks, 16.4 percent by firms producing services, 24.8 percent by petroleum companies and 16.9 percent by leading firms pertaining to the industrial sector. This allocative

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[24] The trade credit is not open in export and import credit in 1993. Therefore these figures do not include that year.

[25] If the amount of repayments of the existing stock of trade credit is similar to the inflow of new credit because imports are not growing, there are no additional funds available and, consequently, this item of the capital account does not contribute to financing the deficit in the current account.

pattern is due to two reasons. First, it reflects the ability of different firms to generate profits and consequently to sustain a significant investment rate and, second, it reveals the fact that the firms with greater net worth and repayment capacity in Argentina belong to the banking, petroleum and services sectors. Only a few leading firms in the industrial sector have access to the international credit markets. In the particular case of services, owing to the privatization process, there are currently many enterprises with fluent access to international capital markets; not only because of their size, but also because of the participation of foreign investors in the ownership of a significant part of the shares.

Table 8. Issues of Euronotes and International Bonds (1991-93).

Sector	In millions of US dollars	As a percentage of total
Industry	679.5	16.9
Petroleum	1.000.0	24.8
Services	660.0	16.4
Banks	1.692.5	41.9
TOTAL	4.032.0	100

Source: Elaborated on the basis of "Prensa Económica" data.

As was said, the item "others" represents 50 percent of capital inflows recorded in the capital account. The growth in domestic dollar deposits ("argendollars") was a very important channel for this capital inflows. It must be taken into account, however, that the increase in argendollar deposits is recorded as a capital inflow in the balance of payments only when they are lent and to the extent that the borrower purchases pesos with the proceeds from the credit in the foreign exchange market or makes a payment abroad. But, given that internal transactions using dollars as a means of exchange are

unimportant, it can be argued that the bulk of the expansion of the argendollar segment was reflected in the balance of payments as an inflow of foreign capital under the heading of "other movements".[26] In this respect, it is worthwhile noting that the expansion of the argendollar segment is higher than the amount recorded in the item "other movements".

The increment in argendollar deposits since the implementation of convertibility has amounted to US$ 14.6 billion (Table 9). This increase in deposits gave way to an expansion of the banks' lending capacity of US$ 12.4 billion.

Table 9. Evolution of the "Argendollar" segment. (In millions US dollars)

	DOLLAR DEPOSITS				Dollar term	
	Sight deposits	Saving deposits	Term deposits	TOTAL	Lending capacity	Dollar deposits/ Total deposits	dep/ term dep.(*)
1988	12	1219	1231	0	0.10	0.11
1989	22	1200	1222	331	0.12	0.13
1990	231	1480	1711	1280	0.29	0.36
Dec. 1990	597	2246	2843	2591	0.28	0.30
March 1991	853	2536	3389	3180	0.40	0.40
June 1991	661	506	3432	4599	4068	0.43	0.50
Sept. 1991	716	868	4139	5723	5036	0.46	0.54
Dec. 1991	782	1137	4642	6561	5746	0.45	0.54
March 1992	879	1505	5516	7900	6900	0.46	0.55
June 1992	852	1536	6670	9058	8017	0.43	0.52
Sept. 1992	836	1674	7834	10344	9205	0.44	0.53
Dec. 1992	839	1868	8231	10938	9703	0.45	0.54
March 1993	543	2406	9282	12231	11543	0.43	0.51
June 1993	555	2679	10298	13532	11832	0.44	0.53
Sept. 1993	601	3824	12488	16913	14636	0.47	0.56
Dec. 1993	616	4151	13264	18031	15583	0.47	0.58

[26] However, if the dollar loans are used to pay imports without "passing" through the exchange market, they will be shown as import credit in the balance of payments.

(*) Excludes sight deposits.

Source: Elaborated on the basis of Central Bank data.

We can deduce, therefore, that residents and non-residents alike have been employing the argendollar segment as a channel for capital inflows. In that way foreign investors and residents repatriating capital have tried to protect their financial investment in the domestic market from the devaluation risk. It seems, consequently, that investors believe that they can take advantage of the positive differential between the domestic and foreign interest rates while avoiding the devaluation risk. The belief that they are assuming the "country risk" but not the devaluation risk, however, may not be justified. By placing their funds in Argentine banks, investors are sharing the banks' investment decisions, which are reflected in credit policies, and banks **are** assuming significant devaluation risks. In order to clarify this we must make a brief reference to the domestic credit market situation.

An analysis based on the 50 major debtors of each bank shows that, 67 percent of the outstanding credit is in dollars, though only 43 percent of the total amount of credit in dollars has been lent to firms producing tradable goods (primary products and industrial goods)[27]. It is clear, then, that repayment capacity of bank debtors would be severely affected by a real devaluation, as would the banks' financial position. Moreover, if a change in the real exchange rate were accompanied by a recession -as is typically the case in Argentina due to the reduction in domestic absorption-, the repayment capacity of firms producing non-tradables would deteriorate further. From this it follows that placing funds in dollar-denominated deposits to by-pass a potential devaluation is not risk-free.

Capital Inflows and Transformations in the Domestic Capital Market.

The reversion in capital movements has had important effects on the structure and evolution of both the financial system and the stock market.

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[27] As is well known, not all production corresponding to these sectors is strictly tradable. The estimation in the text, consequently, may overestimate the proportion of credit channeled toward tradable goods.

Changes in the financial system.

The sharp increment in capital inflows caused, in the first place, a significant remonetization of the economy. As Table 10 shows, the hyperinflationary episodes of 1989 and 1990, together with the so-called "Bonex Plan" -by which there was a compulsory substitution of long-run government bonds for bank deposits in January 1990-, induced a strong demonetization of the economy. Although there was a slight recovery of the monetization level in 1990, it only began to change markedly in the period following the implementation of the Convertibility Plan. That is, when the capital flight process began to revert and there was a sharp and permanent fall in the inflation rate.

Table 10. Monetary aggregates in pesos. (In millions of US dollars)

	Bills and Coins	Sight deposits	Saving deposits	Term deposits	M1	M2	Deposits in pesos
1988	1711	1508	1261	8605	3219	13085	11374
1989	1504	1241	798	7344	2745	10887	9383
1990	1644	1520	1636	1014	3164	5814	4170
Dec. 1990	3521	2063	2632	2706	5584	10922	7401
March 1991	2350	1429	1804	1933	3779	7516	5166
June 1991	3209	2114	1594	2312	5323	9229	6020
Sept. 1991	3790	2353	1619	2719	6143	10481	6691
Dec. 1991	4761	3160	1789	3066	7921	12776	8015
March 1992	5028	3577	2039	3622	8605	14266	9238
June 1992	5529	4396	2542	4912	9925	17379	11850
Sept. 1992	5843	4612	2768	5778	10455	19001	13138
Dec. 1992	6783	4909	2758	5998	11692	20448	13665
March 1993	6997	4995	3639	7474	11992	23105	16108
June 1993	7580	5472	3998	7600	13052	24650	17070
Sept. 1993	8378	6648	4268	8350	15026	27644	19266
Dec. 1993	9254	7403	4323	8455	16657	29435	20181

Source: Elaborated on the basis of Central Bank data.

One particular trait of the post-convertibility remonetization process, which stands out from similar processes that had occurred in the past after the implementation of a stabilization package, was the financial system's deepening dollarization. Table 9 shows that the proportion of dollar-denominated deposits rose from 10 percent of total private deposits in 1988 to 28 percent at the end of 1990 and to 43 percent in June 1991, following an 80-percent devaluation of the domestic currency in the first quarter of that year. From then on, the proportion has been fluctuating around that level, although increased slightly by the end of 1993. If sight deposits in pesos are excluded, however, the share of total deposits accounted for dollar deposits is higher. After almost three years of currency convertibility (December 1993), the ratio of dollarized deposits to total deposits (in both cases excluding sight deposits) has reached 58 percent (see Table 9). This dollarization process has greatly changed the structure of the banks' balance sheet. In June 1993, 47 percent of the banks' total assets and 48 percent of their aggregate liabilities were denominated in dollars.

A significant proportion of the credit capacity created by the expansion of dollar deposits was allocated to finance firms producing non-tradable goods. As noted before, this implies that the banks' financial position could become unduly fragile if a real devaluation occurred. It should be mentioned, however, that not all banks are running the same "devaluation risk." In particular, the financial position of government-owned banks seems to be much riskier than the one corresponding to private banks. In effect, while the proportion of dollarized credit allocated to the tradable sector is 43 percent for the financial system as a whole, the proportion corresponding to public banks is only 20 percent[28].

A greater degree of monetization has resulted not only in an expansion of credit available for firms but also for individuals. After a long period during which the availability of loanable funds for financing consumption expenditures was practically nil, there has been a remarkable increase in the supply of such funds. Specially important was the

[28] These data were extracted from a sample comprising only large debtors, therefore some bias may exist because of a greater concentration of credit in private banks.

expansion of credit for purchasing automobiles and consumer durables. Individuals also benefited from an expansion in mortgage availability. Since an important part of credit to individuals is denominated in dollars, it seems clear that growth in the argendollar segment of the domestic financial system has contributed to financing not only production (especially of non-tradables), but also consumption.

The economy's remonetization also affected the temporal path of interest rates. Table 11 shows that the deposit rate has followed a declining trend since the implementation of the Convertibility Plan. Two factors are crucial in explaining the downward trend of both nominal and real interest rates: reduction in the country-risk premium and a sharp decrease in the devaluation risk perceived by investors. The country-risk premium can be measured as the difference between the rate of return of the Bonex (a dollarized government bond) and the Libo rate[29]. Table 11 shows the evolution of this variable.

[29] This estimation of the country risk tends to be overestimated because the maturity of the Bonex averages two years. Nonetheless, to the extent that the international term structure of interest rates does not change too much, the variable that we are using can be considered a good approximation.

Table 11. Evolution of the annual Interest rate, risk premium and expected devaluation (%).

Period	Domestic Interest Rate(*)	Rate of return of the Bonex	LIBO Rate	Estimated Risk Premium	Estimated Expected Devaluation	Observed Devaluation
1981 IV	127.58	18.38	14.66	3.25	92.24	465.17
1982 IV	151.10	20.15	9.96	9.27	108.99	331.69
1983 IV	407.77	22.22	9.79	11.32	315.45	526.99
1984 IV	1269.48	19.11	9.73	8.55	1049.79	477.42
1985 IV	72.47	17.78	8.10	8.95	46.43	52.75
1986 IV	138.62	14.34	6.10	7.76	108.70	208.39
1987 IV	198.93	23.73	7.73	14.85	141.60	267.98
1988 IV	215.52	23.69	9.15	13.32	155.09	5955.42
1989 I	434.38	36.12	10.23	23.49	292.58	11739.88
II	29473.47	33.27	9.58	21.61	22091.10	3340.69
III	301.49	25.36	8.79	15.23	220.26	774.77
IV	298.36	32.35	8.29	22.21	201.00	470.14
1990 I	3934.55	45.98	8.48	34.57	2663.80	171.48
II	239.56	29.85	8.65	19.51	163.67	94.52
III	270.68	23.06	8.21	13.72	201.18	73.70
IV	135.90	25.15	7.87	16.02	93.12	85.70
1991 I	240.47	25.16	6.81	17.18	185.24	19.05
II	22.09	17.21	6.37	10.19	4.16	0.45
III	22.62	15.01	5.96	8.54	6.62	-0.20
IV	17.08	10.51	4.90	5.09	5.95	0.10
1992 I	15.43	10.85	4.40	5.19	4.13	0.80
II	16.17	9.85	4.17	5.45	5.75	0.00
III	14.80	10.56	3.50	6.80	3.84	0.00
IV	17.24	12.20	3.61	8.29	4.49	0.00
1993 I	16.75	11.53	3.28	7.99	4.60	0.00
(*) II	11.62	8.36	3.31	4.89	3.00	0.00
III	10.27	7.55	3.55	3.93	2.45	0.00
IV	7.93	6.95	3.50	3.20	0.91	0.00

(*) Domestic interest rate on 30-day deposits.

Source: CEDES.

As can be seen, the country-risk premium fell noticeably with the launching of the Convertibility Plan and continued to fall afterwards. The sharp drop in the expected rate of devaluation[30] seems to have played the most prominent role in reducing the deposit rate: after having reached a striking level in the years prior to the implementation of convertibility, expected devaluation was only 4.5 percent per annum at the beginning of 1993 and was around 1 percent at the end of that year.

This deposit rate evolution contrasts sharply with what was observed in other experiences in the past, particularly in the "tablita" period. In the present situation, in spite of an increase in the current account disequilibrium that could have had a negative influence on devaluation expectations, there is no tendency for the deposit rate to increase. It should be mentioned, nonetheless, that during the convertibility there was a sizable "gap" between the rate paid on dollar deposits and the one paid on deposits in pesos,although the difference has been quite small during the last months. One consequence of this "gap" was that banks that have managed to increase the proportion of dollar deposits in their portfolios have gained a competitive advantage over those who have not. In this respect, private banks have shown a much better performance than their public peers. For the financial system as a whole, the proportion of dollar-denominated deposits was 46 percent in August 1993, but that proportion in the case of public banks was only 31 percent. Indeed, an uneven distribution of dollar deposits can also be found in private banks. Dollar deposits are concentrated primarily in foreign banks (65 percent of their total deposits) and national banks located in Buenos Aires (58 percent). Small-sized banks located in the provinces show a much lower proportion of dollar deposits (48%).

Besides having a higher share of total dollar deposits, there are two additional advantages that act in favor of the competitive position of larger banks. First, as a rule, small financial intermediaries (cooperative banks and non-bank financial institutions) have to pay higher interest rates in order to attract depositors who, all things being equal, prefer larger banks. This is especially true in the interior of the country. Second, small banks have no fluent access to other sources of loanable funds, such as foreign credit or the domestic capital market which are cheaper and of longer maturity.

These factors have contributed to the segmentation of the financial market and

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[30] The expected rate of devaluation is measured as the difference between the domestic nominal interest rate and the internal rate of return on the Bonex.

hence to a differentiation in the cost of funds faced by each type of bank. In this context, the actual cost of funds for a given institution heavily depends upon both its size and the origin of the resources. This further deteriorates the competitive position of small banks which are already handicapped by the fact that they show higher operational costs per unit of deposits[31]. It is not surprising, then, that both the spread between lending and borrowing rates and the real rate are higher for loans denominated in pesos and intermediated by small banks operating outside Buenos Aires City.

As Table 12 shows, it is not unusual that the interest rate on loans in pesos be more than 3 percent per month in a context in which the monthly inflation rate is around 0.3 percent. One important consequence of this high level in the real-interest rate is that the quality of the existing stock of credit tends to deteriorate. This represents a threat to the financial (and even macroeconomic) health of the economy.

[31] The monthly costs of intermediation per unit of deposits for the whole financial system averaged 1.65% in December 1992. Banks with less than 29-million dollars in deposits had an average cost per unit of deposits in the range of 2.1 to 3.3 percent; those with an amount of deposits between 29- and 67-million showed costs in the range of 1.6 to 2.7 percent and the larger ones (with more than 67-million in deposits) operated with costs that oscillated between 0.8 and 1.6% per unit of deposits. On the other hand, it must be taken into account that larger banks cover a greater proportion of their costs with the proceeds from the sale of an array of financial services and that the productivity in the provision of services is greater in larger banks.

Table 12. Evolution of Monthly Lending Rates (%)*

Institution	June 1991		December 1991		June 1992		December 1992		August 1993	
	Pesos	US$	Pesos	US$	Pesos	US$	Pesos	US$	Pesos	US$
National Public Banks	1.65	n.d	2.17	n.d.	1.79	0.66	1.45	0.39	1.17	
Provincial Public Banks	3.07	n.d.	3.01	n.d.	2.77	1.07	1.99	1.16	1.54	
TOTAL Public Banks	2.17	n.d.	2.94	n.d.	2.56	0.94	1.95	0.94	1.41	0.93
Private Banks	4.91	n.d.	4.76	n.d.	2.85	1.14	4.41	1.23	2.67	1.14
Foreign Banks	3.13	n.d.	3.91	n.d.	2.72	0.83	3.95	1.02	2.21	0.91
Cooperative Banks	6.43	n.d.	5.23	n.d.	4.27	1.43	4.55	1.58	3.34	1.49
TOTAL Private Banks	4.74	n.d.	4.67	n.d.	3.33	1.04	4.33	1.19	2.70	1.09
Non-Banking Institutions	5.33	n.d.	4.46	n.d.	3.74	1.62	4.31	1.66	2.62	1.66
Aggregate Finanancial System	2.71	n.d.	3.77	n.d.	3.07	1.05	3.23	1.17	2.07	1.06

(*) Import credits are included in dollar credit.

Source: Central Bank.

In the context of increasing financial deepening in recent years, large enterprises have had much easier access to both domestic and international credit markets. But this was not the case for small-and-medium sized businesses which have continued to be

rationed in the international credit markets and have had limited access to financing from large domestic banks[32]. Therefore they have had to resort to small banks -which charge a higher interest rate on loans- to fulfil their borrowing needs. In a situation in which the opening of the economy calls for a deep restructuring of the productive capacity, small-and-medium-sized businesses cannot count on a fluent supply of credit at reasonable rates for financing either working capital or investment[33].

Regarding the term maturity of domestic financial instruments, the present process of financial deepening has not shown substantial differences from the liberalization experience of the late seventies and early eighties. Although there was a certain lengthening of deposit maturity as compared to the immediate post-hyperinflationary period, the average maturity in both pesos and dollars is still too short (around 40 and 90 days for pesos and dollar deposits respectively). The average maturity of bank credit, on the other hand, is longer than that of deposits[34]. To summarize, the domestic financial system has channeled an important part of the capital inflows during the post-convertibility period. Particularly important was the role of the argendollar segment. More than 50 percent of the credit created was channeled to

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32 Two factors seem to have played an important role in limiting their access to large-bank credit. First, during the eighties, these banks specialized in lending to the public sector and consequently did not develop a department of project evaluation with the skills necessary for the assessment of the repayment capacity of small-and-medium-sized businesses. Second, there is a high short-run uncertainty regarding the effects of the opening of the economy on the performance of such kinds of firms.

33 Indeed, it is possible that the high level of lending rates has accelerated capital inflows. This is a fact that is usually ignored in models explaining capital movements on the basis of interest-rate differentials because such models assume only one interest rate for each country. Beyond the fact that there can be multiple interest rates because of the existence of different kinds of risks, it must be taken into account that there are always at least two rates, the lending and the borrowing. If the difference between the two is small and similar between countries, this fact will not change the result of the simple models too much. However, this is not the case in Argentina where the wedge between the lending and borrowing rates has been both large and variable. In such a context, there can be capital movements between two countries in spite of identical deposit rates because there is a sizable difference in lending rates. A case could also occur where an investor simultaneously holds deposits abroad and takes out credit domestically. If there is a great differential between the deposit rate abroad and the domestic lending rate, he or she could change the portfolio composition cancelling domestic credit by resorting to his or her deposits abroad.

Regarding the recent Argentine experience, it can be argued that a part of the recent spurt in capital inflows has been caused by the huge difference between the deposit and lending rates. Firms repatriated capital for financing their working capital -or their losses induced by the opening of the economy- in order to avoid increasing their domestic indebtedness at exorbitant rates. The quantitative relevance of this phenomenon, however, is difficult to evaluate.

34 The main factors that make it possible for banks to lengthen the term to maturity of loans **vis-a-vis** that of deposits are: foreign exchange credit, bonds placed on the domestic and international markets and the loanable capacity generated by the banks' liquid net worth (which represents about 7% of the banks' total liquid assets). Deposits represent slightly more than 50 percent of the banks' total liabilities.

finance the non-tradable sector and has also contributed to financing consumption expenditures, particularly of durable-consumption goods. At the same time, the reduction in both the country risk premium and the expected rate of devaluation, induced a sharp fall in domestic nominal and real interest rates. Large enterprises were the primary beneficiaries of the downward trend in interest rates and this undoubtedly fueled investment expenditures. Because of the persistence of the credit-rationing phenomenon affecting small-and-medium-sized businesses, however, the benefits of the fall in interest rates have not been distributed evenly[35].

These recent financial developments could potentially create solvency problems in certain segments of the banking system. Two factors are worth mentioning. First, a good part of the lending capacity has been allocated to firms producing non-tradables and, second, the borrowing rate is still too high, and this opens the question of the proportion of credit repayment that will be observed in the future. This is especially relevant in the case of small banks in the interior of the country.

It should be taken into account that according to the new "Carta Orgánica" regulating the Central Bank, if there were a deterioration in the financial situation, the Central Bank could not act as lender of last resort. It has been established that the maximum term to maturity of rediscounts cannot exceed 30 days and that their amount cannot be greater than the value of the net worth of the bank receiving the funds. Equally important is the fact that although the stock of international reserves held by the Central Bank equals the stock of monetary base, the ratio M2/ monetary base is 2; and if dollar deposits are added to M2, this ratio reaches a level of 3. This means that in addition to the legal restrictions that constrains the Central Bank's behaviour, there are strict economic limits to the capacity of the Central Bank to help the financial system should solvency and/or severe liquidity disturbances arise.

The Stock Market

The increase in capital inflows has also had a marked influence on the domestic stock market. Table 13 shows the evolution of total market capitalization in the Buenos Aires stock exchange market. Total capitalization went from US$ 5.3 billion in the first

[35] In order to soften the credit constraint of the small-and- medium-sized businesses, the government has recently launched some financial measures comprised of subsidies for banks which lend to small-and-medium-sized firms. It has tried to channel some funds coming from multilateral organizations and from public banks in the same direction.

quarter of 1991 to 25.5 billion in the second quarter of 1992. After that total capitalization declined -as a consequence of falling prices- until the sell of the stock of the state petroleum company (YPF) in June 1993. From then on it increased until reaching a value of 42.9 billion by the end of 1993.

From the beginning of the convertibility program the primary cause of the increment in total market capitalization was the increase in the price of existing stocks rather than a rise in the quantity of the shares. In the 1991-93 period, the most important issue in new stocks was associated to the privatization of the telephone and petroleum company and the state oil company.

Although there are no reliable data, it seems that institutional investors have not had a relevant role in the recovery of the demand for shares. It seems that the resources from these investors have been basically channeled toward purchasing shares of privatized public utilities, which offer "secure" profits in the medium run. The role of foreign investors was particularly important in the case of the privatization of the state petroleum company (YPF).

In conclusion, although the Argentine stock market was classified as "emergent" because of the positive evolution shown during the period under analysis, the present situation is far from consolidated, especially because, as can be seen in Table 13, there have been sharp fluctuations in stock prices, indicating that the level of uncertainty is still high. Likewise, excluding the issues associated to the privatization process, there has been a very low number of new entrants or of issues of new stocks by existing firms oriented toward the expansion of their capital. It seems that private enterprises have privileged external credit and domestic funds coming from banks or bond markets as a means to finance investment.

Table 13. Evolution of the Buenos Aires Stock Market.

Period	Amount of Transactions (In millions of dollars)	Market Index	Market Capitalization

1990				
I	56,6	1045	2593	
II	58	1511	3241	
III	67,2	1858	3360	
IV	44,1	1599	3620	
1991				
I	173,6	3680	5272	
II	132,9	5091	5501	
III	595,6	9991	11995	
IV	660,5	12272	18644	
1992				
I	1070,8	15088	25746	
II	2146,6	18186	25524	
III	1251,8	11350	18210	
IV	1327,8	10023	18435	
1993				
I	1322	10215	18769	
II	4305	10228	26733	
III	7172	12076	31178	
IV	9819	15381	42931	

Source: Research Institute of the Buenos Aires Stock Market.

III. Capital Flows, Stability and Growth.

As we have seen in the previous section, the reversal of capital flows induced a series of changes in the domestic side of the economy. At the macroeconomic level, growing availability of foreign savings gave support to the ongoing stabilization and permitted a sharp increase in domestic absorption. On the financial side, they induced a higher degree of monetization together with a consolidation of the dollarization process.

As a general rule, economic policy passively adapted to the accrued inflows of capital. From the point of view adopted by the Argentine authorities, an activist policy regarding capital inflows was unnecessary: in the short run, because the Convertibility Law guaranteed macroeconomic stability and, in the long run, because capital inflows would finance the increases in investment and productivity. This section aims to assess these issues which, undoubtedly, are at the core of the question of stability and growth.

Macroeconomic Stability and Capital Flows.

Under the Convertibility Law and the new "Carta Orgánica" of the Central Bank, monetary policy was completely passive and therefore capital inflows induced a strong increase in the money supply. The economy's financial deepening was additionally helped by the expansion of domestic dollar denominated deposits. The counterpart of this, as was mentioned, was a strong expansion in the supply of domestically-generated credit.

The expansion of credit produced concomitant growth in effective demand. In the context of a fixed exchange rate and trade liberalization, the upward shift of effective demand has had differential effects on the components of overall supply. Stylizing the facts, it can be said that tradables (imports) adjusted via "quantities" and non-tradables adjusted via "prices". Given that the Argentine economy is small and open, the increased demand for imports was met by a supply that can be considered highly elastic while the higher demand for non-tradable goods exerted an appreciable pressure on prices because the supply could only be expanded by increasing marginal costs.

These differential features of the adjustment process have had two important macroeconomic consequences. Firstly, it strongly affected the trade account. Between

the surplus of 1990 and the deficit of 1993, there is a difference of more than 11 billion dollars. Secondly, since the first signs of the reversal in the direction of capital movements, there has been a systematic trend for the real exchange rate to appreciate and for the relative price of non-tradables to increase[36].

One indicator of the increasing distortion of relative prices is the differential evolution of the consumer and wholesale indices. After the implementation of the plan, the inflation rate in terms of consumer prices was 54 percent, while in terms of wholesale prices it was 8 percent. The main cause of this divergence is that the weight of tradables in the wholesale index is much more important than in the consumer one. It is worthwhile noting that when the indices are disaggregated, the items showing higher increases are those whose exposure to international competition is lower. For example, the items of the consumer index that recorded the highest increases are private services (72 percent) and food -fruit and legumes (84 percent), and meat (68 percent)-. The lifting of trade barriers and reduction of tariffs are clearly related to these results.

Besides the rise in global demand, there are "structural" factors that explain the dynamics of relative prices. On the one hand, the disinflationary shock, although successful in sharply curtailing inflation, left a small but persistent residual "inertial inflation". On the other hand, the increase in the tax burden -because of the reduction in tax evasion- pushed the price of non-tradables.

In addition to the divergence between the consumer and wholesale prices, the differential path of other key relative prices can be seen in Table 14. The Table shows, for example, that taking 1986=100, the value of industrial goods in relation to private services was 35 in December 1993 while the value corresponding to agricultural products was 29[37].

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[36] Indeed, when the program was launched, an overvaluation of the domestic currency provoked by the pressure exerted by the huge trade surplus of 1990 and by the incipient reversal of the capital flight process already existed. The authorities were aware of this fact and at the beginning of the plan tried to induce a fall in the prices of non-tradables aimed at improving the real exchange rate. However, this objective was inconsistent with a passive monetary policy which did not put limits on the strong recovery of effective demand. It is not surprising, then, that the expected deflation did not take place. In fact, just the opposite occurred. As time elapsed, the distortion in relative prices widened.

[37] It could be argued that the difference is due to the fact that productivity increases more in the sectors producing tradables than in the sectors producing services. However, it is difficult to think of divergences in productivity growth of the magnitude observed, especially in the context of a stagnant economy.

Table 14. Evolution of Key Relative Prices. (%, 1986=100)

	Real				
	Exchange Rate*	Wholesale/ Consumer	Industry/ Private Services	Industry/ Total Services	Primary/ Private Services
	US$ Basket				
1980	39.5	46.2	87.1	90.2	87.0	85.4
1981	47.9	51.8	88.3	90.5	88.3	78.3
1982	82.4	83.9	116.9	139.4	129.9	141.7
1983	97.4	93.6	126.1	146.3	147.1	153.4
1984	90.7	80.7	119.0	131.7	134.6	131.0
1985	105.7	89.4	114.6	120.0	120.0	89.5
1986	100.0	100.0	100.0	100.0	100.0	100.0
1987	103.0	110.6	94.9	99.7	97.1	96.6
1988	98.3	109.5	109.6	126.7	122.0	113.9
1989	133.1	146.6	124.3	155.1	152.8	143.6
1990	90.1	107.1	94.6	85.9	87.0	70.4
1991	67.1	96.3	67.6	61.0	59.5	45.4
Dec. 91	65.8	81.0	61.8	54.2	53.9	42.3
June 92	62.6	77.0	57.8	49.4	49.0	38.7
Dec. 92	61.6	79.1	54.3	38.7	44.2	32.8
March 93	61.1	80.4	53.3	37.9	43.5	32.2
June 93	60.9	79.5	52.2	37.0	42.9	32.3
Sept. 93	60.8	77.9	52.0	36.3	41.6	32.7
Dec. 93	61.3		50.6	35.3	40.6	29.3

(*) Deflated by a combined index of wholesale and consumer prices.

Source: Elaborated on the basis of Central Bank data.

This evolution of the economy shows, among other things, that the relationship between macroeconomic stability and capital flows is not a simple one. On the one hand, the distortion of relative prices in a context of liberalization of the capital account presents close similarities to the period of the "tablita." But, on the other hand, it is also

true that the relaxation of the foreign credit constraint vastly helped the stabilization effort of the post-hyperinflation period. The greater availability of foreign exchange allowed the nominal exchange rate to be fixed and hence heavily contributed to anchoring nominal prices.

Beyond the first stages of stabilization, however, it seems that an excess supply of foreign loanable funds tends to act against macrostability. It is a well-known fact that programs based on the de-indexation of contracts and a fixed nominal exchange rate are specially apt to deactivate a process of "high" inflation, and even hyperinflation. But it is also an established fact that if the period of fixed nominal exchange rate is excessively extended, there will be a tendency for the economy to generate unsustainable external disequilibria. In the particular case of Argentina at present, the distortion in relative prices is generating a growing imbalance in the current account. Nonetheless, there is no pressure on the exchange rate, because the fluid supply of external credit has provided the required financing.

In such a context, authorities are facing a policy dilemma which is not easy to solve. If the exchange rate regime were modified in order to induce a correction in relative prices, it might act in favor of medium-run stability to the extent that the current account disequilibrium would tend to be closed. But given the strong emphasis on the fixed exchange rate as a "structural" component of the new economic policy, a correction in the nominal exchange rate would have a deleterious effect on credibility. Furthermore, if the deterioration in credibility induced a shift in the private sector's portfolios in favor of foreign assets, **ceteris paribus**, the required correction in the real exchange rate should be both greater and more rapid. In this sense, there is a paradoxical situation: given the inflationary and contractionary effects of devaluation, the incentive for the authorities to induce a "preventive" upward correction in the existing exchange rate will always be weak, provided that there are no interruptions in capital inflows. But, if an interruption of capital inflows does not take place, given the passive character of the economic policy, it is likely that the current account disequilibrium will continue to grow.

Obviously, alternatives to devaluation could be conceived of. A sharp fall in the activity level could induce a decline in imports and in the price of non-tradables strong enough to eliminate the current account imbalance. This alternative, however, does not seem to be feasible. The required recession would be so far-reaching and would last for so long that its effects on macroeconomic stability would not be much different from the

consequences of a devaluation. Besides, from the empirical point of view, there is evidence regarding the downward inflexibility of the overall price level. On the other hand, the passivity of economic policy implies that the occurrence of a recession-cum-deflation, could only take place if there were a massive reversal of capital inflows. The government does not have the necessary policy tools to achieve such a result by other means.

The changes induced in the financial structure by the recent upsurge of capital inflows, pose an additional problem. Unlike the "tablita" period, the remonetization of the economy has taken the form of a growing dollarization of the domestic financial system led by the increase in the demand for dollar-denominated term deposits. A good part of the new credit generated in this way, has been allocated through the domestic financial system to productive activities related to non-tradable goods. Either deflation or devaluation would induce a strong increase in the real value of the debt burden for sectors producing non-tradables. In such a situation, there would be a marked deterioration in the quality of the bank's balance sheet with the subsequent effects on the stability of the "argendollars" segment of the domestic financial system. If the change in relative prices were induced by a strong recession, deterioration of private agents' financial position would likely be greater. It is worthwhile mentioning, on the other hand, that an important fall in the activity level would also have a significant impact on the government budget because tax collection has become much more dependent on the activity level following the recent tax system reform.

Aware of this, the government is trying to reduce costs through deregulation of certain activities and reducing or eliminating taxes on production[38]. The viability of that strategy will depend on the strength of fiscal accounts and basically on the ability to reduce tax evasion even more.

For this strategy to succeed, however, it needs to be accompanied by a discrete "jump" in the economy's productivity level. It could only happen if the investment rate continues to increase above the still low levels. If the increase in productivity were to take place in the production of non-tradable goods, the real exchange rate would improve by means of deflation induced by an improvement in productivity, providing such improvement is not passed on to wages.

[38] By the and of 1993 the government announced a reduction of taxes on labor for tradeables activities and the substitution of other taxes on production by consumption taxes.

The current dependence on capital inflows can be a source of instability for another reason. Since current capital inflows are led by the private sector, the participation of private firms in the outstanding stock of foreign debt is increasing. In contrast to the experience of the eighties, the public sector has succeeded in lowering its degree of external financial exposure, while the overall deficit of the private sector is becoming the primary cause of growth in the stock of foreign debt. This increase in the private debt impeded a further reduction in Argentina's financial fragility indicators which are still too high. The current relationship between foreign debt (around US$ 75 billion) and exports, for instance, is around 6.

In addition, financial exposure of domestic firms in terms of "argendollars" is also high. The stock of private debt denominated in "argendollars" is currently of US$ 16 billion (6% of GDP). This increase in domestic indebtedness was also a consequence of the accrued inflow of funds. It can be expected, then, that creditors in the domestic financial system will behave like "true" foreign investors concerning portfolio decisions if some signs of instability appear.

The similarities between the present economic situation and the Argentine experience of 1978-81 are quite obvious. Among them we can mention the important capital inflows, the large expansion in domestic credit, the appreciation of the exchange rate, the growing deficit in the balance of trade and the fragility of the financial system.

There are, however, some important differences as well. The most important is the situation of international financial markets. Interest rates are now much lower than at the beginning of the eighties and inflation is lower in the industrialized countries, especially in the United States. Other significant differences are, firstly, a better fiscal situation which is not only the result of the receipts from the privatization process but mainly from the reduction in tax evasion. Secondly, the private sector has a larger participation in the investment process. Therefore, there is likely to be a more efficient allocation of resources. Nonetheless, in assessing the probable relevance of this fact in fostering growth, it should be considered that the investment rate is lower than it was in 1979-81, mainly because of extremely low public investment. Thirdly, over the last 30 months there has been a persistent reduction in the country risk which, together with reduction in international interest rates, have produced an impressive decline in the interest rates of domestic deposits. Finally, although there has been active speculation in real estate and capital markets, signs of the possible generation of a bubble in those markets are not

clear. After an initial increase, prices in both markets are lower now than eighteen months ago, even though they are substantially higher than at the beginning of the stabilization process.

In spite of their importance, none of these differences concerning the domestic side of the economy seems to be important enough to change the premise that basic similarities between the present experience and the one of 1978-81 exist. Indeed, it is the modified international setting (and particularly the present and expected level of interest rates) which accounts for the main differences between the present situation and the previous liberalization experience. It not only reduces the solvency problems of the public sector, but also reduces the required expected return of any physical investment and renders more likely an important supply of foreign resources for the coming years. In other words, what the situation in the international markets is telling us is that there are more incentives to invest and there is more time to carry out the adjustment process.

But more time and more incentives to invest in physical assets do not guarantee long-run sustainability of reform, specially if the existing distortion in relative prices leads to the accumulation of a larger disequilibrium in the current account, instead of setting the economy on a new equilibrium path. The future evolution of exports is essential to answering this question.

Given the important role that the evolution of both national savings and investment will have in determining the macroeconomic viability of the program, it is worthwhile taking a closer look at the path followed by these variables after the reversal of capital flows.

Growth, Foreign Savings and Investment.

The dramatic reduction in investment rates was one of the most damaging consequences of the debt crisis. Table 15 shows that between the maximum recorded in 1980 (26.6 percent of GDP) and the minimum corresponding to the hyperinflation period of 1989 (14.2 percent of GDP), there is a reduction in capital expenditures of more than 12 percentage points. In the 1982-90 period, as a consequence, the investment rate was the lowest in the post-war period, its average being less than 18 percent of GDP. It is no wonder, then, that the economy stagnated during this period: in 1990, the GDP was 3.1 percent lower than in 1980.

Table 15. Structure of the GDP. (%, constant prices)

		Global			Domestic		
Year	GDP	Imports	Supply	Consumption	Investment	Exports	Absorption
1980	100.0	11.9	111.9	78.3	26.6	7.0	104.9
1981	100.0	11.6	111.6	80.2	23.6	7.8	103.8
1982	100.0	6.9	106.9	78.1	20.4	8.4	98.5
1983	100.0	6.2	106.2	78.4	19.5	8.3	97.9
1984	100.0	6.3	106.3	79.9	18.5	7.9	98.4
1985	100.0	5.9	105.9	79.8	16.3	9.8	96.1
1986	100.0	6.3	106.3	80.7	17.5	8.2	98.2
1987	100.0	7.0	107.0	79.7	19.5	7.7	99.3
1988	100.0	6.3	106.3	77.5	19.5	9.3	97.0
1989	100.0	5.5	105.5	79.3	15.7	10.5	95.0
1990	100.0	5.5	105.5	78.9	14.2	12.5	93.1
1991	100.0	8.4	108.4	81.6	16.3	10.5	97.9
1992	100.0	12.6	112.6	83.2	19.6	9.7	102.8

Source: Central Bank.

The increase in interest payments during the debt-crisis period induced a marked reduction in national income. Between 1982 and 1990, due to the burden of interest payments, the GNP was on average 5 percent lower than the GDP. Given that consumption expenditures as a proportion of GDP maintained their pre-crisis level, there was a significant drop in the national savings rate. Since this fall in savings was still more important than the fall in the investment rate, the economy continued to be heavily dependent on foreign savings throughout the eighties. A good part of the borrowing needs, as was mentioned, was covered by forced foreign finance (i.e. interest payments that were in arrears).

The continuous recourse to foreign savings to finance the current account, however, does not mean that the country did not effect a significant transfer abroad. The

net transfer of resources abroad was positive because the flows of new foreign credit were continuously less than the amount of interests that fell due. The resources required to effect the transfer were provided by a trade account which was permanently in surplus. The counterpart of the trade surplus, in turn, was that each year's domestic absorption was about 3 percentage point of GDP lower than income (Table 15).

This evolution of the external gap greatly changed after the reversal in capital movements. As Table 15 shows, the net transfer abroad -as measured by the difference between absorption and GDP- fell from a maximum of 6.9 percent of GDP in 1990 to -2.8 percent in 1992. To be sure, the marked reversal in capital flows permitted Argentina to effect a **negative** transfer abroad for the first time in eleven years.

The loosening of external constraint induced a change in the declining evolution of capital goods expenditures. Between 1990 and 1992, there was a recovery of five percentage points in the investment/GDP ratio[39]. Nonetheless, given the depressed level of investment when the recovery took place, the current amount of capital goods expenditures is still similar to the average ratio observed during the eighties. Consequently, in order to ensure a sustained process of growth, the investment ratio should be continuously raised in the future[40]. This argument, however, does not mean to ignore the fact that the economy has been growing at an average rate of 8 percent during 1991-92 and 6 percent in 1993. On the contrary, it tries to highlight that the ongoing recovery of the activity level is primarily associated to a growing use of idle capacity in the post-hyperinflation period and not with an important expansion of the production facilities.

A second negative characteristic of the recovery process is that it was correlated with a further weakening of savings. During recovery, consumption grew at a higher rate than the one corresponding to the GDP. The consumption/GDP ratio rose from 78.9 percent in 1990 to 83.2 in 1992 (Table 15). The latter ratio represents a maximum in the

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39 The overall investment growth rate in 1991 and 1992 reached 64 percent. The item that showed the highest rate of growth was machinery and equipment (87 percent). This trend has continued during 1993 but at a slower pace (the increase seems to be around 13%).

40 Taking into account that the allocation of investment by public enterprises was far from efficient, it seems reasonable to expect an increment in the efficiency of investment carried out by privatized firms. However, this expected improvement in investment efficiency must be evaluated in light of the deterioration of the existing economic infrastructure that calls for an investment rate well above the normal levels in order to ensure growth resumption.

series and is even greater than the consumption/GDP ratio observed during the liberalization experience of 1979-81[41]. Certainly, the reduction in the effected external transfer, coupled with growing private capital inflows, are primary factors explaining the fact that both consumption and investment grew simultaneously in the last two years.

Indeed, the most important source of uncertainty for the future originates in the fact that demand for foreign savings is already high while the investment rate is still small. For a resumption of growth to take place, under such circunstances, macroeconomic consistency requires that either the consumption rate be reduced (making room for an increase in the investment ratio without resorting to more foreign savings) or the productivity of investment be strongly improved in order to encourage growth with a given investment ratio. External consistency, on the other hand, requires that the growth rate of sectors producing tradables be greater than those producing non-tradable goods. Otherwise, the dependency on foreign savings and the existing external financial exposure of the economy will not be reduced in the future. To achieve the required allocation between tradables and non-tradables and between savings and consumption as well[42], the most important restriction that the economy is currently facing is the misalignment of relative prices.

In order to exemplify the issues that we have just raised, we will conclude by presenting some alternative scenarios for the future.

Macroeconomic Consistency and Foreign Financing.

The exercise encompasses the 1993-97 period. Its most important assumptions are the following:

- A growth rate of GDP of 5 percent per year.
- An increase in investment at a constant rate from the present level of 19.4 percent of GDP to 25 percent in 1997.[43]

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41 During 1993 this ratio will probably show a slight reduction of around one percentage point of GDP.

42 Among other things, the lag in the exchange rate affects the consumption/GDP ratio because the overvaluation of the domestic currency is associated with a tendency for public consumption to increase at a higher rate than overall income. This fact is a consequence of the high participation of non-tradables in public current expenditures.

43 This assumption regarding investment implies an incremental capital-output ratio of productive capital

- The average income-elasticity of imports for the 1994-97 period is 1.5.
- 40 percent of capital inflows corresponds to the repatriation of capital by residents; 20 percent corresponds to foreign direct investment and the remainder represents other forms of external financing.[44]
- The terms of trade faced by the country do not change during the period.
- The rate of return on foreign investment is 12 percent and capital inflows corresponding to non-residents yield a return which is initially 3 points higher than the LIBO rate but which shows a declining trend afterwards. In 1996-97[45] the rate is two points lower. The values of interest rates corresponding to the public sector rise from 5 percent in 1993 to 7.6 percent in 1997.
- It is assumed that the public budget is in equilibrium, consequently there is no increase in government debt[46].

On the basis of these assumptions, it is necessary to determine two variables within our consistency model: the amount of both foreign savings and the exports of goods and real services. The model, consequently, admits two "closures": one considering foreign savings as given (and with the exports path endogenously determined) and the other taking exports as an exogenous variable (and determining foreign savings endogenously).[47]

Two alternative projections are shown. In scenario "1", exports are given, and consequently, foreign savings are endogenously determined. Condidering that the

(excluding investment in housing) that will constantly increase until 1997 when it reaches a value of 2. For further details on this and the assumptions regarding imports' elasticity, see Machinea and Kacef, (1992).

44 The share corresponding to repatriation of flight capital might be considered excessive. However, we have chosen this "optimistic" alternative because it is also assumed that the repatriation of flight capital today does not create a future stream of interest payments abroad.

45 This assumption should be considered "optimistic" in the light of the return rate which is being required by foreign investors.

46 This does not include 1993 when it is assumed that there is a cancellation of 3 billion dollars on the outstanding debt of the social security system. The funds to repay this debt stem from the privatization of the petroleum company.

47 In order to calculate the overall amount of external financing needed, the requirements originating in the expansion of money demand under the convertility regime were added to the borrowing needs stemming from the current account imbalance. It was assumed that the increase in money demand is 15 percent per year. This increase in the nominal demand for money is explained by the GDP growth, the existence of an inflation rate similar to the international one (4 percent), and a slight increase in real money demand.

growth rate of the economy depends on investment which in turn must be financed by either national or foreign savings, if the evolution of exports is given, the growth process determines the current account disequilibrium, and therefore, the external borrowing requirements. In this scenario, the evolution of exports is set assuming that there are no changes in relative prices and hence exports follow a path similar to the one observed in the last three years. This implies that exports are assumed to remain constant in real terms and to grow in nominal terms **pari-passu** with the international inflation rate (4 percent). The consumption rate is obtained as a residual.

In scenario "2", since foreign savings are exogenously given, the amount of exports needed to finance the growth process is endogenous. If the feasible level of the country's indebtedness has a limit, the current account deficit must show a declining trend. In this scenario, it is supposed that the current account is balanced in 1997. As a consequence, the resources allocated to increase investment are generated by a decreasing consumption rate. That is, in this scenario, the national savings rate shows an upward trend. The results corresponding to the performed simulations appear in Table 16.

Table 16. Evolution of key macroeconomic variables. Annual GDP Growth Rate 5%.

	Scenario 1	Scenario 2
1. Annual average growth rate of consumption. 1993-97	4.4	2.1
2. Annual average growth rate of exports. 1993-97	--	16.3
3. Average national savings ratio. 1993-97	15.8	17.9
4. Average foreign savings ratio. 1993-97	3.6	1.5
5. Average capital inflows per year. 1993-97	17092	7596

6. External debt in 1997		
a. Public	60130	60130
b. Private	44684	25693
c. Total	104814	85823
7. Balance of payments in 1997.		
Exports	18333	39005
Imports	30571	30571
Trade Balance	-12860	7812
Financial Services	-9774	-7812
Current Account	22633	0
Capital Account	25086	2452

Source: Projected on the basis of the model explained in the text.

The most important factor regarding scenario "1" is that national savings are insufficient for financing the required investment rate. Consequently, in spite of a slight increment in national savings, the borrowing needs originating in both the current account disequilibria and the reserves accumulation rise from US$ 12.6 billion in 1992 to 25 billion in 1997.

The high level of capital inflows required induces a strong increment in the stock of private foreign debt. Starting from a level of 77.8 billion dollars in 1992, the accumulated stock of foreign debt will reach 105 billion in 1997.

In scenario "2", there is a period of marked growth in the country's indebtedness at the beginning of the simulation period because there is an upsurge in the investment rate. Later on, however, the rate of growth of the stock of foreign debt decreases to the extent that the country balances the current account. Two points deserve to be highlighted: first, consumption grows at a low rate of 2 percent per year; second, the endogenously determined rate of expansion of exports is very high (16 percent per year).

From the afore-mentioned results, it follows that if relative prices continue to favor non-tradable producers, there will be a tendency for the current account deficit to widen. The point is, then, whether the present situation of "easy" capital flows will hold or even improve in the future. If this is not the case, the economy will be unable to grow at the projected rate. The more realistic scenario, which assumes that it is unlikely that the

present capital inflows will be permanent, clearly indicates the need to change domestic relative prices in favor of tradable goods.

In brief, it seems that there should be a change in relative prices or otherwise a sustainable growth process will become more and more difficult in the future. Even if it is argued that the present capital inflows will persist for a long time, there still remains the question of private sector expectations of the future. It is very difficult to imagine that private investors will be eager to allocate their funds in an economy with stagnant exports and mounting current account deficits. Obviously, in addition to these constraints posed by long-run aggregated consistency, the specific short-run macroeconomic problem is still there: how to change relative prices in an economy where the fixing of the nominal exchange rate has played a crucial role in stabilizing inflation and where the dollarization of the financial system determines that a devaluation would induce strong and negative wealth effects on debtors.

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