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PUBLIC SECTOR DEFICITS AND MACROECONOMIC STABILITY IN DEVELOPING ECONOMIES

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ABSTRACT

This paper analyzes Latin America's experience with fiscal adjustment during the last decade. The paper discusses in detail how some countries -- most notably Argentina, Chile and Mexico -- were successfully able to eliminate their fiscal deficits in a relatively short period of time. Their experiences with tax reform and expenditure reduction are analyzed, and some political economy angles of the fiscal adjustment process are emphasized. The paper also discusses the interaction between privatization and fiscal adjustment. An analysis of the relationship between social security systems and fiscal imbalances is provided. In particular, the Chilean pension system reform -- which replaced an insolvent and inefficient pay-as-you-go system with a fully funded one administered by private companies -- is analyzed in some detail. The paper concludes with a discussion of the main lessons from the Latin American reforms for the transitional economies and other reforming countries.

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I. Introduction

For many developing and Eastern European countries the 1980s and early 1990s were years of macroeconomic upheaval. For instance, the debt crisis that erupted in 1982 generated significant dislocations throughout Latin America, where balance of payments deficits soared and inflation increased rapidly. In the former communist countries, on the other hand, the fall of the Berlin Wall was accompanied by serious macroeconomic disequilibria, large public sector deficits and very high inflation rates. During the last few years most countries in these regions—as well as in other parts of the world, including Asia—have embarked on major structural reforms and have struggled to regain macroeconomic stability. Much of the policy discussion in these countries has centered on the most effective way of implementing stabilization programs, and has focused on a handful of key issues, including (a) alternative ways of reducing public sector deficits; (b) the appropriate use of credit and monetary policies in programs aimed at taming inflation and eliminating unsustainable external deficits; and (c) on the role of nominal exchange rate anchors as a device for reducing inflation and maintaining stability over the longer run.

In many countries the stabilization efforts of the last few years have began to bear fruit, and inflation rates have declined significantly. In Latin America the average rate of inflation was reduced from over 1,200% in 1989 to 14% in 1994. Progress has also been impressive in many former communist nations: for instance, in Poland yearly inflation has declined from over 460% in 1990 to less than 33% in 1993. At the center of these successful stabilization efforts have been impressive reductions in public sector deficits, and conservative credit policies. These adjustments, in turn, have been achieved through the implementation of a number of measures, including tax reforms, expenditure (both current and capital) reductions, and privatizations of public enterprises.[1] In spite of the enormous progress in fiscal adjustment during the last few years, in a number of countries fiscal issues have not been fully resolved and remain to be crucially important. This is

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1. Some observers have argued, however, that as a result of these fiscal programs growth prospects have been hurt, and social conditions have deteriorated.

particularly the case in those nations where unfunded retirement systems are contributing to very large public sector *contingent liabilities*.[2]

Now that inflation is subsiding, policy makers are increasingly turning their attention to the real side of the economy. In most developing and transitional countries there is a keen interest in devising policies that will accelerate growth and will increase the rate of employment creation. This has been especially the case in Latin America, where as a consequence of the debt crisis of the 1980s growth came to a halt for almost a decade. By 1992, and after a remarkable process of market-oriented reforms, the nations of this region had recovered and were once again growing. The sense among analysts and policy makers, however, has been that the average real rate of growth for 1992-94—approximately 3.0 percent—was modest, and that in order to compensate for the stagnation of the so-called "lost decade" the rates of economic expansion should accelerate substantially.[3] In discussing these issues a number of authors have pointed out that low saving rates are one of the most serious constraints faced by the Latin American countries. According to the World Bank (1993a) the median ratio of gross domestic savings to GDP was only 20 percent in Latin America in 1991, more than 15 points below that of the East Asian countries. Moreover, the Mexican peso crisis of December 1994 has highlighted the fact that low (and declining) saving rates have contributed to generating unsustainable current account deficits in many countries undertaking major structural reforms. Whether or not these low rates of savings have been a direct consequence of the stabilization and liberalization reforms programs is still an open question, but one that has generated a heated debate. Naturally, issues related to saving rates have not been confined to the Latin American nations, but have also acquired a central role in policy discussions in other developing nations and in the transitional economies.[4]

The purpose of this paper is to analyze some important aspects of fiscal adjustment in a group of developing economies during the last few years, and to discuss some of the

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2. See, for example, the detailed discussion in World Bank (1994).

3. See, for example, World Bank (1993a) and CEPAL (1994).

4. See, for example, the discussion in the IMF's **World Economic Outlook, 1995.**

most pressing unresolved issues and challenges. Although the discussion focuses primarily on the case of the Latin American nations, most of the analytical, conceptual and policy dilemmas in the paper are relevant to a large group of developing countries, and to many of the transitional economies. Section II of the paper deals with the experience of Latin American countries with fiscal adjustment during the 1980s and 1990s. In particular, I discuss in some detail how some countries—most notably Argentina, Chile and Mexico—were successfully able to reduce (or fully eliminate) their fiscal deficits. The analysis presented in this section deals with the nature and scope of tax reforms, the role of expenditure reduction, the relationship between privatization programs and deficit reduction, and the way in which some of these countries have dealt with the fiscal burden of their social security systems. In section III the way in which the policy issues analyzed in the body of the paper apply to the current policy debate in many of the transition economies is discussed, and some concluding remarks are offered.

II. Fiscal Adjustment in the 1980s and 1990s in Latin America

In the mid- and late 1980s, and after the traumatic experience of the debt crisis, most of the Latin American nations faced three fundamental and interrelated macroeconomic problems: First, there was a need to reduce, on permanent bases and in an efficient way, the gap between aggregate expenditure and income. Second, inflation, which had jumped dramatically after the eruption of the debt crisis in 1982, had to be lowered to "reasonable" levels. And third, it was necessary to generate a stable macroeconomic environment conducive to the resumption of growth. The failure of the so-called *heterodox* stabilization programs in Argentina, Brazil, and Peru during the early part of the 1980s generated a growing agreement among policymakers that the solution of these macroeconomic problems required decisive fiscal adjustments, including major tax reforms.[5]

5. On the heterodox programs—the so-called *austral, cruzado* and *APRA* programs—see Kiguel (1991), Dornbusch and Edwards (1991) and Edwards (1995b).

The macroeconomic stabilization programs implemented in Latin America during the late 1980s dealt with four basic and interrelated issues. *First*, programs aimed at reducing the burden of the foreign debt were designed in most countries. *Second*, fiscal adjustment programs aimed at reducing the public sector deficit were implemented. This was done through a number of initiatives, including tax reforms, expenditure cuts and, in a number of countries, the sale of state owned enterprises to both domestic and foreign parties. In many countries privatizations were linked to debt-equity swaps, where foreigners exchanged outstanding debt for stakes in state owned enterprises. *Third*, the macroeconomic adjustment packages required the implementation of consistent domestic credit policies that, at the same time, relieved the pressures on aggregate demand and avoided crowding out the private sector. And, *fourth*, exchange rate policies consistent with the anti-inflationary effort had to be designed.[6]

Table 1 contains data on the evolution of inflation in Latin America between 1984 and 1995—naturally, the data for 1995 are mid-year predictions. As can be seen, in the vast majority of the countries in the region inflation rates declined dramatically between 1988-89 and 1994-95. In particular, by the mid 1990s inflation had reached single digit (or very low double digit) levels in a large number of countries, reflecting, from a historical point of view, a marked improvement. This section contains an analysis of the fiscal policies implemented by (many of) these Latin American nations during this period, and of the way in which this fiscal effort permitted this process of inflation reduction.

II.1 Fiscal Austerity in the Late 1980s and early 1990s

Fiscal imbalances have traditionally been at the heart of Latin America's macroeconomic disequilibrium. Governments inability, or unwillingness, to raise sufficient tax revenues to cover expenditures have forced them to rely on money creation, or

6. During the early phases of the crisis, the question of the sequencing between macroeconomic stabilization and structural reform became an important policy issue. Policymakers asked whether fiscal reform should precede structural reform, or whether both types of policies should be implemented simultaneously. By the late 1980s most analysts began to agree that in countries with serious macroeconomic imbalances the most appropriate sequencing required early and decisive action on the macroeconomic front, including solving the "debt-overhang" problem.

Table 1 - Annual Inflation Rates in Latin America

Country	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995 (p)
Argentina	688.0	385.4	81.9	174.8	387.7	4923.6	1343.9	84.0	18.6	8.0	3.5	4.0
Bolivia	2177.2	8170.5	66.0	10.7	21.5	16.6	18.0	14.5	11.4	8.5	8.3	6.9
Brazil	209.1	239.0	59.2	394.7	992.7	1861.6	1584.6	475.8	1131.5	2541.0	929.0	35.0
Chile	23.2	26.2	17.4	21.4	12.7	21.5	27.3	18.7	14.0	12.7	11.4	8.2
Colombia	18.4	22.4	21.0	24.0	28.2	26.1	32.4	26.8	25.7	22.6	22.0	20.0
Costa Rica	17.3	10.9	15.4	16.4	25.3	10.0	27.3	25.3	18.1	9.8	19.6	20.0
Dominican Republic	40.9	28.3	6.5	25.0	57.6	41.2	100.7	4.0	5.9	4.8	9.3	7.0
Ecuador	25.1	24.4	27.3	32.5	85.7	54.2	49.5	49.0	66.0	31.0	20.0	15.0
El Salvador	9.1	31.9	30.3	19.6	18.2	23.5	19.3	9.8	16.8	12.1	8.9	8.5
Guatemala	7.2	27.9	21.4	9.3	12.3	20.2	59.6	10.2	11.6	13.4	12.6	10.0
Haiti	5.4	17.4	-11.4	-4.1	8.6	10.9	26.1	6.6	17.5	26.9	52.1	20.0
Honduras	2.7	4.2	3.2	2.9	6.6	11.5	36.4	21.4	5.4	13.0	30.0	12.0
Jamaica	31.2	23.3	10.4	8.4	8.9	17.2	29.7	76.8	13.7	24.5	32.0	13.6
Mexico	59.2	63.7	105.7	159.2	51.7	19.7	29.9	18.8	12.9	8.0	7.0	45.7
Nicaragua	47.3	334.3	747.4	1347.2	33547.6	1689.1	13490.2	775.4	2.2	20.4	7.2	8.4
Panama	0.9	0.4	0.4	0.9	0.3	-0.2	1.2	1.1	1.2	0.5	1.0	1.3
Paraguay	29.8	23.1	24.1	32.0	16.9	28.5	44.1	11.8	17.0	18.3	20.7	11.0
Peru	111.5	158.3	62.9	114.5	1722.6	2775.3	7649.6	139.2	56.6	48.5	23.7	12.0
Trinidad and Tobago	14.1	6.5	9.9	8.3	12.1	9.3	9.5	2.3	7.7	10.8	8.3	4.4
Uruguay	66.0	83.2	70.6	57.3	69.0	89.2	129.0	81.5	58.6	54.1	45.0	41.9
Venezuela	18.3	7.3	12.7	40.3	33.5	81.0	36.5	31.0	33.4	45.9	70.8	70.0
LAC Average	188.3	280.1	64.1	208.9	773.5	1205	1185	198.7	410.7	145.8	69.0	19.8

(p) Preliminary projections.

Source: CEPAL, Economic Survey of Latin America; IMF, International Financial Statistics.

seigniorage, to finance the public sector deficit.[7] These policies created a vulnerable system that contributed to magnifying the effects of the debt crisis in the early 1980s.

During the latter part of the 1980s and early 1990s, and partially as a result of the disappointing behavior of their economies, most countries in the region made efforts to reduce their public sector imbalances, as a way to restore macroeconomic equilibrium and foster economic growth. Tables 2 through 5 provide a broad summary of the magnitude of the adjustment programs in a selected group of countries. In subsection II.2, on the other hand, three case studies—for Chile, Mexico and Argentina—are discussed in some detail.

Table 2 contains data on the evolution of the consolidated public sector deficit as a percentage of GDP, for eleven countries for 1986-92. An advantage of these data is that they refer to the *public sector*—including government-owned enterprises, provinces and municipalities—and not to the narrower concept of central government. For many years many Latin countries exhibited relatively balanced central government accounts and very high deficits in the public sector ledgers. In most cases there has been a marked improvement in public finances; with the exception of Venezuela and Costa Rica, every country in the table has drastically reduced its public sector deficit relative to the mid-1980s.[8]

Argentina and Nicaragua are two startling cases, where truly gigantic deficits were transformed into large surpluses. Nicaragua's adjustment after 1990 was part of the Chamorro administration's successful battle against hyperinflation. The control of public finances, coupled with other measures that included the fixing of the nominal exchange rate and the reprivatization of a number of enterprises, helped reduce the rate of inflation from 18,000% in 1990, to a 3.7% in 1992. In Argentina, the turnaround in the fiscal deficit was the central component of a stabilization program aimed at recovering the country's historical macroeconomic stability, and achieving rates of inflation consistent with those in

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7. In some countries governments covered part of their deficit by floating domestic debt. However, given the underdeveloped nature of the region's capital markets, this was a limited option. Clearly, a vicious circle developed, where the lack of sophisticated capital markets precluded using domestic debt as a source of financing and, in turn, inflation discouraged the growth of the financial sector.

8. It is worth noticing that in some countries these figures are affected by revenues obtained from the sale of public enterprises.

Table 2 - Public Sector Balance as a Percentage of GDP, Selected Countries and Years

	1986	1987	1988	1989	1990	1991	1992
Argentina	-4.1	-6.5	-7.0	-21.8	-3.3	-1.8	na
Brazil a/	-3.7	-5.7	-4.8	-6.9	1.3	-3.0	-2.2
Chile	na	-4.3	-0.7	3.5	1.6	0.3	0.3
Colombia b/	-0.3	-2.0	-2.2	-2.9	-0.8	-0.1	na
Costa Rica b/	na	-0.3	-0.3	-2.8	-2.9	-1.2	0.7
Ecuador	-5.1	-9.6	-5.1	-0.9	0.4	na	na
Guyana	-5.6	-34.0	-32.5	-47.9	-58.2	-32.8	na
Jamaica	-5.6	-5.4	-12.8	-6.3	-2.9	-0.4	na
Mexico	na	na	na	-1.6	1.2	3.5	na
Nicaragua	na	na	-36.7	-18.4	-17.8	4.0	-2.0
Peru	na	na	na	-10.7	-6.5	-3.2	-1.4
Trinidad & Tobago c/	-9.5	-7.7	-6.5	-4.4	-1.4	-0.9	na
Uruguay	-5.2	-4.2	-5.0	-7.6	-3.6	na	na
Venezuela d/	na	-5.4	-9.3	-1.3	na	-3.0	-3.2

Note: A positive number is a surplus; a negative number is a deficit.

a/ Operational nonfinancial deficit, including net interest payments.
b/ Data refer to nonfinancial public sector.
c/ Non-financial public sector overall balance.
d/ Data refer to the so-called "reduced public sector".

Sources: IMF, Government Financial Statistics; World Bank, World Tables; and individual country reports.

the rest of the world (see the discussion below for greater detail). This table also illustrates Mexico's success in equilibrating its public finances in the period leading to the approval of the NAFTA.

Chile is another interesting case of deficit management. In the mid-1980s, and as a result of the debt crisis and the failure of a number of financial institutions, Chile developed large public sector deficits.[9] These, however, were eliminated in 1988-89 through reduced expenditures and a new tax reform. The generation of positive government savings became an important component of the government strategy to accelerate growth; by 1989 a comfortable public sector surplus had been achieved.[10] The existence of this surplus allowed the new administration of President Aylwin to finance an increase in social expenditures aimed at reducing poverty and improving income distribution in the early 1990s—see the discussion in Section II.2 for details.

The case of Brazil contrasts sharply with that of Argentina. Between 1986 and 1988 both countries experienced significant fiscal disequilibria that were closely related to the failure of the heterodox experiments. Public sector finances deteriorated rapidly in Argentina until, in early 1989, the country suffered a complete breakdown of macroeconomic management and succumbed to hyperinflation. In late 1989, the new administration of President Menem embarked on a serious stabilization program that, as discussed in greater detail below, centered its efforts on a drastic reduction of the government deficit. Brazil, on the other hand, followed a divergent path. After a brief interlude with fiscal austerity during the early years of the Collor de Mello administration, the country slipped back into increasingly large public imbalances, that have fed a voracious inflation which reached 1,195% in 1992. It is only in 1994 with the implementation of the *real* plan that a credible and consistent stabilization program was implemented in Brazil. Whether the gains achieved by this program will be maintained through time is still to be seen, and will clearly depend on the Cardoso administration's ability to generate new significant fiscal adjustments.

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9. See Edwards (1995b) for a discussion of the Chilean financial crisis of the early 1980s.

10. See Fontaine (1989) for a discussion of the government's macroeconomic strategy during this period.

In most countries the improvement in the public sector accounts has been accomplished through a combination of higher revenues and lower expenditures. On the revenues side, most programs included: (a) tax reforms aimed at improving the efficiency and effectiveness of the tax system; (b) improvements in tax administration, including efforts to reduce evasion; (c) increases in public services prices in order to cover costs; and (d) sales of state owned enterprises.

During the 1980s and early 1990s World Bank and IMF conditionality focused, among other things, on the need to implement significant tax reforms throughout Latin America. These reforms had a number of objectives, including the reduction of distortions, the simplification of the tax system and generating an increase in tax revenues. Table 3 presents data on tax rates—for personal, corporate and foreign companies' income—in both pre- and post-reform periods for a number of countries. Table 4, on the other hand, contains data on the evolution of the value added tax (VAT). A number of interesting facts emerge from these tables. First, as reflected in Table 3, in the majority of the countries (eleven out of eighteen with relevant data) the top income tax rate was reduced, while the minimum rate tended to increase. At the same time, most countries raised the exemption level for the personal income tax. Shome (1994) reports that for the region as a whole the average exemption increased from approximately one GDP per capita in 1985 to almost two per capita GAPS in 1991. The combination of these two measures was expected to increase the efficiency of the tax system, at the same time as reducing its (traditional) degree of regressiveness.

Second, the data in Table 3 also show that the maximum marginal rates on the corporate income tax have, in general, been reduced. Also the number of corporate tax rates has been cut down significantly. Additionally, Shome (1994) argues that an important aspect of tax reforms in the region is that they have eliminated the uncertainty that had traditionally surrounded taxation of capital gains; most countries have decided to treat capital gains as ordinary income. And third, Table 3 shows that the withholding rate on foreign remittances was reduced in most countries in an effort to encourage foreign investment.

Table 3 - Tax Rates in the Pre-Reform and Post-Reform Periods (percent)

Country	Personal Income Tax		Corporate Income Tax		Withholding Taxes on Foreign Remittances 1/	
	1985-86	1991	1986	1992	1986	1993
Argentina	16.5-4.5	6-30	0-33	20	23	17
Bolivia	...-30	13	0-30	0	25	13
Brazil	0-60	10-25	29-50	25-40	25	22
Chile	0-57	5-50	10-37	15-35	40	38
Colombia	...-49	5-30	40	30	40	12
Costa Rica	5-50	10-25	0-50	30	15	18
Dominican Republic	2-73	3-70	0-49.3	0-49.3	20	30
Ecuador	19-40	10-25	0-59	0-44.4	40	36
El Salvador	3-60	10-50	0-30	0-25	22	20
Guatemala	11-48	4-34	0-42	12-34	16	17
Honduras	3-40	3-40	0-55	0-40.2	10	18
Mexico	3-55	3-55	5-42	0-35	37	22
Nicaragua	15-50	6-50	0-45	0-35.5	20	30
Panama	13-56	2.5-56	0-50	2.5-45	30	22
Paraguay	5-30	0	0-30	0-30	23	25
Peru	2-56	5-56	0-40	0-30	42	19
Uruguay	0	0	0-30	0-30	30	-
Venezuela	12-45	4.5-45	18-67.7	20-67.7	20	15
Regional average	5-36	7-47	3.4-46.3	8.6-36.5	27	22

1/Simple average.

Source: Shome (1994).

The data in Table 4 deals with the VAT. Perhaps the most important effect of the reforms in this area is that at the end of 1993 most Latin American countries had adopted a value added tax system. Additionally, an effort was made to increase the VAT's efficiency through a reduction of the number of rates and a broadening of its base. The IMF has estimated that most countries in the region that were able to increase their tax revenue to GDP ratio did so through an increase in the contribution of the VAT to total revenues.

Table 5 contains data on tax revenues as a percentage of GDP for a selected group of countries. As can be seen, in every case where there are available data, tax revenues were somewhat higher in 1991 than in 1987-88. This is particularly the case in those countries where a very high inflation rate was seriously eroding tax revenues. Interestingly enough, the data for 1994 indicates that Argentina experienced a significant decline in tax revenues. This drop in revenues contributed to the creation of the impression among international analysts, that towards late 1994 the Argentine macroeconomic program was running into difficulties. In the first half of 1995, and prompted by the Mexican crisis, new policies geared at increasing revenues and reducing expenditures have been implemented, as a way to help engineer an adjustment to a significant reduction in the extent of capital inflows.

The data presented in the preceding tables suggest that, although the Latin American tax reforms have introduced major changes geared at increasing the fairness and efficiency of tax systems, they have had a rather limited effect on total revenues. This is the consequence of a combination of factors, including the fact that compliance continues to be low and that tax administration bureaucracies continue to lack the required degree of expertise. Only with time, and as these shortcomings are dealt with, do tax revenues begin to increase significantly.

Table 6 deals with the evolution of public sector expenditure between 1987 and 1993. Two interesting facts emerge from this table: first, in every country, with the exception of Colombia and Venezuela, total public sector expenditures were much *lower* in the 1990s than in 1987-88. In fact, a comparison of the evolution of tax revenues and expenditures shows clearly that the reduction in the latter have made the greatest contribution to the attainment of fiscal equilibrium in the region. A second feature of the expenditure adjustment programs that emerges from Table 6 is that, in almost every

Table 4 - Value-Added Tax: Percentage Rates

Country	Date VAT Introduced or Proposed	At Introduction	January 1994
Bolivia	Oct. 1973	5, 10, 15	14.92 2/
Brazil 3/	Jan. 1967	15	9, 11
Brazil 4/	Jan. 1967	15	17
Chile	Mar. 1975	8, 20	18
Colombia	Jan. 1975	4, 6, 10	8, 14, 20, 35, 45
Costa Rica	Jan. 1975	10	8
Dominican Republic	Jan. 1983	6	6
Ecuador	Jul. 1970	4, 10	10
El Salvador	Sep. 1992	10	10
Guatemala	Aug. 1983	7	7
Haiti	Nov. 1982	7	10
Honduras	Jan. 1976	3	7, 10
Jamaica	Oct. 1991	10	12.5
Mexico	Jan. 1980	10	10
Nicaragua	Jan. 1975	6	5, 6, 10
Panama	Mar. 1977	5	5, 10
Paraguay	Jul. 1993	12	10
Peru	Jul. 1976	3, 20, 40	18
Venezuela	Oct. 1993	10	10

1/ Suplementary VAT rates of 8 and 9 percent on non-capital goods imports: through "catch-up", these can revert to 18 percent retail.
2/ Effective rate (legislated tax-inclusive rate is 13 percent).
3/ On interstate transactions depending on region.
4/ On interstate transactions.

Source: Shome (1994).

Table 5 - Tax Revenue as Percentage of GDP
Selected Countries and Years

	1987	1988	1989	1990	1991	1992	1993	1994	1995
Argentina (a)	17.8	16.2	19.1	20.0	na	na	na	11.6	12.5 (c)
Brazil	18.1	17.8	18.1	23.8	20.7	18.5	19.6 (b)	na	na
Colombia	14.9	14.4	14.9	14.9	16.1	16.8 (b)	18.0 (c)	na	na
Costa Rica	22.4	22.0	22.2	22.2	na	na	na	na	na
Mexico	8.6	9.6	12.2	11.7	12.0	12.4	12.7	12.8 (b)	11.8 (c)
Nicaragua	na	20.9	16.6	24.0	na	na	na	na	na

(a) Includes national administration and social security taxes.
(b) Preliminary data.
(c) Projection.

Source: IMF, Government Finance Statistics and individual country reports.

Table 6 - Total and Capital Expenditures of the Public Sector in Selected Latin American Countries
Percentage of GDP

	1987		1989		1991		1992		1993		1994		1995	
	Total	Capital	Total	Capital	Total	Capital	Total	Capital	Total	Capital	Total	Capital	Total	Capital
Argentina	22.3	3.8	19	2.8	21.6	1.5	na	na	na	na	15.6	1	16.1	1.3
Brazil	31.9	7.5	35.2	6.5	31.1	7	30.1	5.2	29.6	5.1	na	na	na	na
Chile	34.4	6.9	24.7	4.8	24	4.2	23.3	4.5	23.8	4.7	24.3	4.9	na	na
Colombia	21.1	7.7	24.6	8	25.2	7.1	26.7	7.6	29.2	8.7	na	na	na	na
Costa Rica (a)	30.3	5.8	33.1	6.8	17.9	1.4	17.5	1.8	18.8	2	19.8	2.4	na	na
Ecuador (b)	31.5	7.1	25.8	7.2	27.8	8	27.9	7.8	26.5	7.4	24.4	6.9	25.7	6
Nicaragua	47	6.2	35.9	6.2	36.1	5.9	na	na	na	na	na	na	na	na
Peru	na	na	na	3	na	2	na	na	na	na	na	na	na	na
Venezuela	32.2	12	31	11.2	33.1	13.3	30.2	11.9	28.3	10	46.9	26.7	33.6	13.1

Note:These are nonfinancial expenditures, so they exclude interest payments and international losses of the public financial sector (that is, the central bank).

Source: IMF Government Financial Statistics; World Bank World Tables, 1992; and individual country reports.

country, capital expenditures were reduced in a very drastic fashion. In four out of the eight countries with available data, capital expenditures were in 1991 more than 25% lower than the already depressed levels of 1987, and were still very low in 1993. The nature of these cuts varied from country to country. In some cases large and inefficient government projects were cancelled or postponed; in others, however, public investment in basic infrastructure was cut, generating some serious shortcomings in transportation and power provision. In some countries, including Mexico, Chile and Argentina, capital expenditures that were traditionally made by the government are increasingly being handled by the private sector. For example, in Mexico allowing the private sector to charge tolls in newly constructed highways resulted in some increase in roads construction. However, very high tolls for using these highways have resulted in a low degree of utilization, and in significant financial distress for the companies involved in the projects.[11]

Throughout the region interest payments on public sector debt—both domestic and foreign—represent a large proportion of total public sector expenditures. In fact, when these payments are excluded, and we concentrate in the *primary* deficit, we find that most countries have been able to achieve very substantial adjustments. Perhaps the most impressive case is that of Argentina, which in 1989 had a consolidated public sector deficit of almost 22% of GDP, and a primary deficit of only 0.4% of GDP. In that year, and as a result of a remarkable surge in inflation, interest payments on the domestic nonfinancial sector indexed debt surpassed 15% of GDP!

A large internal debt can seriously jeopardize macroeconomic stability when, as has traditionally been the case in most of Latin America, it is concentrated on short term maturity instruments. Changes in short term interest rates stemming from changing world conditions, from macro-policy measures, or, purely from "perverse" expectations, will have a huge impact on the public sector deficit. The Mexican peso crisis of December of 1994 clearly showed the extent to which the existence of short term public debt—and especially short term dollar denominated debt—can increase a country's degree of macroeconomic vulnerability and instability

11. The Mexican authorities have pointed out that they will deal with these issues in the second wave of privatizations.

An interesting peculiarity of Latin America's public finances is that in many countries the *financial public sector* has recently been the source of sizable deficits, through the so-called *quasi-fiscal* deficits. In most cases these deficits stem from Central Bank operations that subsidize a particular group, or particular activities. For example, two typical sources of quasi-fiscal deficits are dual exchange rates—where the central bank buys "expensive" foreign exchange at the ongoing rate, and sells it "cheaply" to a particular user—and bail-out operations of the financial sector. In the latter case the central bank usually acquires low quality, or non-performing assets, from a financial institution about to fail. Since this type of operation is usually financed by issuing interest bearing obligations, the net effect is an operational loss for the central bank. This has been the case of Chile, for example, where after the financial crisis of 1982-83 the Central Bank has incurred very large losses. In Argentina, on the other hand, the main cause of the quasi fiscal deficit has been the payment of (high) interest rates on commercial banks' legal reserves.

II.2 Tax Reform and Fiscal Adjustment in Chile, Mexico and Argentina

In this sub-section the experiences of three countries—Chile, Mexico and Argentina—with tax reforms and fiscal adjustment are addressed in some detail. Chile provides an exemplary case of the management of tax policy to generate macroeconomic stability and facilitate the adjustment after the debt crisis. Mexico is an important case of a major tax reform, that included the revision of tax rates, the broadening of the tax base and an improved tax administration. What is particularly interesting is that in spite of significant fiscal efforts, as a result of a combination of factors—including political shocks and faulty monetary policy—Mexico faced an unprecedented macroeconomic crisis in December 1994. Finally, Argentina, provides an illustration of an effort to reduce the fiscal deficit through a program that fundamentally relied on expenditure reductions.

CHILE: Between 1974 and the end of 1992 Chile went through three tax reforms. The first one, implemented in 1975, was the most profound one, and introduced sweeping

changes in the country's public finances.[12] The main purposes of this reform were to generate a substantial increase in tax revenues and to reduce the efficiency distortions generated by the old system. The principal features of the first tax reform include the replacement of a cascade sales tax with a flat rate value added tax at a 20% rate; a full indexation of the tax system; an elimination of *all* tax exemptions and subsidies; the unification of the corporation and non-corporation income taxes into a flat business tax; and the integration of personal and business income taxes.

The combination of increased tax revenues and reduced government expenditure rapidly affected the fiscal deficit, which declined from over 10% of GDP in 1974 to 2.6% in 1975 and to less than 1% in 1978. In the years that followed, and for the first time in more than two decades, Chile experienced a fiscal surplus. This situation changed only in 1983 when in the midst of the debt crisis, the reduction of tax collection generated a deficit.

In 1985, and as a way to stimulate the economy, a fundamental change in the direction of Chile's public finance took place. First, fiscal policy focused on redirecting public expenditures away from current expenditures and toward public investment. As a result, public investment increased by more than 7 percentage points of GDP between 1985 and 1989. Additionally, during this period a fiscal reform aimed at encouraging private savings via lower income tax rates was enacted. One of the most important components of this reform was the reduction of the tax rate on corporate earnings from 46% to 10%. At this point, with aggregate expenditures under control, it was possible to implement this type of tax cut without threatening the overall macroeconomic stability of the country. As a consequence of these policies, between 1985 and 1988 investment grew at a rate of 11% per year. In 1989, when the fiscal finances were clearly under control—the non-financial public deficit had a small surplus—the rate of the value added tax was reduced from 20% to 16%, as a way to encourage consumption.

The newly elected government of President Patricio Aylwin implemented a third fiscal reform in 1990, aimed at increasing revenue to finance social programs and public

12. When the Allende government came to an end in 1973, Chile faced a tremendous macroeconomic disequilibrium. Inflation surpassed 700% and the fiscal deficit had reached 22% of GDP. See Edwards and Edwards (1991).

investment. Economists associated with Aylwin's *Concertación* coalition calculated in 1989 that in order to implement significant social programs aimed at alleviating poverty, annual funds of the order of 4% of GDP were required (Tironi, 1989). They argued that these resources could be obtained through a combination of expenditures reallocation, foreign aid and increased tax revenues. In order to implement rapidly these programs, in April of 1990 the executive submitted to the newly elected Congress a legislative project aimed at reforming the tax system. The main features of this package were: (a) on the corporate income tax was temporarily increased from 10% to 15% for 1991-93. Additionally, the base of the tax which in 1985 had been defined as distributed profits, was broadened to total profits. (b) The progressivity of the personal income tax was increased by reducing the income level at which the maximum rate was applicable. And (c) the rate of the value added tax was increased to 18% from 16%.[13]

In order to provide credibility to the fiscal adjustment a number of institutional reforms were implemented. The most important one was the creation, in December of 1989, of an independent central bank, whose board members are not directly subject to the vagaries of partisan politics. A second institutional reform that has increased the credibility of fiscal policy announcements was enacted in late 1989, when legislation that greatly restricted the activities of the public sector in production was passed. This legislation places severe limits on the government's ability to engage in new joint ventures with the private sector, and forbids publicly owned firms from obtaining loans from the central bank. Finally, it may be argued that, in a way, the drastic reduction of the public sector through the privatization of nearly 600 state owned enterprises has added credibility to the government's intentions of maintaining a balanced public sector.[14]

***MEXICO*:** The Mexican tax reform was initiated in 1985, and replaced an inefficient system fraught with corruption by a modern one based on a value added tax and a modern income tax. Most domestic tax havens, subsidies and exemptions were

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13. In the first half of 1993 the Chilean congress decided to maintain the 15% tax rate on corporate earnings.

14. See Edwards and Edwards (1991) and Bosworth, Dornbusch and Labán (1994) for a detailed discussion of the Chilean privatization program.

eliminated. In particular, the traditionally favorable treatment provided to, among others, truck owners, publishing houses, forestry, fishing, and live-stock raising were abolished. Additionally, tax administration was greatly improved, in an effort to reduce corruption and evasion.

Once fiscal balance was achieved in 1986 many tax rates were lowered as a way to provide additional incentives to the private sector. The corporate income tax was adjusted for inflation, and its rate was reduced from 42% in 1986 to 35% in 1991. Taxes on dividends were eliminated and the maximum rate for the individual's income tax was lowered from 55% to 35% in 1991. All tax incentives for corporations were eliminated, and replaced by an investment credit for firms that invest in areas other than Mexico City, Monterrey and Guadalajara. This credit is equal to the present value—computed using a 5% real discount rate—of depreciation expenditures.

As a way to reduce tax evasion by corporations, Mexico devised an ingenious tax on assets at a 2% annual rate. This tax can be fully credited when the firm pays its corporate income tax. If in a particular year (or years) the firm incurs in losses, it can carry forward the asset tax, fully indexed by inflation. This type of tax has steadily gained in popularity throughout Latin American, and by late 1993 had been adopted (in one form or another) by Argentina and Colombia.

To improve tax collection and reduce evasion a number of additional important administrative reforms were implemented, some of which clashed with the general goal of decentralizing the Mexican economy. For example, the administration of the value added tax was transferred from the states to the federal government, and a national data base on VAT tax payers was constructed, helping in the audit and control process. For the first time it was required that medium-size firms provide annual audits performed by a certified public accountant. The actual process of paying taxes was also simplified, since all commercial banks were allowed to receive tax payments from any firm or individual.

The Mexican fiscal reform achieved important goals. In less than five years a very large fiscal deficit was eliminated, and a modern tax system was put in place. However, in spite of the tremendous fiscal effort, including the complete elimination of the public sector deficit, in the early 1990s Mexico's inflation continued to be somewhat high—in 1992 it

was 11.7%. This persistence in inflation was the result of two interrelated factors. First, even though a preannounced rate of devaluation was used as a way to anchor prices, some degree of inertia remained in the economy, reinforcing inflationary forces. Second, starting in 1991 large capital inflows into Mexico have been monetized putting pressure on domestic prices. These inflows contributed to increasing the degree of real appreciation and loss in international competitiveness. When the magnitude of capital inflows greatly declined in 1994, the Mexican authorities resisted implementing an adjustment program, setting the stage for the gigantic crisis of December of that year.

***ARGENTINA*:** When President Carlos Menem took over the government in mid-1989, Argentina was facing the worst economic crisis in its history. Inflation reached 200% per month, output was plummeting, the foreign debt had not been served for more than a year, and the nation's morale was at an all time low. Fiscal irresponsibility was at the center of all of this. Tax collection reached its lowest historical point in mid-1989, public services prices were ridiculously low, and expenditures were completely out of hand. As was reported in Table 2 the consolidated public sector deficit surpassed 20 % of GDP in 1989.

From early on the Menem administration understood that a solution of the country's problems required major action on the fiscal side.[15] Deep reforms aimed at increasing public sector revenues and reducing expenditures had to be undertaken. A succession of failed programs and unkept promises in the previous decade made things particularly difficult. It was clear that reducing the deficit was not enough; in addition, credibility had to be generated through major institutional reforms.

Increasing tax revenues was clearly a priority in the new administration's program. During the second quarter of 1989 tax revenues were only 9.5% of GDP. Additionally, at that point the tax structure had become highly distorted. On the one hand, it relied heavily on export taxes and a number of inefficient tax surcharges; on the other, there were innumerable exemptions that greatly reduced the effectiveness of the system. To make

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15. In spite of acknowledging the decisive role of fiscal imbalances, the two early Menem stabilization attempts—Roig/Rapanelli and Gonzalez—only made limited progress in this area.

things worse, tax administration had deteriorated steadily since the mid-1980s. The central tax office—*Dirección General Impositiva*—lacked resources and was plagued by corruption.

The Menem tax reform had several components. First, a very broad and uniform value added tax was implemented. It initially covered all goods, and was extended to all services in November of 1990. Second, a tax on fixed assets—similar to the Mexican tax discussed above—was put into place in 1990. Third, a tax on all bank checks was introduced in early 1991.[16] And fourth, taxes on exports were gradually eliminated. In addition to these tax-related measures aimed at improving the efficiency of the system and increasing revenues, tax administration was strengthened. Computers were adopted, a list of all major tax payers was compiled, the revenue directorate fired corrupt inspectors, wages paid to remaining inspectors were drastically raised, random VAT inspections were greatly increased, and tax evaders were subject to stiff penalties, including the closing of their businesses.

In order to balance the public sector books the Menem administration took major action on the expenditures side. First, central government employment was reduced by approximately 100,000 people in 1991-92. This resulted in a simultaneous reduction of the wage bill by 10%, and an increase in the average wage of those still in the government's payroll.[17] Second, the federal government transferred almost 200,000 primary and secondary school teachers to the provinces budgets. This was done on the basis of the "*Law of Coparticipation*", which established a limit on the federal government's contribution to the provinces at 58% of revenues. Third, in early 1991 the government passed a decree that strictly linked public expenditures to revenues, imposing a de facto balanced budget provision. Fourth, public sector prices were increased drastically in order to cover costs. And fifth, starting in 1990 the government engaged in an aggressive privatization program that has not only generated direct revenue from sales, but has also eliminated the need to subsidize money losing operations—see section II.3 of this paper for details.

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16. See Newfarmer (1992) for a detailed analysis of the Argentine public sector adjustment under the Cavallo plan.

17. See World Bank (1992).

In order to provide credibility to the stabilization program and to accelerate the convergence of the domestic rate of inflation to "world levels", the Argentine government introduced a set of important institutional reforms in March of 1991. These were contained in the "Convertibility Law" that fixed the exchange rate between the Argentine peso and the US dollar, and completely abolished all exchange and capital controls.[18] Additionally, this law established that the quantity of money could only be expanded if fully backed by international reserves.[19] This provision of the law practically eliminated the possibility that the Central Bank would fund public enterprises, the federal government or the provinces. Additionally, after the opening of international trade in 1989-90 it was expected that the fixed exchange rate would introduce discipline to prices. The fact that any alteration of the current parity would require the passage of a new law by congress added credibility to the government's promises that the fixed exchange rate would be maintained, and that inflation would subside. Following a generalized trend across Latin America the Argentine central bank was granted full independence in 1994.

Although the overall program succeeded in rapidly reducing inflation, it also created a significant relative price misalignment.[20] Prices of domestic (nontradable) goods became extremely high, putting a dent into the country's degree of competitiveness. However, the team led by Minister Domingo Cavallo has shown great resolve in defending the parity and sticking to the original policy. A speculative attack against the peso in early 1995, mostly as a result of the Mexican peso crisis, was fended off successfully through restrictive credit policy, increased interest rates, the strengthening of the banking sector and the adoption of an IMF program. Whether these policies will eventually be fully successful will depend on a number of interrelated factors: first, whether fiscal adjustment can be furthered in the short run; second, whether significant gains in productivity can be attained in the domestic goods sector; third, if the government has the political will to maintain the course in the

18. The original rate was 10,000 Australes per dollar. After the currency reform of 1991, however, the rate became one Argentine peso per US dollar.

19. The interpretation of "liquid" international reserves is somewhat lax, since it includes government financial assets denominated in foreign currency. See Canavese (1991).

20. Dornbusch (1992).

face of very large unemployment (recent data suggest that the rate of unemployment surpassed 18% in Buenos Aires); and, finally, whether the domestic banking sector can sustain a period of high interest rates and rapidly deteriorating portfolios.

II.3 Privatization and Fiscal Adjustment in Latin America

Privatization, more than any other policy, is changing the economic landscape in Latin America. Between 1985 and 1994 more than 2,400 publicly owned firms—including public utilities, banks, insurance companies, highways, ports, airlines, and retail shops—have been privatized throughout the region.[21] As with other reforms, however, the pace of privatization has varied from country to country. While in some countries, such as Chile and Mexico, a very high percentage of state-owned enterprises had been divested by mid-1993, in others—Bolivia, Brazil and Ecuador, for example—the process has been much slower. Yet in other countries, including Uruguay, the privatization effort ran into some political difficulties in 1993 and basically has come to a halt. In this subsection some of the most salient features of the Latin American privatization experience are analyzed in some detail. The emphasis is on the relationship between privatization and fiscal deficits.

Throughout most of Latin America the importance of state-owned enterprises (SOE) grew steadily between the 1950s and early 1980s. The creation of a substantial SOE sector was an important component of the structuralist development strategy and responded to a number of objectives: first, it was considered an efficient way of dealing with externalities, and in particular with natural monopolies and oligopolies; second, state ownership was generally seen as a way to serve the public interest and advance social objectives, such as the provision of (some) services at low prices to the population at large; and third, it was thought that a large public sector would reduce the vulnerability of the economy to external

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21. The monthly journal Latin Finance provides useful and detailed information on the privatization process in the region. The focus on massive privatization was developed rather late in the efforts to tackle the debt crisis. For example, the minor role assigned
to privatization during the early debates on the debt crisis is reflected by the fact that in the pioneer volume edited by Jeffrey Sachs in 1989—which collected the papers presented at a conference held in late 1987—the word "privatization" is not mentioned even once in the subject index. Only three years later the situation had changed dramatically, as is evidenced by the discussion in the volume edited by John Williamson in 1990—from a conference held in late 1989. In this book privatization related issues cover almost a full page in the subject index.

shocks.[22] In almost every country the growth of the SOE sector was accompanied by the development of massive regulatory legislation that restricted the freedom of the private sector.

By the mid 1980s, in most countries SOEs were incurring major losses that imposed a heavy burden on public finances, fueled the inflationary process and resulted in very poor provision of services. The eruption of the debt crisis made evident that the over-regulatory path followed until then had been costly and ineffective; despite good intentions, the presence of a mammoth public sector and sweeping distortions did not shield the Latin American economies from major external shocks. When faced with the imperious need to tackle massive fiscal imbalances during the late 1980s, many policy makers saw the sale of publicly owned assets as a natural way of obtaining liquid resources in the short run. Additionally, many supporters of the reform process argued that a rapid privatization would provide some basic political foundations to the economic transformation towards market orientation.

The decision to embark on massive privatization presented some gigantic challenges to the region's governments, including which SOEs to sell, and how to sell them. But perhaps the most difficult task—and one which has not always been fully tackled—is creating a new regulatory framework consistent with a private sector that is getting rapidly involved in areas that, traditionally, had been reserved for the government.

It is useful to distinguish at least four modes of privatization:[23] (a) sale of a controlling percentage of shares to a private company or consortium; (b) initial public offering of shares on a stock exchange, either domestic or international; (c) employee buy-out; and (d) liquidation of the firm and sale of its assets. Each of these modalities can help attain particular goals. For example, the sale of controlling interest will usually be consistent with a speedy privatization that raises significant revenues in the short-run. Public offerings of shares, on the other hand, can help spread ownership. Some countries, such as Chile and Mexico, have offered some shares at preferential prices to small

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22. On the use of public ownership as a way to deal with externalities see, for example, Willig (1993).

23. See Seabright (1993) for a similar classification.

investors. This has created a broad constituency of shareholders that support the privatization process and is concerned with the way in with the private sector is regulated. Public offers in foreign stock exchanges—such as Argentina's offer of YPF stock in New York in June 1993—can increase the international appeal of certain firms and can be interpreted as a signal of the government's seriousness regarding privatization. Employee buy-outs will generally reduce the extent of opposition to privatization in certain sectors. Most Latin American countries have resorted to a combination of these four modes of privatization. In some cases, two or more of these modalities have been used during the sale of a particular firm—the telephone company, ENTEL, in Argentina, and the electric utility, ENDESA, in Chile. By combining these methods, the authorities hoped to make progress in several objectives, as well as minimizing the extent of political opposition towards the privatization process.

As a way to avoid excessive concentration and potential monopolistic behavior, some countries have broken up public monopolies before offering them to the private sector. This has been the case, for example, in Argentina where the Buenos Aires telephone company and the natural gas distribution company were divided into several independent firms before being sold.[24] This breakdown of public utilities has been complemented by the design of a new regulatory framework aimed at curbing potential abuses by the newly privatized utilities. Also, in Argentina, Chile and Mexico efforts have been made to agree with the buyers of public utilities on future expansion programs and price-setting mechanisms. In Argentina, however, the regulatory framework was only put together after the telephone company had been sold. This delay increased the uncertainty faced by potential buyers, reducing the price offered for the company.

Massive divestiture programs, of the type being implemented in Latin America and in the transition economies of Central and Eastern Europe have important consequences on public finances. First, the proceeds of the sales themselves constitute public sector revenue, improving the fiscal accounts in the short run. Most experts have argued that

24. However, an important technical issue when dealing with the privatization of large monopolies is whether it is more efficient to break them down vertically or horizontally.

these revenues are **not** supposed to be considered permanent income and, thus, it is not advisable to use them to finance current expenditures. Although, in theory, political leaders have agreed with this prescription, in reality in a number of countries (Argentina, Brazil) governments have relied on privatization revenues to delay the implementation of other deficit reducing measures. Privatization also affects public revenues through a second channel: a large number of SOE in Latin America have for a long time faced financial problems requiring large and continuous injections of funds by the government. Naturally, once these firms are sold to the private sector the government ceases to be responsible for their finances. This effect can be very significant, saving large volumes of public funds, as was the case in Chile during its first round of privatization in 1975-1982. To the extent that privatized firms become profitable and pay taxes, divesture will also impact public finances in the longer run. On the other hand, when a profitable firm is privatized, the public sector ceases to receive those funds, and a negative effect on public finances will result. On the aggregate, however, the available evidence suggests that in most Latin American countries privatization has had an overall positive fiscal impact.[25]

The restructuring of firms in distress has become an increasingly important issue in the design of privatization plans. Should the government restructure SOEs—both financially and technologically—before they are sold, or should this task be left to the new owners? The way in which this problem is handled will have economic, financial and political consequences. From a financial perspective, if the government undertakes the restructuring—including laying off redundant workers—it will be able to sell the firm at a higher price. Restructurings tend to be expensive, however, with costs associated both with the acquisition of new equipment, and the dismissal of workers. Moreover, governments do not have a comparative advantage for restructuring inefficient state-owned firms (Seabright, 1993). Labor legislation in most Latin American countries does not consider economic distress as a valid cause for "just" layoffs. This means that the reduction of redundancies will require substantial resources to finance severance payments. In some countries, such as Mexico and Chile, this problem has been partially solved by working out

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25. See Galal and others (1992); World Bank (1992).

agreements with the unions in the firms to be privatized, where workers have consented to layoffs in exchange for a fraction of the firm's stock.

From a public finance perspective an important question refers to the price at which state owned firms are sold to the private sector. This has been a particularly important issue in Chile, where there has been a long debate on whether firms were sold at a "fair" price, or whether buyers were subsidized. Although it may be argued that the early procedure sometimes lacked transparency, there is no evidence of wrongdoing through deliberate underpricing of assets. Many of the early firms were sold at relatively low prices because they were in extremely poor financial condition, had a large number of redundant personnel and were incurring significant losses. Additionally, political instability and the lack of a credible regulatory framework reduced the market value of these assets. In an effort to sell a large number of companies fast, the government made no effort to restructure them before offering them to the public.

In retrospect, it is clear that in Chile the cost of restructuring the new firms turned out to be much higher than what the private "grupos", or large conglomerates, officials had anticipated at first. For years many companies—including those in the export sector, which was supposed to be favored by the new policies—incurred large losses. The "grupos" increasingly tapped the credit market in order to cover them, generating what Harberger (1985) has called a "false demand for credit". This put severe pressure on Chilean real interest rates in the late 1970s and early 1980s, adversely affecting macroeconomic balance in the country. Moreover, when the debt crisis erupted in 1982 many of these conglomerates could not pay their debts, helping generate a banking crisis that resulted in a major government bail out of a large number of banks. This bail out, in turn, ended up being extremely costly to the public sector whose quasi fiscal deficit increased, for this concept alone, in more than 3% of GDP.[26] It may be argued, in fact, that if a more gradual privatization policy had been undertaken the Chilean privatization process would have had a more positive fiscal impact.

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26. See Edwards (1995b), Brock (1992).

Between 1983 and 1992 the Mexican government privatized approximately one thousand state-owned firms. The process continued swiftly during 1993 and 1994, and at the end of the Salinas Administration in 1994, the number of SOEs in Mexico had been reduced from 1,155 in 1982 to less than 80.[27] At the present time, and as a consequence of the peso crisis, Mexico is moving aggressively towards a new round of privatizations, where a number of firms related to the oil sector and many infrastructure projects will be offered to the private sector.

The Mexican privatization program began slowly in 1983. During its first phase (1983-1987) 64 small and medium size firms were sold to private interests. Most of the early privatization corresponded to manufacturing companies operating in fairly competitive sectors that did not require significant changes in the regulatory framework. During this initial phase the impact of sales on fiscal revenues was rather modest—the gross proceeds were approximately US$2,600 million. Starting in 1988 the privatization process accelerated significantly, as very large public firms, including service sector monopolies, were put on the block. These sales included the telephone company TELMEX—which on its own generated a revenue of US$1,800 million—the two major airlines, 18 banks that had been nationalized immediately after the debt crisis, a gigantic steel complex and other large corporations. From a fiscal revenue perspective, this second round of privatization had a very significant effect, raising more than US$12 billion.

Argentine state-owned enterprises (SOEs) have long been a financial drag for that country's treasury. During the 1980s, for example, SOEs financing requirements surpassed 50% of the total nonfinancial public sector deficit, directly contributing to the eruption of hyperinflation in 1989. Towards the end of that decade it became increasingly clear to analysts and policy makers that a permanent solution to the country's macroeconomic instability would require a massive restructuring and divestiture of public enterprises. The Reform Act of 1989 established that publicly owned enterprises were eligible for privatization. Originally the plan ran into political opposition, especially from the militant

27. However, the Mexican government will still own some important firms, including the oil giant PEMEX. The Mexican government showed its clear commitment to privatization and restructuring when, in 1987, it allowed AEROMEXICO, a state-owned airline, to actually go bankrupt.

Peronist unions. Slowly, however, and as the quality of services provided by the newly privatized firms improved, and the structural adjustment program began to bear fruit in other spheres, the program began to enjoy increasing support among the population at large.

Between 1989 and 1992, 51 firms were privatized for a total of approximately US$18 billion in cash and debt-reduction schemes. Drawing from the experiences in other countries, the Argentine government has made an effort to strengthen the regulatory framework for public utilities and other sectors where the government formerly had an important presence.

The Argentine privatization program responded to a number of objectives. First, in order to reduce inflation and to stabilize the macroeconomy, the Menem administration urgently needed to reduce the fiscal burden imposed by state enterprises. The most effective and rapid way to accomplish this was through the divestiture of most public enterprises. Second, the reduction of the size of the state and a major decentralization process were integral components of the Menem's administration vision of a modern Argentina. And third, the modernization process required a major improvement in the quality of public services, including telecommunications, electricity, transportation and ports. A long history of failed attempts to increase the efficiency of SOEs convinced the new administration that this could only be achieved through a major participation of the private sector in these areas.[28]

Since 1989, the privatization process has been coordinated by a special unit created in the Ministry of Economics, and headed by the Undersecretary of Privatization. Actual sales of SOEs have been undertaken by ad-hoc commissions that included representatives from the central unit, sectoral policy areas, auditing bodies and, in some cases, provincial governments (Alexander and Corti, 1993). Most privatizations have been carried out with legislative approval and oversight, providing political legitimacy to the process. The initial round of privatization was approved by the Emergency Law of 1989; during the second

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28. Menem's main economic strategist, Domingo Cavallo articulated his vision of a "new" Argentina in his 1985 book *Volver a Crecer*.

round a bi-cameral commission had the right to approve specific sales of state owned assets.[29] As a way to reduce the monopoly power of the privatized firms, state owned utilities were broken down into two or more companies before the privatization. This was the case of telecommunications, electricity and natural gas.

The Argentine government used several privatization procedures. The most popular method was creating new corporations that owned or operated public assets; as a way to increase the attractiveness of the firms to be privatized the old state enterprises retained most liabilities. Shares of the newly formed companies were then offered to the public, and sold through a "two-envelope" competitive bidding process. The first envelope included the technical characteristics of the offer, while the second dealt with its financial features. In some cases, instead of selling the actual asset the government has offered operating concessions for up to 99 years. This has been the case of some highways, ports, and railways. In the latter case concessions were granted to those bidders that required the lowest amount of subsidy for a period of ten years. In the case of the urban-rural railway system the winning bidder requested a subsidy of approximately US$100 million per year, significantly lower than the almost US$500 million that the government had been shelling into the system every year. An additional interesting aspect of railways privatization has been that the total labor force has been reduced from more than 95,000 to a mere 5,000, increasing productivity by several orders of magnitude!

The Argentinean privatization program has had an important impact on the country's public finances. The World Bank has calculated that the deficit of public enterprises declined from 3.4% of GDP in 1989 to -0.06% of GDP in 1994. The reason behind this drastic change is that in the case of Argentina inefficiencies and politically controlled prices have led to systematic losses in SOEs. For the system as a whole the reduction in government outlays (primarily in the form of subsidies and transfers) will more than offset the reduction in income stemming from the limited number of profitable operations (see World Bank 1992).

29. Interestingly enough, if the commission failed to reach a consensus on specific privatization, the executive could act on its own (Alexander and Corti 1993).

The privatization process allowed the Argentine government to reduce greatly its public (foreign and domestic) debt. As a result of the process, as of the first quarter of 1993, the face value of public debt had been reduced by approximately US$14 billion. Additionally, the government had received approximately US$6 billion in cash. Naturally, this provided welcome breathing fiscal room at a time when the need to consolidate the public finances has been at the heart of the adjustment program.

As a result of privatization there has been a drastic reduction in the public enterprises sector payroll: from 250,000 in 1989 to approximately 60,000 employees by the end of 1993. This major reduction in public sector employment has been accomplished through three major channels: transfers to the newly privatized firms, early retirement and "voluntary" quits with severance payments. It has been estimated that the average cost in severance payments has been around US$7,200 per employee, or US$690 million in total. This cost has been partially covered with World Bank adjustment loans, that required clear audit conditions for disbursement. The reduction in redundant personnel prior to the privatization has allowed the government to obtain higher prices, and has permitted the buyers to start operating with fairly lean crews. Additionally, the existence of generous severance payments rendered existing collective bargaining agreements void, allowing buyers to negotiate from scratch with the remaining labor force (Alexander and Corti 1993).[30]

II.4 Fiscal Deficits and Social Security Reform in Latin America

An increasing number of Latin American countries have recently moved in the direction of privatizing their social security systems. This development, pioneered by Chile in the early 1980s, is particularly advanced in Peru and Mexico. These reforms have two main objectives: First, to replace financially troubled pay-as-you go pension schemes by fully-funded capitalization systems based on individual retirement accounts —this "fiscal justification" has also been at the center of the recently approved social security reform in Italy. And second, to develop a large presence for institutional investors in the (emerging)

30. The bargaining process was still subject to the fairly distorted Argentine labor legislation.

capital markets. Also, the creation of privately administered pension funds has opened the opportunity for developing new channels for privatization. For, instance, in the second round of Chilean divestitures in the mid-1980s pension funds were given the opportunity to buy shares at subsidized prices, helping, in this way, to further the goal of spreading ownership.[31]

Social security has for many years been a fundamental element in the provision of health and pension services throughout most of Latin America (Mesa-Lago, 1991). A large number of families, especially from the middle classes, obtain basic income support and health services through the social security system. Moreover, social security represents one of the few social services areas where expenditures increased systematically during the 1980s. Most social security institutions in the region, however, are inefficient and underfunded, and syphon significant public funds from general revenues contributing to fiscal instability and inflation. A number of analysts have argued that unless some major reforms are implemented, there will be a series of major financial and macroeconomic crises (see, for example, Cox-Edwards 1992). In fact, the insolvency of the social security system is still a serious, unresolved fiscal problem in many countries in the region, including Argentina, Brazil, Costa Rica, Guatemala, and Venezuela, among others.

In most "mature" social security systems, including Argentina, Brazil, and Mexico, the ratio of pensioners to contributors is very high, imposing a heavy burden on the working population. In Argentina, for example, there is one retiree for every three contributors. This figure is almost two in the case of Chile. Table 7 provides a summary of social security contributions and benefits in 10 Latin American countries. Cox-Edwards (1992) has argued that in all countries, with the exception of Chile and Peru, there is only a very weak actuarial connection between contributions and benefits. There is also significant room for increasing the degree of managerial efficiency of social security institutes. In the early 1990s administrative costs exceeded 15% of expenditures, as opposed to 3% in the industrial nations (World Bank 1993). Also, in many countries, there

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31. See Luders (1991).

Table 7 - Social Security Contributions and Other Payroll Taxes in Selected Latin American Countries

CONTRIBUTIONS						BENEFITS	
Country	Percent toward Health Care	Additional Cost Family Coverage	Percent Toward Retirement	Percent Toward Workers' Compensation	Percent Toward Other Programs	Pensions	Health Care and Other
Argentina	31	None within public system	9	Insurance premium	15	Benefit defined pension, inherited by spouse and minor children.	Medical care extended to dependents. Disability. Maternity leave. Unemployment insurance. Low cost mortgages.
Bolivia	10	None within public system	8.5	1.5		Benefit defined pension, inherited by spouse and minor children.	Medical care extended to dependents. Disability. Maternity leave.
Brazil	28 - 30			1 - 3	15.4	Benefit defined pension, inherited by spouse and minor children	Medical care extended to dependents. Disability. Maternity leave. Unemployment insurance.
Colombia	7	5	6.5	Included	2.0	Benefit defined pension, inherited by spouse and minor children.	Medical care extended to dependents. Disability. Maternity leave. Public sector training.
Chile	7	Varies with plan	10	.9 - 3.4		Contribution defined above minimum level.	Choice of plan. Maternity leave.
Ecuador	20.2			Included		Benefit defined pension, inherited by spouse and minor children.	Medical care extended to dependents. Disability. Maternity leave.
Mexico	18.05			.26 - 6.56	5.0	Benefit defined pension, inherited by spouse and minor children	Medical care extended to dependents. Disability. Maternity leave. Low cost mortgages.
			2			Contribution defined	
Nicaragua	9	None within public system	8	Included		Benefit defined pension, inherited by spouse and minor children.	Medical car extended to dependents. Disability. Maternity leave.
Peru	9	May vary with plan	9	Insurance premium	7.5	Contribution defined above minimum level	Choice of health plan. Public sector training. Low cost mortgages.
Venezuela	Public sector		6.75	Included	5.0	Benefit defined pension, inherited by spouse and minor children	Medical care extended to dependents. Disability. Maternity leave. Unemployment insurance. Public sector training.
	Private sector		23 - 25				

Source: Cox-Edwards (1992).

has traditionally been a clear duplication of effort by two or more institutes serving the same region or population.

In terms of economic efficiency and equity, social security systems have serious problems in most countries in the region. First, in most cases existing pension funds encourage early retirement, generating a serious burden to the country at a time when the retiree is in the prime of his/her productive years. Second, pensions are often unrelated to the individual contributions to the system. This is particularly true for higher income individuals, who often are able to obtain lavish pensions after having made small and limited contributions to the general pension funds. Third, as health providers, social security systems tend to encourage expensive and highly technological curative care. And fourth, the poorer groups of society are often excluded from social security. For example, In Brazil, only 18% of the poorest income groups—which account for more than 40% of the population—are covered by social security, receiving only 3% of total benefits (McGreevey 1990). One of the most serious aspects of the Latin American social security systems is that their (potential) fiscal cost is not publicly acknowledged.

In the early 1980s Chile embarked on a major reform of its social security system, replacing a traditional (and financially troubled) pay-as-you-go pension system with one based on individual retirement accounts. In the new Chilean system, health provision is also based on choice. Workers have to contribute 7% of their taxable income to an insurance program. They can choose between a public system, managed by the national health fund (FONASA), or private health providers (ISAPRES). Currently, approximately 80% of the population is affiliated with the public system, and 20% have chosen the ISAPRES regime. The Chilean social security reform has had important results. First, the traditional drag on public finances has been eliminated.[32] Second, there has been substantial improvement in the degree of efficiency of the system.[33] And third, the

32. However, during the transitional period the fiscal effort required to fund the pensions of those in the old system will increase. See the discussion below.

33. A number of experts have argued that there is still room for additional efficiency improvements. Also, the minimal pension assured by the new system may be too low to cover "requirements". On details of the Chilean system see, for example, Cheyre (1991).

capitalization system has provided a definite encouragement to the Chilean capital market by creating a number of large institutional investors, giving decisive impetus to increases in savings.

The reform of the Chilean social security system initiated in May of 1981 and represented a key step in the development of that country's financial markets. As pointed out, this reform replaced a basically insolvent pay-as-you-go regime with a capitalization system, based on individual retirement accounts managed by private companies known as "Administradoras de Fondos de Pensiones", AFP.[34] A key feature of the new system is that workers have the freedom to choose their AFP, and can shift their funds freely among them. A detailed and modern regulatory framework—enforced by an institution especially created for this purpose, the Superintendency of AFPs—ensures free determination of fees and commissions and free entry into the industry. These two elements have created the conditions for markets to function competitively and efficiently. In contrast with the case of banks, the Superintendency of AFPs established from the first day very precise norms to secure the diversification and transparency of the AFPs investments (Iglesias et al., 1991).

Currently, pension funds are the largest institutional investors in the Chilean capital market, with assets representing more than 35% of GDP in 1994 (compared to a 0.9% in 1981). The average real return to investment of Chilean Pension Funds between 1981 and 1990 was 13%. The real return of individual accounts (after subtracting fees) have varied between 10.4% and 9.2%. These impressive results are in part a reflection of the fast expansion of a previously underdeveloped financial market.[35] The dynamism exhibited by the Chilean capital market during the past ten years has forced constant revisions to the norms governing the eligible securities for AFP investments. Initially, these institutions were not allowed to hold common stock or foreign securities. These regulations, however,

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34. In the reformed system, the State plays a fundamental role regulating and monitoring the operation of the management companies, and guaranteeing "solidarity in the base" through a minimum pension. An important feature of the new social security system is that it is obligatory, requiring that every dependent worker (non-self-employed) makes contributions equal to 10% of her disposable income.

35. For further details see Edwards and Edwards (1993). In January of 1993 the Chilean government announced that it was relaxing the restrictions for AFPs to invest in the stock market. Diamond and Valdés (1994) have argued that the current operating mode of Chile's AFP's generates sizeable waste.

were relaxed by the Aylwin administration, which broadened the scope of instruments that can be maintained in the AFP portfolios. This has provided additional impetus to the local stock market, allowing firms to finance expansion plans in an increasingly efficient fashion. Perhaps the most important effect of Chile's financial sector liberalization is that it has greatly encouraged (private) savings. The increase in the savings rate, however, was steady but slow. By 1994, the ratio of gross domestic savings to GDP bordered 30%, significantly higher than the historical ratio of 20%.

III. Concluding Remarks - Some Lessons for Developing Countries

During the last few years the majority of Latin American countries undertook major fiscal reforms aimed at reducing inflation and achieving external sector sustainability. In most cases these goals have been successfully achieved. Average inflation in the region has declined from over 1,000% in 1989 to less than 15% in 1994; also, in most countries external accounts are now safely under control. This adjustment was accomplished through the implementation of a number of policies, including tax reforms, expenditure reduction and the sale of public enterprises. Latin America's experience with fiscal adjustment during the last few years offers a number of important lessons for other nations, including most transitional economies in Eastern Europe and Central Asia.

A first important lesson from Latin America's experience is that tax reforms aimed at improving the efficiency of the tax system—through the reduction of tax rate dispersion and the introduction of the value added tax, for example—usually do not result in large (or any) increases in tax revenues in the short run. In fact, the region's experience suggests that only in those countries that experienced a very substantial reduction in inflation did tax revenues increased rapidly and substantially. From a policy point of view this means that the goal of improving the efficiency of the tax system has to be separated, at least in the short run, from the fiscal revenue goal. Tax revenues will only grow to the extent that tax administration and tax compliance improve. This, however, requires significant effort, including the training of personnel, and usually takes time. An important consequence of

this lesson is that in most cases of successful adjustment the reduction of public expenditure has made the fundamental contribution.

A second lesson from Latin America is that, from a political point of view, it is easier to reduce public investment than to cut current expenditures. While in some cases this has meant canceling large and wasteful projects, in others it has resulted in a decline in investment in basic infrastructure. Some countries have faced this problem by transferring the provision of basic infrastructure to the private sector. The Latin American experience strongly suggests, however, that the degree of success of this type of operation will depend on the existence of clear and modern regulatory frameworks. In fact, as I argue below, the development of institutions able to regulate new activities—including newly privatized public utilities—constitutes a key challenge of most fiscal reforms.

Third, Latin America shows that the financial public sector can be a substantial source of fiscal imbalances. In fact, in a number of countries the quasi-fiscal deficit continued to be quite large even after the rest of the public sector had attained equilibrium. There are two fundamental channels through which a financial public sector deficit can take place: first, publicly owned development banks—either belonging to the central or provincial governments—can contribute significantly to the deficit.[36] Second, the central bank can experience substantial losses that contribute to the overall deficit. This will be the case, for example, if dual exchange rates are in place, or if the central bank has to participate in a major rescue operation to bail out some financial institutions. This latter case has been common among a large number of countries in the region.

Fourth, Latin American experiences suggest that institutional reforms may add credibility to fiscal policy. Along these lines, a particularly important development is that, in recent years, a large number of Latin American countries have granted independence to their central banks. Although it is too early to know whether this measure will make a

36. Interestingly enough, in a number of countries there has been a reluctance to privatize fully the banking sector. Even in the most advanced reformer—Chile—the state has retained ownership of the largest bank (Banco del Estado). Government owned banks have made macroeconomic management difficult in a number of countries, including Argentina, Brazil and Mexico.

difference in every (or even most) countries, the initial evidence suggests that these independent central banks have indeed added credibility to fiscal policy.

The experience of Chile after 1989 provides a fifth important lesson: to the extent that there is political will and agreement it is possible to increase taxation to finance social programs. However, Chile suggests that for this political consensus to emerge it is crucially important that these programs are indeed focused on the poorest segments of society and are channeled to areas such as education and health.

Latin America also offers a number of key lessons regarding the relationship between privatization and fiscal policy. Most countries in Latin America have, in one way or another, relied on the sale of publicly owned enterprises to reduce their fiscal deficits. While in some cases the proceeds from privatizations have contributed significantly to public revenues, in others the fact that the government has stopped financing large losses has been important in itself. Perhaps the most important lesson of privatization in Latin American countries is that the formulation of adequate regulatory frameworks is a key determinant of success in the process. Proper regulation affects, among other things, the price that the private sector is willing to pay for SOE's. Also, it determines the success of these firms once in the private sector. Mexico, for instance, found out that the lack of proper regulation regarding toll charges greatly affected the degree of use of privately constructed highways. The most important aspect of regulation, however, refers to the banking sector. Again and again the Latin American countries have found out that, due to the absence of proper supervision and regulation, private banks—and in some cases recently privatized ones—run into serious difficulties and have to be bailed out by the authorities. As the cases of Chile, Argentina, Colombia and Mexico have shown, in these cases the process of rescuing the banks has added considerably to the fiscal accounts.

An important question in designing a wholesale divestiture program is the sequence in which firms in different sectors should be privatized. In particular, should banks and other financial institutions be sold early on, or should they be maintained under public property for a longer time? McKinnon (1991) has argued that because of moral hazard considerations, the privatization of banks should "come near the end of the reform process". McKinnon's position is partially based on the Chilean experience of the 1970s,

where banks were sold early to emerging—and not fully solvent—conglomerates (the *grupos*), which used them to finance the acquisition of firms subsequently privatized. During this process the newly privatized banks engaged in extremely risky and financially questionable operations, and accumulated large volumes of bad loans—many to interrelated companies owned by the same conglomerate. Due to the existence of an (implicit) government guarantee on deposits, the public did not distinguish between solid banks and those that were financially troubled. This process—which, in the first place, was able to develop because of the lack of an appropriate supervisory framework—ended in a major financial crisis in 1982-83, when some of the largest Chilean banks became insolvent and had to be taken over by the government.

This episode highlights the important relationship between the modernization of bank supervision and privatization. However, it is unclear whether, as argued by McKinnon (1991), this relationship is a reason for delaying the divestiture of financial institutions beyond what is required to put the new regulations in place. In fact, it is possible to argue that there are some compelling reasons for privatizing banks during the early stages of the reform process—but only *after* the new regulatory framework is firmly in place. First, in order to successfully move from a protectionist environment to a competitive one, manufacturing and other firms will have to engage in major restructuring activities that will allow them to increase productivity. This will require financing which, under most circumstances, will be difficult to obtain from a largely inefficient and old-fashioned state-owned banking system. Second, recent experiences have shown that in many cases a banking system dominated by large government-owned banks will usually stand in the way of macroeconomic stabilization efforts. In these cases the public-bank culture usually continues to prevail, and credit is granted at a pace that is inconsistent with overall macro equilibrium. This has been, for example, the recent case in Nicaragua, where the inability to control the state-owned Banco Nacional de Desarrollo has jeopardized the macroeconomic stabilization program.[37] Also, delaying the privatization of the banking

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37. In Nicaragua the staff of Banco Nacional de Desarrollo has continued to operate within the populist mode that characterized the Sandinista administration. This has resulted in the crowding out of private investment, and has affected the country's ability to meet the International Monetary Fund's targets.

system may delay the creation of a dynamic and modern capital market, negatively affecting resource allocation and intermediation.

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