

Pinheiro, Armando Castelar; Schneider, Ben Ross

**Working Paper**

## The fiscal impact of privatization in Latin America

Discussion Paper, No. 53

**Provided in Cooperation with:**

Institute of Applied Economic Research (ipea), Brasília

*Suggested Citation:* Pinheiro, Armando Castelar; Schneider, Ben Ross (2015) : The fiscal impact of privatization in Latin America, Discussion Paper, No. 53, Institute for Applied Economic Research (ipea), Brasília

This Version is available at:

<https://hdl.handle.net/10419/220142>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# 53

**DISCUSSION PAPER**

Originally published by Ipea in October 1994 as number 354 of the series Texto para Discussão.

## **THE FISCAL IMPACT OF PRIVATIZATION IN LATIN AMERICA**

**Armando Castelar Pinheiro  
Ben Ross Schneider**





Originally published by Ipea in October 1994 as  
number 354 of the series Texto para Discussão.

Brasília, January 2015

## **THE FISCAL IMPACT OF PRIVATIZATION IN LATIN AMERICA**

Armando Castelar Pinheiro  
Ben Ross Schneider

## Federal Government of Brazil

**Secretariat of Strategic Affairs of the  
Presidency of the Republic**  
Minister Roberto Mangabeira Unger



A public foundation affiliated to the Secretariat of Strategic Affairs of the Presidency of the Republic, Ipea provides technical and institutional support to government actions – enabling the formulation of numerous public policies and programs for Brazilian development – and makes research and studies conducted by its staff available to society.

### **President**

Sergei Suarez Dillon Soares

### **Director of Institutional Development**

Luiz Cezar Loureiro de Azeredo

### **Director of Studies and Policies of the State, Institutions and Democracy**

Daniel Ricardo de Castro Cerqueira

### **Director of Macroeconomic Studies and Policies**

Cláudio Hamilton Matos dos Santos

### **Director of Regional, Urban and Environmental Studies and Policies**

Rogério Boueri Miranda

### **Director of Sectoral Studies and Policies, Innovation, Regulation and Infrastructure**

Fernanda De Negri

### **Director of Social Studies and Policies, Deputy**

Carlos Henrique Leite Corseuil

### **Director of International Studies, Political and Economic Relations**

Renato Coelho Baumann das Neves

### **Chief of Staff**

Ruy Silva Pessoa

### **Chief Press and Communications Officer**

João Cláudio Garcia Rodrigues Lima

URL: <http://www.ipea.gov.br>

Ombudsman: <http://www.ipea.gov.br/ouvidoria>

## DISCUSSION PAPER

A publication to disseminate the findings of research directly or indirectly conducted by the Institute for Applied Economic Research (Ipea). Due to their relevance, they provide information to specialists and encourage contributions.

© Institute for Applied Economic Research – **ipea** 2015

Discussion paper / Institute for Applied Economic

Research.- Brasília : Rio de Janeiro : Ipea, 1990-

ISSN 1415-4765

1. Brazil. 2. Economic Aspects. 3. Social Aspects.  
I. Institute for Applied Economic Research.

CDD 330.908

The authors are exclusively and entirely responsible for the opinions expressed in this volume. These do not necessarily reflect the views of the Institute for Applied Economic Research or of the Secretariat of Strategic Affairs of the Presidency of the Republic.

Reproduction of this text and the data it contains is allowed as long as the source is cited. Reproductions for commercial purposes are prohibited.

# SUMMARY

---

## 1. INTRODUCTION

## 2. PRIVATIZATION AND FISCAL ADJUSTMENT

- 2.1. Chile
- 2.2. Mexico
- 2.3. Argentina
- 2.4. Brazil

## 3. MODELING THE FISCAL IMPACT OF PRIVATIZATION

## 4. IMPLICATIONS FOR THE POLITICAL ANALYSIS OF PRIVATIZATION

## APPENDIX

## BIBLIOGRAPHY

---

**THE FISCAL IMPACT OF PRIVATIZATION  
IN LATIN AMERICA**

**Armando Castelar Pinheiro \***  
**Ben Ross Schneider \*\***

\* Do IPEA / DIPES.

\*\* Princeton University .

---

## 1. INTRODUCTION<sup>1</sup>

State enterprises, privatization and fiscal policy interact in several ways. On the one hand, losses by state enterprises are part of the fiscal problem and fiscal crises push privatization toward the top of the policy agenda. In the late 1970s, state enterprises generated average deficits of four percent of GDP in developing countries [Floyd (1984 p. 144-145) as cited in Waterbury (1992: 190)]. Moreover, fiscal crisis itself usually further impedes attempts to control state enterprises and their losses by weakening the state's administrative and monitoring capacities, strengthening centrifugal tendencies within the state, and exacerbating bureaucratic conflict [see for example Werneck (1993)]. Lastly, investment by state enterprises is a prime target for budget cuts and without investment the quality of products, infrastructure, and services quickly deteriorates. These factors tarnish the image of the companies and increase public support for reform and privatization. A fiscal crisis is a major determinant of, if not a necessary condition for, the decision to privatize.<sup>2</sup>

On the other hand, privatization is perceived to be part of the fiscal solution. Privatization provides a lump sum revenue that can be used to temporarily offset the deficit and it frees governments from the burden of subsidizing loss-making state enterprises and investing in the companies sold. Divestiture of state enterprises through debt-equity swaps reduces the public debt and debt service which in most developing countries became an increasingly onerous item of public expenditure in the 1980s. In addition, privatization frees up administrative resources previously devoted to monitoring and controlling state enterprises.

Interestingly, though, most social science analyses downplay the revenue benefits of privatization, which should not, in their opinion, be a primary objective. An overview report published by the World Bank concluded that:

---

<sup>1</sup>Jonathan Krieckhaus and Guilherme Bacha de Almeida provided valuable research assistance. Ben Schneider thanks the Center of International Studies, the UNDP, and the Pfizer Foundation for financial support. We are grateful to Fabio Giambiagi for providing valuable fiscal data and to Melissa Birch, Eliana Cardoso and Ricardo Varsano for comments on earlier drafts.

<sup>2</sup>For overviews see, Fishlow (1990), Vernon (1988), and Waterbury (1992).



---

the economic benefits of privatization are maximized when governments make improved efficiency the number one goal (...). Maximization of revenue should not be the primary consideration.<sup>3</sup>

Of course, eliminating subsidies to state enterprises has a clear positive impact (though privatization is not the only way to eliminate these losses). However, when political leaders emphasize the fiscal benefits, they usually mean new revenues. Ironically, publications by the IMF and World Bank are unambiguous in downplaying these fiscal benefits, even as their debtor governments adopt privatization to demonstrate their commitment to stabilization.<sup>4</sup>

The objections to the fiscal impulse or the revenue maximization approach to privatization are both theoretical and empirical. The consensus among economists is that the fiscal impact of privatization depends on the increase in the efficiency of the firms sold. Otherwise the simple exchange of an asset for a future stream of income has no net contribution to public accounts.<sup>5</sup> Empirical studies of the longest standing experiences of privatization do not highlight the fiscal benefits. In the industrialized countries fiscal issues were secondary and most analyses of programs there ignore the fiscal impact [see Suleiman and Waterbury 1990: 5]. In Britain by the late 1980s proceeds from privatization covered a large share of the PSBR (Public Sector Borrowing Requirements), but by then the budget deficit and inflation were largely under control [Hyman (1989: 197); Smittin 1990: 68)]. In developing countries, fiscal crises accompanied

---

<sup>3</sup>Kikeri, Nellis and Shirley (1992: 6). For an equally categorical statement from another long time advocate of privatization, see the Economist (21 August 1993).

<sup>4</sup>From the IMF and World Bank, see Mansoor (1988), Heller (1990), Hemming and Mansoor (1988), and Kikeri, Nellis and Shirley (1992).

<sup>5</sup>See Jones (1990), Andic (1990), and the works cited in the previous footnote.

---

decisions to privatize, but post-hoc analyses have revealed little direct fiscal contribution.<sup>6</sup>

Yet political leaders in the 1990s continue to profess their goal of selling state assets to reduce the budget deficit. Announcements in 1993 of forthcoming sales emphasized the fiscal benefits. For example, "empty treasuries have inspired most of Western Europe's planned privatisations" (*Economist*, 21 August 1993, p. 18). Peru was one of the last countries in Latin America to get on the bandwagon, but when the government announced the privatization program in 1993 fiscal motives were again paramount: "the sales will not only help Peru balance its budget and reduce inflation (...) but will also provide more cash for social spending" (*New York Times*, 6 April 1993). In Spain, Privatisation International reported that, "while premier Gonzalez' socialist government is no more committed to privatization ideologically than it has ever been, the widening budget deficit is steadily increasing pressure to raise cash through disposals" (n.55, April 1993, p.1). For *Latin Finance*, the fiscal impulse even has predictive value: "when [Brazil] finally succumbs to fiscal necessity (...) it will be Latin America's last privatization bonanza" (n.48, July/August 1993, p.24).

This paper seeks to make several contributions to this fiscal debate. It adds empirical support for the claims that revenues from privatization are too little and too late to help much in resolving fiscal crises. It presents a more encompassing model that incorporates other indirect effects as well as time preferences to show that only at a price and under very favorable but uncommon situations does privatization make sense for fiscal purposes. This model highlights the shorter time horizons of political leaders in Latin America which helps explain why their views of the fiscal benefits of privatization differ from those of academic economists. The paper concludes with some analysis of the value of privatization as a political signal.

---

<sup>6</sup>See Section 2 and Hachette and Luders (1993) for an in depth empirical analysis of Chile. Others are still skeptical about the efficiency justification and hence place greater weight on fiscal concerns. Przeworski writes: "I do not think that the selling of public firms can be justified by the criterion of efficiency; efficiency could be improved by introducing competition among state firms without privatizing. The motive for privatization is to fill the state treasury, and so it is an appealing step for any deficit-ridden government" (1991: 154).

---

The empirical analysis concentrates on Argentina, Brazil, Chile, and Mexico (see Table 1). In the 1980s and 1990s these countries turned from import substitution and state intervention to trade liberalization and state retrenchment. In the four countries, fiscal deficits contributed to explain this newfound sympathy for market-friendly policies. Although the destination was similar, the paths taken and speeds toward it varied greatly across the four countries.<sup>7</sup>

Although this analysis covers only four countries in one region, the results may have more general applicability since these countries cover much of the universe of privatizations in developing countries and at the same time much of the range of variation. From 1981 to 1991 these four countries accounted for 59 percent of all firms privatized in developing countries (excluding Eastern Europe). Chile ranked first in terms of percent reduction in the number of state enterprises (75 percent) and total gross proceeds as a percent of 1990 GDP (12 percent). In absolute terms, these four countries were in the top five, along with Venezuela, in gross proceeds from privatization (1980-91, Kikeri, Nellis and Shirley (1992: 23, 25, 30)). For the more recent period 1988/92, Chile drops out of international rankings, but Mexico and Argentina are the leaders among developing countries in both proportional and absolute terms. Brazil ranks third in the total value of privatization proceeds (Economist, 19 June 1993, p.112).

These four countries also initiated privatization in different contexts and with different procedures and goals. For example, privatization took place under non-democratic regimes in Chile and Mexico, and democratic governments in Brazil and Argentina. Privatization peaked in Mexico and Chile after significant stabilization and market-oriented reform while privatization and structural adjustment were more or less simultaneous in Argentina and Brazil. The Chilean government in the late 1980s relied on public sales and popular capitalism, while the other governments relied primarily on private sales. Chile and Argentina allowed foreign buyers in while Mexico and Brazil kept them out. This range of variation will help us explore the hypothesis that the lack of a significant short-term fiscal impact is endemic rather than associated with particular contexts or strategies.

---

<sup>7</sup>See Williamson (1990) for a review of reform in the 1980s. See also Fishlow (1990), Cardoso (1991), and Rodrik (1992).

Table 1  
Revenues from Privatization, 1974-1993  
(including debt conversions)

	ARGENTINA		BRAZIL		CHILE		MEXICO	
	US\$ Million	% of GDP <sup>a</sup>	US\$ Million	% of GDP	US\$ Million	% of GDP	US\$ Million	% of GDP
1974					16	.1		
1975					224	2.0		
1976					107	.9		
1977					124	1.0		
1978					115	.8		
1979					165	1.1		
1980					70	.4		
1981			34	.01	112	.6		
1982			125	.05	20	.1		
1983			31	.02	n.a.	n.a.	31	
1984			-	-	n.a.	n.a.	1	
1985			-	-	10	.1	63	.03
1986			-	-	232	1.4	69	.05
1987			22	.01	313	1.7	102	.07
1988			407	.12	560	2.9	514	.3
1989			86	.02	234	.9	726	.4
1990	7,531	4.3	-	-			3,085	1.3
1991	1,905	1.0	1,635	.4			10,680	3.7
1992	5,335	2.6	2,368	.6			6,799	
1993	4,019 <sup>b</sup>		2,531	.6			1,358 <sup>c</sup>	
Total	18,790		7,239		2,301		23,428	

Sources: For Brazil, Pinheiro and Oliveira Filho (1991a), BNDES (1993); for Mexico, communication from the Unidad de Desincorporacion, Secretaria de Hacienda y Credito Publico (current dollars); for Chile, Hachette and Luders (1993); for Argentina, communication from the Subsecretaria de Privatizaciones, Ministerio de Economia y Obras y Servicios Publicos. For Argentina, debt papers traded at face value account for 36 percent of the total proceeds. Other sources: World Bank (1993), IMF's International Financial Statistics (August 1993).

<sup>a</sup>As a percentage of GDP in 1991 dollars because the fluctuations in Argentina's official GDP in dollars exceed 100 percent from 1990-92.

<sup>b</sup>Through August 1993.

<sup>c</sup>Through October 1993.

---

## 2. PRIVATIZATION AND FISCAL ADJUSTMENT

This section presents brief synopses of privatization in each of the four countries and answers a common set of questions for each case. How large are the annual revenues from privatization relative to other measures to reduce spending and increase revenues? Did the revenues generated come to the government after the budget deficit had already been brought under control? Did the fiscal contribution of state enterprises to stabilization efforts predate their sale?

### 2.1. Chile

Privatization in Chile began soon after the military took power in 1973. The process of privatization went through four different phases over a 15 year period and ultimately reduced the share of state enterprises, excluding the copper monopoly, to about a third of the value added in the sixties.<sup>8</sup> In the first and second phases the military government sought to undo the socialist reforms of the Allende government as well as bring the public deficit under control (losses by state enterprises came to a whopping quarter of GDP in 1973). The Allende government had increased the number of state enterprises from 68 in 1970 to 596 in 1973. In the first phase, in 1974, the government returned 325 companies (with a net book value of about \$1 billion) that had been "intervened" by the Allende government to their previous owners. In phase two from 1975 to 1979 the state sold 207 enterprises, most acquired during the Allende administration, generating about \$1.2 billion in revenues. By the end of the second phase in 1980, the government had reduced the number of state enterprises to 48. During this phase, divestiture was geared towards financing the public deficit. To maximize revenues, the government financed the acquisition of the companies and permitted highly leveraged purchases.<sup>9</sup> In addition, the government took no measures to prevent property concentration.

---

<sup>8</sup>See Marcel (1989) on the four periods. Most of the historical data on Chile is from Hachette and Luders (1993).

<sup>9</sup>Although more than one mode of privatization was used, the sale of controlling stocks in public auctions was by far the preferred method of sale.

---

The reform of the public enterprise sector was not restricted, however, to selling assets. The government revamped state enterprises, cut personnel, deemphasized their non-commercial objectives, submitted them to the same rules applying to private firms, allowed them to increase their prices substantially, and subjected new investment to prior central approval. To help reduce the public deficit, the government instructed managers of state enterprises to distribute a high share of their profits as dividends. As a result of this restructuring, in 1980 state enterprises presented a surplus of 0.1 percent of GDP and transferred to the government taxes and dividends equal to 7.8 percent of GDP, about a quarter of the general government's current revenues (Tables A.1.1 and A.1.2). These taxes and dividends, for a single year, exceeded the total revenues from privatization for the whole 1974/80 period which came to roughly 6.3 percent of GDP in 1980.<sup>10</sup>

The macroeconomic crisis that hit Chile in the early 1980s sent the highly-leveraged conglomerates established through privatization in the 1970s into bankruptcy. To salvage these companies the government retook control of most of the state enterprises it had sold in the previous years and absorbed their large debts. Because the government assumed the management and debts but not the full legal ownership of these enterprises, they became known as the "odd sector."

The sale of companies in this "odd" sector from 1984 to 1986 constitutes phase three. These sales initiated the phase of popular capitalism that extended into phase four. This final phase started in 1985 and comprised the sale of large state enterprises created or nationalized by law which formed the core of the public enterprise sector. This was the only phase which did not consist essentially of reprivatizations and is generally more comparable to large scale privatization elsewhere in Latin America.

Although privatization of the odd sector was delayed until the companies were restructured and the economy's performance had improved, and even though proceeds from privatization were used to finance the deficit in 1985/86, revenue maximization was not the main objective of Chilean privatization program in the 1980s. Modes of divestiture became more diversified, as the government tried to distribute ownership, develop capital markets, and reduce public debt, both foreign

---

<sup>10</sup>Calculated from Table 1 and Hachette and Luders (1993: 12-13).

---

and domestic. In the 1985/88 period, 20 percent of the shares divested were sold to workers, 50 percent on the stock exchange and 18 percent to pension funds (Administradoras de Fondos de Pensiones, AFPs) [Marcel (1989: 33)]. Foreign participation increased significantly in the 1980s when investors could use foreign debt (that traded at a 40 percent discount) at face value to pay for privatized shares. Other proceeds from privatization in 1987 and 1988, in turn, were used to reduce domestic public debt.

Over the decade (1978-89) the non-financial public sector went through a cycle from surplus to deficit and back to surplus (see Table 2).<sup>11</sup> Although the deterioration of the fiscal performance coincided with the end of phase two and later recovery with the beginning of phases three and four, privatization did not play a major role in Chile's fiscal dynamics. The major determinant of change in both cases was the current balance of the general government which fell by 9.4 percent of GDP in 1978-83 and increased by 6.6 percent of GDP in 1984/89 (see Table A.1.1). The drop in revenues and the increase in expenditures in the first phase and a substantial contraction of expenses in the second were the driving forces behind this evolution. The revenues from privatization became more important after 1986 when expenditures had already greatly declined. Moreover, over the twelve years from 1978 to 1989 state enterprises consistently ran a current surplus or a small deficit (see Table A.1.2). Their major contribution to Chile's fiscal policy did not come from privatization, but rather from the taxes and dividends they transferred to the government throughout the 1978/89 period.

---

<sup>11</sup>Table 2 presents for each of these countries the operational deficit of the consolidated public sector and of the public enterprises (before government transfers). Detailed fiscal accounts for the four countries are presented in the Appendix.

Table 2

Operational Deficit of State Owned Enterprises (SOEs) and the Non-Financial Public Sector (NFPS) (before Current and Capital Transfers from government, percent of GDP)

	CHILE <sup>a</sup>		MEXICO		ARGENTINA		BRAZIL	
	SOEs	NFPS	SOEs	NFPS	SOEs <sup>b</sup>	NFPS	SOEs <sup>c</sup>	NFPS
1978	1.4	-1.5	4.5	6.7	3.2			
1979	1.1	-4.2	4.8	7.6	3.6			
1980	.2	-5.6	5.9	7.5	4.6		1.6	.5
1981	2.0	-.8	9.2	14.1	5.2		2.9	1.6
1982	1.1	3.4	6.9	16.9	6.9		4.0	3.2
1983	.1	3.0	3.7	8.6	6.3	15.4	3.0	2.5
1984	.8	4.4	3.3	8.5	4.9	6.3	2.6	2.5
1985	-1.1	2.6	4.1	9.6	4.2	5.4	2.4	3.9
1986	.3	1.9	4.3	16.0	2.2	4.2	2.3	5.4
1987	-.3	.6	2.3	16.1	3.3	6.7	2.0	2.2
1988	-.3	-.2	1.1	12.5	4.7	8.6	.1	.2
1989	.3	-1.8	1.6	5.6	3.3	4.7	3.3	8.7
1990	.7	4.0	1.9	5.1	.6	.4		
1991	1.1	-1.8	2.2	1.7	.9			
1992			.4	-1.7	.3			

Source: Tables A.1.1 to A.4.2.

Note: - means a surplus. The deficit of SOEs is equal to the operational deficit minus current and capital transfers from the central government.

<sup>a</sup>Assuming transfers equal to 0 in 1986-89.

<sup>b</sup>SOEs' interest payments in 1988/92 are estimates. Primary deficits are reported in Table A.3.2.

<sup>c</sup>Accounting deficit of Federal SOEs.

## 2.2. Mexico

Privatization in Mexico was preceded by a period of rapid and contentious expansion of the public enterprise sector that culminated in the nationalization of private banks in 1982. The governments of Presidents Echeverria and Lopez Portillo increased the number of state enterprises from 391 in 1970 to 1,155 in 1982. The de la Madrid government initiated privatization and other reforms in response to the macroeconomic crisis of the early 1980s and especially to the public deficit in 1982 of 16.9 percent of GDP. Because state enterprises accounted for about two-thirds of the consolidated deficit of the federal government in the 1978/81 period, reform of this sector was an obvious candidate for inclusion in fiscal policy throughout the 1980s (Table 2).

The divestiture in Mexico evolved in two phases. During the administration of President de la Madrid (1982-88), the main targets were the hundreds of small



---

companies, also known as the "Chiquillera" sector [see Schneider (1991)]. Liquidation of loss-making companies was the most popular mode of divestiture in this phase. But the government also sold assets, merged state firms with other public institutions, and transferred them to state and local authorities.<sup>12</sup> Although divestiture in this period managed to reduce the number of state enterprises to 412 (Lustig 1992: 105) it generated only \$779 million in revenues. In addition to divesting, the government tried to reform the public enterprise sector, allowing for price increases, absorbing \$12 billion of state enterprise debt and increasing the autonomy of the companies through performance contracts [Waterbury (1992: 212)].

In 1986-87 the public deficit again exceeded 16 percent of GDP, after three years under 10 percent, and stayed at 12.5 percent in 1988 (Table 2). Falling per capita incomes, continuing inflation, and large public deficits encouraged the Salinas government (1988-94) to take a more radical approach. Sales became the most common mode of divestiture, and large enterprises, including Telmex and the banks, were included in the program. By 1991, the state had withdrawn from 24 out of 62 sectors in which it used to play an important role.<sup>13</sup>

While persistent deficits had a lot to do with the decision to privatize, the revenues from privatization had little to do with solving the fiscal crisis. In 1978-81 public enterprises were responsible for most of Mexico's consolidated deficit (see Table 2). Thereafter, Mexico's public deficit resulted largely from large expenditures on external and domestic interest payments. Since 1982, and especially after 1986, state enterprises have answered for a declining share of the country's PSBR, both before and after government transfers. Thus, in Mexico too, the contribution of public enterprises to fiscal adjustment came years before privatization proceeds became significant (see Table 2). In fact, revenues from privatization did not go much beyond 0.1 percent of GDP

---

<sup>12</sup>Up to January 1991, 125 SOEs had been merged with other SOEs or transferred to local or provincial authorities [Tandon (1992: 6)].

<sup>13</sup>Lustig (1992:105). A report from the Brazilian embassy in Mexico provided the sectoral information.

---

until the non-financial public sector showed a balanced budget.<sup>14</sup>

Despite their numbers, the Chiquillera state enterprises were not the main culprit for the state enterprises' deficit in the early 1980s (see Table A.2.2). On the contrary, the companies under budget control answered for 80 percent of the state enterprise deficit in the period, with Pemex alone generating almost half of the total public enterprise deficit. This picture changed significantly after 1982, as Pemex and the other controlled state enterprises adjusted, basically by increasing their revenues. The deficit of the Chiquillera state enterprises, in contrast, did not fall until privatization reduced their numbers. However, these firms contributed little to the consolidated public deficit.

Table A.2.3 distinguishes Mexico's large state enterprises, excluding Pemex, by those that were privatized and those that were not. Together, these companies accounted in 1980-89 for almost all the state enterprise deficit (excluding Pemex). Both sets of firms went through major adjustments during the 1980s, but the lion's share of the deficit (before transfers) was caused by the companies that remained state owned. This suggests that the reduction of the state enterprise deficit was not accomplished by selling large loss-making public enterprises.

---

<sup>14</sup>The government cut transfers and subsidies to state enterprises by half between 1982 and 1988, before privatization took off [Kikeri, Nellis and Shirley (1992:4)]. Mexico's public enterprise sector is divided in two for accounting purposes. Most large enterprises, including Pemex, are included in the group under budgetary control ("sector presupuestal"). Although not enterprises, the Social Security Institutes IMSS and ISSSTE are also included in this first group. Most public enterprises in Mexico are classified in the group of state enterprises outside budgetary control ("sector extrapresupuestal"). This group is itself divided in two: the "big three", that include the Federal District Department, the Metro and Telmex, and the "Chiquillera" group, formed by many small state enterprises [see Cepal (1991a)].

---

Over the medium term, in the 1990s, privatization had a profound impact in making fiscal balance and macro stability sustainable. After 1990, nearly \$20 billion went into a contingency fund.<sup>15</sup> This fund served to calm fears that a sudden drop in oil prices would be destabilizing for current account and fiscal equilibria. Overtime the money in this fund also went to retire public debt. This process contributed to the reduction in domestic debt from nearly 25 percent of GDP in 1990 to an estimated 11 percent of GDP in 1993 (the total domestic and international debt dropped from 62 percent of GDP in 1988 to 36 percent in 1991, El Norte, 19 November 1993, p. 39A). So, in Mexico the proceeds from privatization helped macro stability not by closing the deficit but by reducing the medium term burden of reducing debt service which had been one of the major sources of imbalance in the 1980s.

### 2.3. Argentina

In Argentina, state enterprises contributed with a major share of the public deficit throughout the 1980s. Besides the traditional drain of resources represented by the politically motivated pricing of inputs and outputs, the performance of state enterprises was seriously undermined by heterodox attempts at controlling inflation in which public prices were the first to be frozen and the last to be freed. In the 1980s attempts at controlling the deficit of state enterprises were feeble and fleeting. Although President Alfonsín privatized some state enterprises, including the domestic airline company, and tried to curtail transfers from the treasury to public enterprises, these companies still accounted for an estimated operational deficit of 4.7 percent of GDP in 1988 (before transfers).

Privatization did not become a priority until the end of the 1980s despite the fact that the deficit of state enterprises was higher in Argentina than in the other three countries for most of the 1980s (see Table 2). Alarming fiscal deficits usually precede decisions to privatize, but the Argentine case shows that the lag before the decision can be lengthy. By the end of the 1980s, three years of declining output and the two hyperinflation episodes of 1989 made more drastic action palatable. President Menem's privatization program sped up the sale of state enterprises, included large traditional companies, and was part of the broader effort to reduce the public deficit and the

---

<sup>15</sup>Interview with Jorge Silberstein, Subcoordinador General, Unidad de Desincorporación, SHCP, 16 November 1993.

---

external debt. Since 1989, the government has sold its television, telecommunication and electricity companies, Argentina's international airline, oil fields and YPF shares, petrochemical concerns, ports, the gas distribution company, hotels, miscellaneous real state, and the railway merchandise transportation company. Up to mid 1993, privatization proceeds totaled \$18.8 billion (47 percent in cash) (data provided by the Ministry of Economics).

Shedding assets was not the only way the state enterprise sector contributed to reducing the public deficit. The labor force dropped drastically from 295,000 in 1990 to 50,000 by the end of 1992, with divestment contributing two-thirds of this decline [World Bank (1993)]. Prices were allowed to increase and peaked at record levels in 1989 and 1990. Finally, the government reduced subsidies to the private sector, such as those in the Buy-Argentina Law. In 1992, state enterprises had a surplus for the first time in many years.

Privatization was accompanied by major changes in tax and expenditure policies. The government took major steps to reduce tax evasion and subsidies to the private sector, while improving the quality of the tax system by enlarging the incidence of the value added tax and eliminating several low-yield distorting taxes. Expenditures rose as a result of larger transfers to Provinces and the Social Security. These permitted, however, the transfer of thousand of public employees to Provinces and to end the accumulation of arrears with pensioners. Employment in the national administration fell to 385,000 from 670,000 in 1990. Of this reduction, 280,000 employees were transferred to provincial governments [World Bank (1993)]. Simultaneously, salaries and salary dispersion increased substantially.

In contrast to the other three cases, proceeds from privatization in Argentina did come in sufficient quantity and at the right time to help close the budget deficit.<sup>16</sup> The overall impact of these revenues was, however, secondary; the major source of adjustment was

---

<sup>16</sup>"The speed and character of privatization in Argentina can only be understood by acknowledging that privatization was to an important degree an instrument of stabilization policy. After the two hyperinflation experiences of 1989 and 1990, the result of privatization helped to avert a third" [Gerchunoff et alii (1992: 4)].

---

the increase in the tax revenues of 7.3 percent of GDP from 1990 to 1992 collected by the central government and the social security administration. In addition, as in Chile and Mexico, state enterprises had managed to reduce their deficits before divestiture accelerated: the public enterprise primary deficit (before transfers) as a percent of GDP fell from an average of 2.4 in 1978-84 to 1.9 in 1985-88 and 0.9 in 1989-92.<sup>17</sup> However, the contribution of privatization to fiscal adjustment came at a high cost in that the process created rents for the buyers and increased prices to consumers [see Gerchunoff et alii (1992)]. In effect, privatization created new indirect taxes on consumers of public services.

#### 2.4. Brazil

As in Mexico, in Brazil in the 1970s the expansion in the number and scope of state enterprises was exponential: in the 1966/77 period alone 219 state enterprises were established, most in sectors with significant private sector activity. A first attempt at controlling the expansion of state enterprises came in 1980 with the creation of the Secretariat for the Control of State Enterprises (Sest). In its first census, Sest identified 505 institutions under public control, about half of which (268) were enterprises. Only 40 of these companies had been created by law and of the remaining 228 one third were bankrupted private companies the state absorbed. Privatization began officially in 1981 with a presidential decree creating the Special Privatization Commission. Over the rest of the decade (1981-89) the government sold 38 companies, transferred 18 to state governments, merged 10 into other federal institutions, closed four, and rented one. Most of the sales were reprivatizations of small companies and proceeds were minimal (and largely financed by the government).<sup>18</sup>

---

<sup>17</sup>As in Brazil, the continuation of the privatization program will depend on the provinces and cities. In late 1991, out of Argentina's 220 state enterprises (down from 353 in mid-1980), only 57 were federal-owned, with the provinces owning 147 and the cities the remaining 20 [World Bank (1993)].

<sup>18</sup>See Werneck (1989), Pinheiro and Oliveira Filho (1991a), and Schneider (1991) on Brazilian privatization in the 1980s.

---

The snail's pace of privatization in the 1980s was due largely to the lack of political commitment. As with de la Madrid (before 1985) and Alfonsín, the Figueiredo and Sarney administrations tried to reform the state rather than change the development strategy. They emphasized reducing the deficit of state enterprises and cleaning up their finances by transferring a lot of their debt to the government.<sup>19</sup> In addition, ceilings were established for investment, current expenditures, and imports of public enterprises. These ceilings and other restrictions reduced the number of state enterprises among Brazil's 500 largest enterprises from 158 in 1980 to 80 in 1990.

Privatization was a major issue in the 1989 election, and President Collor made it one of his top priorities. The Collor government expanded the divestiture program to include large traditional state enterprises and embedded it in a broad program of market-oriented reforms which included trade liberalization and deregulation. The participation of foreign investors, forbidden in the 1980s, was allowed, though in a restricted form. By mid 1993 the Collor and Franco governments had sold 24 state enterprises and targeted 40 more for sale. These companies were mostly in metallurgy, petrochemicals and fertilizers, sectors that comprise the bulk of state participation in manufacturing. The initial commitment of the Franco government to privatization seemed weak but by 1993 officials were promising to expand the program to public utilities, transportation, and communications which would mean selling off most of the largest state enterprises.

The state enterprise deficit in the 1980/85 period, though responsible for more than half of the total PSBR, was smaller than in Mexico and Argentina (see Table 2). Since 1986, state enterprises have no longer been primarily responsible for the Brazilian public sector deficit. In addition, in 1986-91 state and municipal state enterprises accounted for about 70 percent of the public enterprise deficit, with borrowing requirements of approximately one percent of GDP (Table A.4.2). Unfortunately, the adjustment accomplished by federal state enterprises resulted mostly from contracting investment, which dropped from an average of 4.9 percent of GDP in 1980-82 to 3.3 percent in 1983-88 and just 1.9 percent in 1989-91. The deterioration in the quantity and quality of services

---

<sup>19</sup>In the steel sector alone, the federal government absorbed debts worth \$8.2 billion between 1987 and 1989 [Passanezi Filho (1993)].

resulting from this decline in investment levels and the concomitant doubling of personnel expenditures as a percent of GDP from 1984 to 1989 help to explain the support privatization received from large segments of Brazilian society in the 1989 elections.

The government used the proceeds from privatization to reduce public debt. Reducing the public deficit, beyond the decline in interest payments resulting from debt conversion, has not been a major contribution of divestiture. Cash proceeds, amounting to about \$150 million, increased in the Franco administration and were used to expand expenditures. However, privatization ultimately had little impact on fiscal balance and macro stabilization because the necessary accompanying fiscal adjustments were lacking.

### 3. MODELING THE FISCAL IMPACT OF PRIVATIZATION

A fuller assessment of the fiscal impact of privatization requires an analysis of the effects of asset sales when they occur (0) and in subsequent periods ( $t = 1, 2, \dots$ ):<sup>20</sup>

$$\Delta PSBR_0 = (1-\alpha) (1+x\pi) V^s_0 + \tau r^p K_0 - r^s K_0 + I^s_0 \quad (1)$$

$$\Delta PSBR_t = i\Delta D_0 + \tau r^p K^p_t - r^s K^s_t + I^s_t \quad t=1,2,3,\dots \quad (2)$$

where  $\Delta PSBR$  is the reduction in Public Sector Borrowing

Requirements,  $\alpha$  is the portion of revenues from privatization used to redeem public debt ( $0 \leq \alpha \leq 1$ );  $\pi$  reflects the fact that the company's economic value may differ for private owners and for the state, with  $x$  being the part of this difference that is reflected in the sale price;  $V^s_0$  and  $K_0$  are the economic value for the state and the replacement cost of the state enterprise being privatized, respectively;  $I^s$  and  $I^p$  are the investment in the companies being sold under public and private ownership;  $\tau$  is the tax rate on corporate profits;  $r^p$  and  $r^s$  are the before taxes rates of return under private and public management,

<sup>20</sup>The following model draws on Pinheiro and Giambiagi (1994) and Hachette and Luders (1993). Our model puts into an integrated framework the distinct effects considered in these other two models and introduces the difference in growth rates under public and private management; it clarifies the distinct sources of a potential fiscal impact of privatization, separating the scale effect ( $V^s_0$ ) and the role played by differences between the state and private agents, debt conversions, etc.; and it stresses the role of time preferences.

respectively;  $i$  is the average interest paid on the public sector debt; and  $D$  is the public sector debt. In addition, we have that

$$D_0 = \alpha (1+x\pi) V^s_0 / (1-d) \quad (3)$$

is the total debt reduced using privatization revenues, where  $d$  is the discount on the debt;

$$K^j_t = (1-z) K^j_{t-1} + I^j_t \quad j = s, p \quad (4)$$

with  $z$  being the rate of depreciation; and

$$V^s_0 = r^s K_0 (1+\delta) / (\delta+z) \quad (5a)$$

$$V^p_0 = r^p(1-\tau) K_0 (1+\delta^p) / (\delta^p+z) \quad (5b)$$

$$1+\pi = V^p_0 / V^s_0 = [r^p(1-\tau)(1+\delta^p)/r^s(1+\delta)] [(\delta+z)/(\delta^p+z)] \quad (6)$$

with  $\delta$  and  $\delta^p$  being the rates of time preference for the state and the private sector, respectively; and  $V^p_0$  the economic value of the state enterprise for a private investor.

After some algebra, using (3) to (6), assuming constant investment in all periods and that occasional fiscal deficits or surpluses do not affect the stock of public debt, the present value (PV) of the fiscal adjustment resulting from divestiture can be written as:

$$\begin{aligned} RV = V^s_0 \{ & [ (1+x\pi) (1 - \alpha + \alpha i/((1-d)\delta)) - 1] + \\ & + \tau r^p/r^s [1 + (I^s/K_0)/\delta] + \tau r^p/r^s [((I^p-I^s)/K_0)/\delta] - \\ & - [(I^s/K_0)/\delta] (r^s-z-\delta)/r^s \} \end{aligned} \quad (7)$$

Equation (7) reveals five conditions under which, other things being equal, privatization may reduce the present value of PSBR. First, if the company is worth more for private investors than for the state ( $\pi > 0$ ), and the government is able to make investors bid away at least part of this premium ( $x > 0$ ). Second, if the effective real rate of interest on the public debt ( $i/(1-d)$ ) exceeds the state's rate of time preference ( $\delta$ ). Third, if the state enterprise becomes more profitable after sale ( $r^p > r^s$ ). Fourth, if the state enterprise grows faster in private hands ( $I^p > I^s$ ). Fifth, if the rate of return of the state enterprise net of depreciation is lower than the state's rate of time preference ( $r^s - z < \delta$ ). Together these



---

conditions are sufficient (but not necessary) for  $PV > 0$ . The same result ( $PV > 0$ ) may be achieved with subsets of these five conditions. The fiscal impact, if any, will be proportional to the value of the state enterprises privatized ( $V_0^s$ ).

Table 3 shows that depending on whether the above conditions are fulfilled or not, the overall fiscal impact of privatization may range from negative to several times the value of the assets sold.<sup>21</sup> The sign and magnitude of  $PV$  and the temporal profile of the fiscal impact depend on  $V_0^s$  and on four other factors: a) how urgent political leaders think it is to reduce the PSBR; b) how significant revenue maximization is vis-à-vis other objectives of privatization; c) whether the state and business actors have different propensities to invest, different time preferences, or are able to extract different returns from the company; and d) if revenues are used to cancel public liabilities and under what conditions this takes place.

The base case in Table 3 approximates a situation in which ownership transfers are neutral from a fiscal perspective. In this case, the state is indifferent to rearrangements of its portfolio ( $i/(1-d) = \delta = r^s - z$ ) and the public and private sectors are alike, that is,  $r^p = r^s$ ,  $IP = I^s$  and  $\delta = \delta^p$  (note that in the base case  $\pi = -r$ ). Under these circumstances, privatization will have a small fiscal impact equal to the present value of the taxes collected on the stream of future private investment ( $r^p \tau (IP/\delta) (1+\delta)/(\delta+z)$ ), but only to the extent that  $IP$  is an addition to the economy's aggregate investment.

The urgency to adjust reflects the higher social value of present vis-à-vis future revenues. Although it does not change the temporal profile or the magnitude of gains and losses resulting from privatization, the increased utility of short-term inflows raises the present value of the fiscal impact of privatization by reducing the economic value of the company for the state and opening room for arbitrage gains through sale to private investors. In fact, from a present value perspective, a high rate of time preference may justify

---

<sup>21</sup>Figures in Table 3 are reported in units of  $V_0^s$  and  $K_0$ . The first are more adequate for evaluating the impact of privatization using the sale values, but yields results that are not comparable across different cases. The second, in turn, can be used to compare the fiscal impact for the different cases considered in Table 3.

TABLE 3  
PRESENT VALUE AND ANNUAL REDUCTION IN PSBR RESULTING FROM PRIVATIZATION  
(IN ALL CASES, UNLESS OTHERWISE STATED,  $Is/Ko = Ip/Ko = 3\%$ ,  $\alpha = p = i/(1-d) = rp - z =$   
 $= rs - z = 6\%$ ,  $\beta = 25\%$ ,  $z = 3\%$  AND  $x = 1$ )

Case	$\pi$	Present value in % of <sup>a/</sup>		Annual reduction in % of <sup>a/</sup>	
		Vos	Ko	Year 0	Year 1
Without debt-equity swaps ( $\alpha = 0$ )					
Base	-0.25	0.8	0.8	75.8	-3.8
Urgent to adjust ( $\beta = 12\%$ )	0.18	60.7	40.8	75.8	-3.8
Very urgent to adjust ( $\beta = 18\%$ )	0.57	105.2	53.2	75.8	-3.8
High state investment ( $\beta = 12\%$ , $I_s/K_o = 7\%$ ) <sup>b</sup>	0.18	82.9	55.7	79.8	-0.1 <sup>c/</sup>
Very high state investment ( $\beta = 12\%$ , $I_s/K_o = 10\%$ ) <sup>b</sup>	0.18	99.6	66.9	82.8	2.6 <sup>d/</sup>
Private investor risk averse ( $p = 12\%$ )	-0.52	-26.7	-28.3	46.7	-3.8
Private investor very risk averse ( $p = 18\%$ )	-0.64	-38.5	-40.8	34.2	-3.8
High private investment ( $I_p/K_o = 7\%$ )	-0.25	1.8	1.9	75.8	-3.7
Very high private investment ( $I_p/K_o = 10\%$ )	-0.25	2.5	2.7	75.8	-3.6
High private profits ( $r_p = 12\%$ )	0.00	34.3	36.4	103.0	-3.0
Very high private profits ( $r_p = 18\%$ )	0.50	101.5	107.6	157.5	-1.5
Very favorable ( $I_p/K_o = 10\%$ , $\alpha = r_p = i/(1-d) = 18\%$ )	2.14	291.6	147.5	157.5	-1.2 <sup>e/</sup>
All proceeds used for debt-equity swaps ( $\alpha = 1$ )					
Base	-0.25	0.8	0.8	-3.8	1.0
Urgent to adjust ( $\beta = 12\%$ )	0.18	1.6	1.1	-3.8	1.0
Very urgent to adjust ( $\beta = 18\%$ )	0.57	0.4	0.2	-3.8	1.0
High state investment ( $\beta = 12\%$ , $I_s/K_o = 7\%$ ) <sup>b</sup>	0.18	23.8	16.0	0.3	4.7 <sup>f</sup>
Very high state investment ( $\beta = 12\%$ , $I_s/K_o = 10\%$ ) <sup>b</sup>	0.18	40.5	27.2	3.3	7.49
Private investor risk averse ( $p = 12\%$ )	-0.52	-26.7	-28.3	-3.8	-0.7
Private investor very risk averse ( $p = 18\%$ )	-0.64	-38.5	-40.8	-3.8	-1.5
High interest rate ( $i/(1-d) = 12\%$ )	-0.25	75.8	80.3	-3.8	5.8
Very high interest rate ( $i/(1-d) = 18\%$ )	-0.25	150.8	159.8	-3.8	10.6
Very favorable ( $I_p/K_o = 10\%$ , $r_p = i/(1-d) = 18\%$ )	0.50	405.0	429.3	-1.5	27.4

<sup>a</sup>Negative values stand for increases in PSBR.

<sup>b</sup>These cases consider a rate of time preference for the state of 12%. Comparisons should use the urgent-to-adjust case as a reference.

<sup>c</sup>In year 10 becomes equal to -2.9.

<sup>d</sup>In year 10 becomes equal to -2.3.

<sup>e</sup>Fiscal impacts in this case go up annually and reach 3% of  $Ko$  after 9 years.

<sup>f</sup>Falls rapidly to 1.9 in year 10.

<sup>g</sup>Falls rapidly to 2.5 in year 10.

---

privatizing in conditions that tend to depress the sale price, such as high inflation and declining output. Note, though, that if rapid reductions in the PSBR are the main goal of a decision to privatize, then the government should not swap equity for debt. Governments may also decide to privatize if they are unable to promote the investment required to keep their state enterprises competitive. In this case, by foregoing the need to invest in the privatized companies governments achieve a short-term relief to public expenditures and, if the state's rate of time preference exceeds the net rate of return of state enterprises, it will also reduce the present value of the PSBR.<sup>22</sup>

The priority given to maximizing revenues influences the timing of sale and the regulatory environment in which the state enterprise will operate after privatization. These, in turn, affect the values of  $r^p$ ,  $\delta^p$  and  $x$ . Measures to maximize  $x\pi$  and  $r^p/r^s$  include favorable price and competition policies, the financing of sales, the guarantee of buying shares back, allowing the participation of all interested buyers (including foreign investors), and the postponement of privatization until the macroeconomic environment is stable.

A special case arises when  $r^s < 0$  -- that is, the rate of return extracted by the state is negative -- and the government is subsidizing the SOE through current transfers. In this case,  $V_0^s < 0$  and privatization will always lead to an increase in PV, even if that means giving the SOE away. If, however,  $r^s$  is also negative, nobody would want such a (Greek) present, and the best course of action would be to shut down the company.<sup>23</sup>

The foregoing empirical comparisons and modeling exercise demonstrate the wide variety of fiscal impacts that privatization can have. The relative magnitude and timing of the fiscal impact varied widely across the four cases. The fiscal impact also depends heavily on the conditions in which firms are sold and the varying preferences of the officials who privatize them.

In Chile in phase two, Brazil, and especially Argentina revenue maximization was the dominant objective. In Chile, the revenue obsession compromised the whole process and led to a reversal of privatization in the

---

<sup>22</sup>Pinheiro and Giambiagi (1994) show this to be the case in the current privatization program in Brazil.

<sup>23</sup>We thank Ricardo Varsano for calling our attention to this fact.

---

early 1980s. In Brazil, the government has been willing to let private buyers increase their market power through the acquisition of state enterprises, reduce competition, and thereby seriously compromise the efficiency benefits of privatization. In Argentina, the government distorted regulation and pricing policies to raise the market value of the companies sold [Gerchunoff et alii (1992)].

In other cases such as Chile (in the 1980s) and Mexico governments pursued other objectives and accepted the consequent losses in revenues. To spread ownership and reduce the risk of reverse privatization, Chile's government offered workers and the general public generous investment opportunities to acquire shares of Chile's largest financial and industrial state enterprise. By one estimate this strategy may have cost the government as much as 18 percent of revenues [Hachette and Luders (1993: 73)]. In Mexico, at least three features of the program helped to reduce total proceeds. First, offer prices were not the only criterion used to select buyers; the commitment to invest and introduce new technologies also mattered a lot. Second, new owners could not reduce the company's labor force at will; in fact, buyers were not supposed to lay off workers. Third, the exclusion of foreign investors reduced the number of bidders.<sup>24</sup>

Differences between the state and private sectors may work for or against fiscal adjustment through privatization. If private investors are more risk averse than the state, and there are some sound legitimate reasons why they may be, then privatization may be a bad business from a fiscal perspective.<sup>25</sup> Risk aversion reduces the value of the company for private investors. In Argentina and especially in Brazil the difficult macroeconomic conditions and the lack of sound stable regulations certainly made investment in privatization risky and thereby reduced the fiscal impact.

High growth under private management has a very modest impact on fiscal accounts, from a present value perspective, because the increase in tax collection

---

<sup>24</sup>From 1987 to 1991 foreign investors acquired only 3 (small) companies out of 156 sold. Minority foreign participation was important in several other sales.

<sup>25</sup>There are three main reasons for having  $\delta < \delta^0$ : a) greater uncertainty about the macroeconomic environment; b) lack of control over regulations; and c) risk of future state intervention.

---

takes place over the very long run. In addition, for such an impact to exist, private investment in the privatized company cannot result from simply reducing investment elsewhere. A more favorable and probable outcome is that private management increases the company's rate of return. In this event the most significant impact comes from the higher value the company has for private investors and less from increased taxes in the future, particularly if the government is pressed to reduce the fiscal deficit. For privatization to benefit the public accounts, therefore, it is essential that the government is able to force investors to bid away the premium on the sale price.<sup>26</sup> Restricting the number of buyers, especially foreign buyers, tends to frustrate this objective.

Private managers usually increase profitability by shedding labor, renegotiating contracts with suppliers, distributors and customers, and increasing efficiency. The room for cutting costs is sometimes immense. In the Argentine hydrocarbons sector, for instance, subsidies to private firms in 1989 were estimated at \$1 billion, while the Buy Argentine Law may have cost to Treasury as much as \$600 million [World Bank (1993)]. Usually, however, part of this income redistribution is done by the state in the preparation for sale and constitutes the primary contribution of state enterprises to fiscal adjustment. In Chile and Brazil, new managers turned losses into profits in state enterprises before they were privatized.

In some cases government regulation or lack thereof may be the primary cause of increased profits and hence increased revenues from the sale. Both in Brazil and Argentina, very little was done to limit the market power of new private owners, so that privatization redistributed income from consumers to the state and the new owners. In such cases the fiscal benefit results from a hidden tax on consumers sometimes at the expense of increased efficiency and consequently higher taxes over the longer run.

Several countries in Latin America, including the ones examined here, have used part of the proceeds from

---

<sup>26</sup>This premium is given by  $\pi$  defined in expression (6) by the ratio of economic values to private entrepreneurs and the state. The state does a good deal if it gets paid at least  $Vos$  and the private sector if it pays at most  $Vop$ . The room for maneuver, that is, fixing the sale price, is given by the difference between the two.

---

privatization to redeem public debt, that traded in secondary markets at significant discounts. Strictly speaking, the fiscal impact of divestiture in this case arises from the existence of the debt discount and not from privatization proper. Privatization programs, nevertheless, were instrumental in making this portfolio restructuring feasible, and it is not clear that governments would have otherwise been able to appropriate part of this discount.

Debt-equity swaps, however, have the drawback that potential benefits are long term and may have a reduced present value if it is urgent to close the fiscal gap. Debt conversion is more beneficial when the effective rate of interest is high, either because the debt is heavily discounted as in Brazil and Argentina or because the interest rate itself is high as in Mexico.<sup>27</sup> Argentina reduced its external debt by about \$9 billion through privatization through the end of 1992. The Brazilian program concentrated on redeeming public debt and domestic debt instruments accounted for about 98 percent of total revenues in 1991-93. In Mexico, since 1991 revenues from privatization helped reduce domestic debt to close to 10 percent of GDP (after peaking at 57 percent of GDP in 1986). This reduction contributed to the significant decline in the interest rate and hence expenditures on debt service.

In sum, how likely are countries to achieve significant short-term fiscal gains through privatization? Not very. Combining the results in Tables 1 and 3 and comparing them with the deficits in Table 2, shows that the fiscal impact of privatization is small compared to the gaps governments needed to cover. Only under extremely favorable conditions would privatization go beyond a simple exchange of an asset for a stream of future income, with a neutral long-term impact. Conditions under which privatization usually takes place, however, are generally far from favorable. The same fiscal and macroeconomic instability that increases the utility of short-term revenues for the state lowers the economic value of the state enterprise for private investors. Extra gains resulting from exploiting enhanced market power may be short lived and private agents realize that. A perennial fiscal gain is more likely to result from appropriating debt discounts, reducing total public debt, or ending subsidies to the private sector, but privatization is

---

<sup>27</sup>From expression (7) one derives that PV is maximized by  $\alpha=0$  when  $\delta > (1/(1-d))$ , by  $\alpha=1$  when the opposite happens and does not depend from  $\alpha$  when  $\delta=1/(-d)$ .

---

not necessarily the best instrument nor alone sufficient for achieving these ends.

#### 4. IMPLICATIONS FOR THE POLITICAL ANALYSIS OF PRIVATIZATION

In its review of privatization worldwide, the Economist concluded that

whatever the circumstances, two overriding aims are usually involved. One is to shrink the state, in pursuit of greater economic efficiency; the other is to raise cash. These hopes are often in conflict (...) Often the success of a government's privatisation programme turns on the way this dilemma is resolved (21 August 1993, p. 18).

This dilemma may appear in day to day policy making but the trade off between efficiency and revenues evaporates over time and in economic theory. Over time the trade off between fiscal and efficiency benefits is really a trade off between revenues now and revenues later. If long term fiscal gains result from enhanced efficiency, then short-term measures to jack up sale prices which reduce efficiency also thereby reduce the longer term fiscal contribution of privatization.

Beyond efficiency and revenues, privatization has other potentially significant impacts such as greater investment, reorientation of government spending, political realignment, expansion of capital markets, and increased foreign investment. The costs of pursuing these various goals as well as the speed of privatization can usually be estimated in terms of foregone sale proceeds. Measures like restricting foreign investment to maintain national control, providing lots of shares to workers or small investors to generate political support, selling an infrastructural firm quickly on the condition that the new owners invest heavily, all reduce the sale price.

The vast literature on managing and controlling state enterprises often suffered from a neglect of the conflicting goals ascribed to the managers of these enterprises. Different principal(s) with multiple goals, expected their agents to promote industrialization, transfer technologies, develop poor regions, subsidize consumers, maintain employment, and generate taxes and profits. Effective managers found ways to balance and reconcile such multiple and conflicting objectives. Ironically, effective privatization depends on the same skills for reconciling and balancing the multiple objectives of privatization in order to realize its multiple potential benefits.

---

The puzzle posed in the introduction remains: why, despite the weight of economic evidence and analysis against giving top priority to fiscal concerns, do political leaders, as well as their highly trained and respected economic advisors, continue to claim that their privatization programs are going to help balance the budget? Three plausible political explanations consider variations in time horizons, the packaging of reform strategies, and credibility.

Time horizons for politicians in Latin America are generally short especially since most Presidents are constitutionally barred from reelection. Worse, even single constitutional terms have been difficult to serve out as Alfonsín, Collor, and Pérez will attest. Given the trade-offs between the long term costs of the fiscal obsession and short term receipts, politicians with short time horizons have strong incentives to maximize immediate receipts. Since outsiders have longer time horizons, they tend to be less enthusiastic about the fiscal benefits of privatization which helps explain why economists at the IMF, World Bank, the Economist, and elsewhere consistently conclude that privatization has little fiscal impact while government leaders just as consistently ignore them.

From the perspective of political feasibility, politicians and their economic advisors may really want to privatize to promote efficiency but realize that it can be politically risky and hard to generate much excitement for privatization with arguments about the long term improvement in social welfare. If, in contrast, politicians can link privatization to the simple and popular goal of deficit reduction, they can generate more popular support. To the extent that elected leaders worry more about packaging reforms to make them politically palatable, the fiscal argument for privatization may be more common in democracies.

Finally, privatization can also be valuable to political leaders to signal credible commitments both within the state and to private economic agents.<sup>28</sup> As a signal, privatization has distinct advantages. The sale of a large state enterprise generates enormous press coverage. And, because of the presumption (often exaggerated) that powerful vested interests will block privatization, successful sales demonstrate political backbone. In contrast, real fiscal adjustment depends more on reducing expenditures or increasing revenue collection on the margins. Neither policy generally

---

<sup>28</sup>On signalling, credibility, and uncertainty, see Rodrik (1989a, 1989b, 1991, 1992). His empirical focus is usually trade liberalization.



---

generates as much press coverage (especially in terms of coverage per dollar of public funds involved) or demonstrates comparable political will.<sup>29</sup>

Within the state, privatization can send a clear signal to managers of public firms. The management of state enterprises is always complicated by the multiple goals they pursue and the multiple constituencies they serve. Sometimes, government leaders can impose reform programs that eliminate deficits in and transfers to the state enterprise sector. But, these reforms are hard to sustain [Kikeri, Nellis and Shirley (1992: 17)], presumably in part because signals from principals become multiple and contradictory once again. However, as noted in the comparisons above, the fiscal benefit of privatization usually comes before privatization as managers of state enterprises cut costs and losses, and begin generating profits. It is the government's protestations of commitment to fiscal goals through privatization that send a clear signal to managers of what is expected of them.

The clarity of political signalling to outsiders in the private sector is even more crucial to the success of economic reform and stabilization especially in the context of extreme economic and political fluctuations of the 1980s in Latin America. Reducing high inflation in Latin America depends heavily on expectations, especially regarding budget deficits. Politicians may therefore tie privatization to fiscal adjustment to signal the intensity of government commitment to stabilization. This signalling is more effective if it

---

<sup>29</sup>A comparable example of picking a policy for its signal value is the popularity of across-the-board salary cuts in the public sector. No specialist in public administration would recommend such cuts as a sustainable method to reduce costs and raise productivity. Yet the complex recommendations these specialists generate are unlikely to signal credible intentions have more than fleeting visibility, or demonstrate government commitment. Rodrik argues that direct signals are best and gives the example of subsidizing imports to signal commitment to trade liberalization (1989: 767, 770-1). What he neglects is that some policies are inherently better signals because they are more visible and presumed to be costly. In some instances, indirect signals may be more cost effective.

---

demonstrates how much political capital the government is willing to spend to privatize.<sup>30</sup>

Signalling is costly; governments have to invest in policies or absorb high costs associated with them to make them credible signals. The cost varies according to the government's general endowment of credibility which in turn depend on things like electoral mandates, reputations of top policy makers, programmatic party support, and coercive backing. The liberalization and stabilization programs adopted in Mexico and Chile in the 1980s generally enjoyed high levels of credibility, especially in Chile.<sup>31</sup> In contrast, Alfonsín, Sarney, and Collor were all unknown quantities, had weak electoral and legislative support, and hence suffered severe credibility deficits. All three seemed to try to signal via privatization, though in all three cases the signalling backfired. Sarney and Alfonsín backed down when opposition to privatization arose, and Collor's privatization program kicked in too late to effectively signal intentions in the first year and a half of his term. Menem had stronger electoral and legislative support but because of his Peronist roots had almost no credibility as a champion of fiscal discipline and market-oriented reform. Menem's privatization program arguably sacrificed efficiency considerations more than the programs in the other countries which indicates a willingness to invest in privatization as a signal.

Privatization may have attractions as a signal, but it is a costly and risky one. Closely linking privatization programs and fiscal adjustment can undermine both policies by compromising the efficiency goals of privatization and diminishing the credibility of efforts to promote fiscal balance. For example, Collor's economic team claimed they would balance the budget in 1990 using revenues from privatization. Over the course of the year, the revenues projected from privatization continued to drop and the projected

---

<sup>30</sup>Rudiger Dornbusch explicitly favored using privatization as a signal in the stabilization program he recommended for Brazil: "rapid privatization must **signal major change**. Put the best companies on the table and **startle the world** by doing something unconventional but in the right direction" (*Business Week*, 13 September 1993, p. 8, emphasis ours).

<sup>31</sup>In Mexico, during the 1st phase, several divestitures generated little or no revenue but a lot of political controversy (Fundidora, Aeromexico). However, these divestitures had a deep impact overall on business expectations [see Schneider (1991)].

---

deficit continued to rise, sending precisely the wrong signal (see Schneider 1992). Furthermore, the ease of gaining resources from privatization can undermine longer term efforts at fiscal discipline by distracting the attention of policy makers and weakening the coalition for fiscal discipline.<sup>32</sup>

---

<sup>32</sup>See Abreu and Werneck (1993). Mitchell argues that privatization in the Thatcher government gave the impression of addressing the fiscal problem without in fact doing much about it (1990: 24).

# APPENDIX

TABLE A.1.1  
CHILE: FISCAL ACCOUNTS OF CONSOLIDATED PUBLIC SECTOR, 1978-90 (% OF GDP)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
1. General government													
Current revenue	33.2	32.5	32.9	32.1	29.9	27.7	28.7	28.6	29.1	29.2	29.8	29.9	26.1
Direct taxes	8.1	7.2	7.3	5.8	5.7	5.0	4.7	3.7	4.7	5.1	8.7	10.0	6.8
Copper	2.8	1.9	1.9	0.2	1.0	1.9	1.3	0.5	1.4	2.0	5.8	7.0	4.5
Non-copper	5.3	5.2	5.4	5.5	4.8	3.1	3.4	3.1	3.3	3.1	2.9	3.0	2.3
Indirect tax	13.7	13.3	13.4	14.8	13.8	14.6	16.3	17.1	17.0	17.3	14.5	14.1	14.5
Social security	3.7	5.3	5.6	4.7	3.3	2.8	2.8	2.4	2.5	2.2	1.9	1.9	1.9
Non-tax revenue	7.7	6.7	6.6	6.9	7.2	5.3	5.0	5.5	4.8	4.6	4.7	4.0	2.9
Current expenditures	26.7	24.8	24.5	26.6	31.9	30.5	30.7	29.6	28.2	27.0	24.4	22.0	21.7
Personnel	10.0	9.1	8.8	7.8	7.8	6.7	6.4	5.8	5.3	4.8	4.4	4.2	4.0
Goods and services	4.7	3.0	3.1	2.9	3.3	3.2	3.4	3.2	3.9	4.2	3.8	3.6	3.5
Social security	6.9	7.0	7.1	8.2	10.8	9.7	10.1	9.0	8.7	8.0	7.2	6.6	6.9
Transf./Subs. priv. sector	2.9	3.8	4.1	6.9	9.1	8.9	8.2	8.0	7.6	7.0	5.8	5.3	4.9
Interest payments	1.6	1.2	0.8	0.4	0.6	1.8	2.4	3.2	2.4	2.9	3.0	2.2	2.3
Domestic	0.9	0.7	0.5	0.2	0.0	1.3	1.8	2.4					
External	0.7	0.5	0.4	0.3	0.5	0.5	0.6	0.8					
Others	0.7	0.5	0.5	0.4	0.4	0.4	0.2	0.3	0.3	0.2	0.2	0.1	0.2
Copper stabilization fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.4	4.1	
Current balance <sup>a</sup>	6.6	7.7	8.4	5.5	-2.0	-2.8	-2.0	-0.9	0.9	2.0	2.0	3.8	
Capital revenues <sup>b</sup>	1.1	2.2	1.7	2.8	7.5	4.0	3.2	3.0	3.4	3.6	3.4	2.2	1.1
Capital expenditures	5.4	4.8	4.6	5.4	7.8	4.2	4.8	5.7	6.0	6.5	5.5	3.9	3.0
Financial investment	1.9	1.6	1.9	2.8	5.7	2.1	2.1	2.6	2.7	3.1	2.6	1.4	0.7
Physical investment	3.5	3.2	2.8	2.6	2.1	2.1	2.7	3.1	3.3	3.4	2.9	2.5	2.3
Capital balance	-4.3	-2.6	-2.9	-2.6	-0.3	-0.2	-1.6	-2.7	-2.6	-2.9	-2.1	-1.7	-1.9
General government balance	2.2	5.1	5.5	2.9	-2.3	-3.1	-3.5	-3.6	-1.6	-0.9	-0.1	2.1	
2. SOE balance	-0.7	-0.9	0.1	-2.0	-1.1	0.0	-0.7	1.1	-0.3	0.3	0.3	-0.3	
3. Non-fin. publ. sect. bal	1.5	4.2	5.6	0.8	-3.4	-3.0	-4.4	-2.6	-1.9	-0.6	0.2	1.8	
4. Quasi-fiscal balance	0.0	0.0	0.0	0.0	-5.3	-4.3	-4.8	-7.3	-2.9	-1.3			
5. Overall balance	1.5	4.2	5.6	0.8	-8.7	-7.3	-9.2	-9.9	-4.8	-1.7			

Sources: "El deficit del sector publico y la politica fiscal en Chile, 1978-1987", Comision Economica para America Latina, 1990, Serie Politica Fiscal, N. 4; "Informe socio-economico -- Chile, 1991", Interamerican Development Bank, 1991; and Ministry of Finance.

<sup>a</sup>Accounting for copper stabilization fund.

<sup>b</sup>The atypical value for 1982 is due to an asset transfer inside the government (from Social Security) with no net effect on consolidated accounts.

TABLE A.1.2  
CHILE: FISCAL ACCOUNTS OF STATE-OWNED ENTERPRISES, 1978-89 (% OF GDP)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Current revenue	25.4	27.2	26.1	20.8	24.2	29.5	29.8	35.3				
Goods and services	24.2	25.5	24.9	19.9	23.4	28.2	28.0	32.1				
CODELCO	8.6	9.8	8.8	5.6	7.1	9.4	8.4	10.4				
Government transfers	0.7	0.2	0.3	0.0	0.0	0.1	0.1	0.0				
Others	0.6	1.6	1.0	1.0	0.8	1.3	1.8	3.2				
Current expenditures	23.4	26.1	24.1	21.2	23.6	27.2	27.5a/	30.8 <sup>a</sup>				
Goods and services	12.2	12.6	11.2	10.2	9.9	11.8	12.7	14.4				
Personnel	4.5	4.0	4.2	4.0	4.4	4.0	3.9	3.9				
Transfers/taxes to govern.	5.1	8.5	7.8	5.6	7.1	8.7	7.8	8.0	7.6	8.2	10.1	11.3
CODELCO	2.3	4.8	4.2	2.0	2.3	3.4	2.9	2.5	2.6	3.1	6.6	
Others	2.7	3.7	3.6	3.6	4.8	5.3	4.9	5.5	4.9	5.0	3.4	
Interest payments	1.2	0.7	0.8	1.1	1.8	2.5	2.5	2.8				
Domestic	0.5	-0.1	0.0	0.3	0.1	0.9	0.4	0.6				
External	0.7	0.8	0.9	0.8	1.7	1.6	2.1	2.3				
Others	0.4	0.2	0.1	0.3	0.4	0.2	0.1	0.1				
Current savings	2.0	1.1	2.0	-0.4	0.6	2.4	2.4	4.5				
Adjustments <sup>b</sup>	0.1	-0.3	0.2	0.4	0.5	0.4	0.3	0.3				
Current balance	2.1	0.8	2.2	0.1	1.1	2.8	2.7	4.8	3.7	3.2	3.0	1.3
Capital revenue <sup>c</sup>	0.4	0.2	0.5	0.4	0.3	-0.1	0.2	0.3	0.6	0.6	0.4	1.1
Capital expenditures												
Physical investment	3.2	1.9	2.6	2.6	2.6	2.6	3.7	3.9	4.3	3.5	3.3	2.6
Financial investment	n.a.	n.a.	n.a.	n.a.	0.0	0.0	-0.1	0.1	0.4	-0.0	-0.2	n.a.
Capital balance	-2.8	-1.7	-2.1	-2.1	-2.2	-2.8	-3.4	-3.7	-4.0	-2.9	-2.7	-1.6
SOE Balance	-0.7	-0.9	0.1	-2.0	-1.1	0.0	-0.7	1.1	-0.3	0.3	0.3	-0.3

Sources: "El deficit del sector publico y la politica fiscal en Chile, 1978-1987", Comision Economica para America Latina, 1990, Serie Politica Fiscal, N. 4 and "Informe socio-economico -- Chile, 1991", Interamerican Development Bank, 1991.

<sup>a</sup>This total differs from the sum of items below because "Transfers and Taxes to Government" taken from BID (1991) were lower than the ones reported in CEPAL (1990).

<sup>b</sup>Differences between borrowing requirements and accounting disbursements. <sup>c</sup>For 1978-82 and 1989 these are capital revenues net of financial investments.

TABLE A.2.1  
MEXICO: FISCAL ACCOUNTS OF FEDERAL PUBLIC SECTOR, 1978-91 (% OF GDP)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>1. Federal government</b>														
Total revenue			15.3	15.3	15.6	17.8	16.9	16.9	16.0	17.0	16.6	18.6		
Oil sector			4.1	4.2	5.9	8.4	7.8	7.6	6.1	7.4	5.8	5.8		
Non-oil sector			11.2	11.1	9.8	9.4	9.0	9.3	9.9	9.7	10.8	12.8		
Tax revenue			10.4	10.2	8.7	8.4	8.3	8.4	8.9	8.6	9.6	10.5		
Income tax			5.5	5.5	4.7	4.1	4.1	4.1	4.3	4.0	4.9	5.5		
Value added tax			2.6	2.5	2.2	2.8	2.7	2.8	2.7	2.8	3.0	3.0		
Non-tax revenue			0.8	0.9	1.1	1.0	0.8	0.9	1.0	1.1	1.2	2.3		
Total expenditures			18.1	21.5	27.1	25.9	24.3	24.6	28.9	31.2	26.9	23.6		
Current expenditures			13.1	14.5	21.3	21.3	20.1	20.0	24.9	27.7	24.5	21.4		
Personnel			3.6	3.7	4.1	3.2	3.4	3.3	3.2	3.3	2.8	3.0		
Goods and services			0.5	0.8	0.8	0.5	0.7	0.6	0.9	0.7	0.7	0.8		
Interest payments	1.9	1.9	1.7	2.8	5.3	8.5	8.0	8.5	13.6	17.6	15.2	11.4	8.5	5.0
Domestic			1.2	2.3	4.1	6.4	6.2	6.6	10.9	14.5	12.4	9.0		
External			0.5	0.5	1.1	2.2	1.9	1.9	2.7	3.1	2.5	2.5		
Partic. to fed. entities			2.3	2.5	2.2	2.8	2.9	2.7	2.6	2.7	2.8	3.0		
Current transfers			5.0	4.7	5.1	5.6	4.5	4.5	4.2	3.3	2.8	2.6		
Others			0.9	0.6	4.3	1.0	1.1	0.8	1.1	0.7	0.9	1.0		
Capital expenditures			3.9	5.5	4.1	3.3	2.7	3.2	3.0	3.1	1.8	1.9		
Physical investment			1.5	1.5	1.5	0.8	0.9	0.9	1.0	0.9	0.5	0.5		
Capital transfers			2.3	3.9	2.5	2.3	1.8	2.3	1.9	2.2	1.3	1.3		
Financial investment			0.1	0.1	0.1	0.2	0.0	0.0	0.1	0.1	0.0	0.1		
ADEFAS			1.2	1.6	1.8	1.4	1.5	1.3	0.7	0.4	0.5	0.4		
IDB and BIRD credits			0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0		
Variation in other accounts			-0.2	-0.3	-0.5	0.0	0.2	0.1	-0.2	0.0	0.8	-0.2		
Federal government deficit	2.9	3.3	3.0	6.5	11.9	8.2	7.2	7.6	13.1	14.2	9.7	5.1	2.9	-3.4
<b>2. Def. of SOEs in budget</b>														
PENEX	1.4	1.2	1.3	3.7	1.4	-1.8	-1.7	-0.9	0.0	0.0	-0.2	0.3	-0.4	0.1
<b>3. Def. SOEs not in budget</b>														
	0.3	0.8	0.9	1.1	1.5	0.8	0.7	0.9	1.0	0.2	0.1	-0.2	-0.2	0.0
<b>4. Financial subsidies</b>														
	1.2	1.4	1.0	1.1	1.3	0.5	1.4	1.5	1.1	1.0	1.6	0.6	1.1	1.1
<b>5. PSBR of federal gov.</b>														
	6.7	7.6	7.5	14.1	16.9	8.6	8.5	9.6	16.0	16.1	12.5	5.6	4.0	-1.8
<b>6. Quasi-fiscal deficit<sup>a</sup></b>														
			0.5	-1.6	-3.0	2.6	0.7	0.9	3.9	5.8	-0.8	-1.2		
<b>7. Overall deficit</b>														
			8.0	12.6	13.9	11.2	9.2	10.5	20.0	21.9	11.5	4.6		
<b>Memo</b>														
PSBR of provinces and cities			0.2	0.3	0.4	0.0	0.3	0.3	0.2	0.2	0.1	0.3		

Sources: "El deficit del sector publico y la politica fiscal en Mexico, 1980-1989", Comision Economica para America Latina, 1991, Serie Politica Fiscal, N. 10 and "Informe socio-economico -- Mexico, 1992", Interamerican Development Bank, 1992.

<sup>a</sup>From September 1982 on includes the banks nationalized.

TABLE A.2.2  
MEXICO: FISCAL ACCOUNTS OF STATE-OWNED ENTERPRISES, 1978-91 (% OF GDP)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. SOEs under budgetary control <sup>a</sup>														
Current revenue	12.4	13.1	14.0	13.8	16.8	20.5	20.3	19.3	17.1	17.8	15.8	13.8	14.5	12.9
PEMEX			7.3	7.3	9.9	14.2	13.0	11.5	9.0	9.8	7.6	6.9		
Social security			2.3	2.4	2.5	2.4	2.1	2.2	2.2	1.9	1.8	2.1		
Current transfers <sup>b</sup>	0.9	0.9	0.9	1.7	2.2	2.7	2.5	2.2	1.6	1.1	0.7	0.7	0.5	0.5
Social security			0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0		
Current expenditures	10.2	10.0	10.0	11.6	12.2	13.0	13.4	13.5	13.5	11.5	10.6	9.5	8.8	7.5
Personnel	3.4	3.3	3.0	3.2	3.5	2.9	2.8	3.0	3.0	2.7	2.6	2.4	2.4	2.5
Goods and services	3.6	3.2	3.2	3.9	3.4	4.2	4.4	4.8	5.0	4.2	4.1	3.2	3.0	2.0
Interest payments	1.0	1.2	1.5	1.8	2.7	3.5	3.7	2.8	2.8	2.0	1.5	1.5	1.1	0.6
Domestic	0.7	0.7	0.9	0.4	0.6	1.2	1.6	1.1	1.1	0.8	0.6	0.5	0.5	0.0
External	0.3	0.5	0.5	1.4	2.1	2.3	2.1	1.7	1.7	1.2	1.0	1.0	0.5	0.0
Taxes	1.3	1.6	3.8	3.9	4.7	6.6	5.9	5.9	3.8	5.3	3.5	3.8	4.1	3.9
PEMEX			3.7	3.8	4.6	6.4	5.8	5.8	3.8	5.3	3.4	3.7		
On domestic sales <sup>c</sup>		0.4	0.5	0.6	0.4	2.7	2.9	3.0	2.0	2.6	1.8	1.5		
On exports <sup>c</sup>	1.1	3.0	3.2	4.3	3.8	2.8	2.7	1.7	2.3	1.6	1.5			
Others	2.2	2.3	2.3	2.7	2.6	2.4	2.5	2.9	2.7	2.6	2.4	2.4	2.4	2.4
Capital revenue	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital transfers <sup>b</sup>	1.0	1.0	1.5	1.1	1.1	1.0	0.9	1.5	1.3	1.1	0.8	0.9	0.8	0.4
Social security			0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
Capital expenditures	4.7	5.3	5.4	6.3	5.2	3.6	3.3	2.9	2.8	2.7	2.5	2.2	2.2	2.2
PEMEX			2.8	3.8	2.9	1.9	1.6	1.3	1.2	1.2	1.0	0.9		
Social security			0.4	0.5	0.4	0.1	0.2	0.2	0.3	0.2	0.2	0.2		
Ajenas netas (-)	-0.5	-0.3	0.2	-0.3	-0.2	-0.2	-0.3	-0.4	-0.4	-0.3	-0.3	-0.1	-0.4	-0.5
Deficit	2.3	2.1	2.6	5.3	2.1	-0.8	-0.8	-0.5	0.4	-0.1	-0.5	0.2	-0.4	0.2
2. Deficit of SOEs not under budgetary control														
3 Big <sup>d</sup>	0.3	0.8	0.9	1.1	1.5	0.8	0.7	0.9	1.0	0.2	0.1	-0.2	-0.2	0.0
Federal District			0.4	0.7	0.6	0.3	0.2	0.3	0.2	0.0	0.1			
Chiquillieria <sup>e</sup>			0.3	0.5	0.4	0.1	0.2	0.3	0.1	0.0	0.0			
Others			0.6	0.5	1.0	0.5	0.5	0.6	0.8	0.2	0.1			

Sources: "El déficit del sector público y la política fiscal en México, 1980-1989", Comisión Económica para América Latina, 1991, Serie Política Fiscal, N. 10 and "Informe socio-económico -- México, 1992", Interamerican Development Bank, 1992.

<sup>a</sup>Includes PEMEX, Instituto Mexicano del Seguro Social, Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado, Comisión Federal de Electricidad (CFE), Compañía Nacional de Subsistencias Populares (CONASUPO), Ferrocarriles Nacionales de México (FERRONALES), Lotería Nacional, Compañía de Luz e Fuerza del Centro (CLYF), Productora e Importadora de Papel (PIPSA), Caminos e Puentes Federales de Ingresos y Servicios Conexos (CAPUFE), Aeropuertos y Servicios Auxiliares (ASA), Constructora Nacional de Carros de Ferrocarril (CONCARRIL), Instituto Mexicano del Café (INMECAFE), Productos Forestales Mexicanos (PROFORMEX), and Forestal Vicente Guerrero (FOVIGRO).

<sup>b</sup>PEMEX did not receive current or capital transfers during the 1980-89 period.

<sup>c</sup>Taken from J. Alberro-Semerena, "The Macroeconomics of the Public Sector Deficit in Mexico during the 1980s", in Lustig (1992).

<sup>d</sup>Federal District Department, Metro and TELMEX.

<sup>e</sup>Refers to the many small SOEs (more than 1,000 in the first half of the 1980s) which have been the prime target of privatization.

TABLE A.2.3  
MEXICO: BREAKDOWN OF FISCAL ACCOUNTS OF MAIN SOEs ACCORDING TO OWNERSHIP STATUS, 1980-89<sup>a</sup>  
(% OF GDP)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989 <sup>b</sup>
1. SOEs that would be privatized or closed down <sup>c</sup>										
Current revenue	2.1	2.2	2.0	2.0	2.4	3.0	3.2	3.4	3.3	2.2
Current expenditures	2.0	2.2	2.1	2.3	2.6	3.5	3.8	3.8	3.1	2.1
Taxes	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest payments	0.2	0.3	0.3	0.5	0.6	0.7	0.9	0.8	0.5	0.3
Capital revenue	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Capital expenditures	0.7	0.8	0.8	0.8	0.6	0.7	0.8	0.6	0.7	0.6
Change in other accounts	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1
Transfers	0.3	0.4	0.4	0.6	0.5	0.7	0.7	0.6	0.5	0.3
Current	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3
Capital	0.1	0.3	0.2	0.4	0.3	0.4	0.4	0.1	0.2	0.1
Deficit	0.2	0.3	0.3	0.3	0.4	0.5	0.6	0.4	-0.2	-0.1
2. SOEs not privatized <sup>d</sup>										
Current revenue	2.9	2.8	3.0	2.8	3.4	3.2	3.5	3.2	3.3	3.5
Capital revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current expenditures	4.0	4.8	4.7	5.5	5.7	5.0	4.4	3.4	3.5	3.7
Taxes	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1
Interest payments	0.7	0.7	1.1	1.5	1.5	1.2	1.0	0.5	0.4	0.4
Capital expenditures	1.8	1.7	1.5	1.2	1.2	1.1	1.0	1.0	1.0	0.8
Change in other accounts	-0.1	-0.1	0.0	-0.1	0.1	0.0	-0.1	0.1	0.1	0.0
Transfers	1.9	2.3	2.6	3.0	2.8	2.9	2.0	1.5	1.0	1.1
Current	0.8	1.6	1.8	2.4	2.2	1.7	1.2	0.6	0.4	0.4
Capital	1.1	0.7	0.8	0.6	0.6	1.1	0.9	0.9	0.6	0.7
Deficit	1.1	1.5	0.6	0.9	0.6	-0.0	-0.1	-0.4	0.1	-0.1

Source: "El déficit del sector público y la política fiscal en México, 1980-1989". Comisión Económica para América Latina, 1991, Serie Política Fiscal, N. 10.

<sup>a</sup>Excluding PEMEX.

<sup>b</sup>Preliminary estimates.

<sup>c</sup>Consolidated fiscal accounts of AEROMEXICO (1980-88), AHNSA (1980-89), Azúcar (1985-89), DINA (1980-88), FERTIMEX (1980-89), FUMOSA (1984-86), IMCE (1980-85), INDECO (1980-83), PROPEMEX (1980-88), SICARTSA (1980-89), SIDENA (1980-88) and TELMEX (1980-89).

<sup>d</sup>Consolidated fiscal accounts of ASA, CAPUFE, CFE, CLYF, CONASUPO, CONCARRIL, Ferrocarriles Nacionales, (FERRONALES and others), FOVIGRO, INMECAFE, Lotería Nacional, PIPSA and PROFORMEX.



TABLE A.3.1  
ARGENTINA: FISCAL ACCOUNTS OF FEDERAL PUBLIC SECTOR, 1978-1992 (% OF GDP)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 <sup>i</sup>
<b>1. National administration<sup>a</sup></b>															
Current revenue <sup>b</sup>						14.6	19.8	19.5	17.7	16.2	14.4	14.3	12.6	14.8	17.1
Tax revenue						11.0	16.5	15.1	14.6	14.0	12.1	13.0	11.5	13.5	15.9
Non-tax revenue						3.6	3.3	4.4	3.1	2.2	2.3	1.3	1.1	1.3	1.2
Current expenditures <sup>c</sup>						19.5	16.7	17.1	16.5	16.8	17.8	16.4	16.0	15.9	15.5
Personnel expenditures	4.4	4.1	4.9	4.8	3.8	4.8	4.8	4.1	3.6	4.1	4.1	3.4	4.1	3.9	3.6
Goods and services	2.4	2.2	2.2	2.1	2.6	2.9	1.9	2.2	2.0	2.1	2.0	1.6	1.4	1.3	1.6
Interest on debt <sup>c</sup>	1.9	2.0	1.8	3.6	6.1	3.3	2.9	2.9	2.3	1.9	2.8	3.3	3.1	2.1	1.7
Domestic <sup>d</sup>	1.7	1.9	1.5	2.5	3.7	0.4	0.5	0.2	0.3	0.5	0.4	0.2	0.5	0.3	0.1
Foreign <sup>d</sup>	0.2	0.1	0.3	1.1	2.4	2.9	2.4	2.7	2.1	1.4	2.4	3.1	2.6	1.8	1.6
Current & capital transfers <sup>f</sup>						8.4	7.1	7.9	8.6	8.7	8.9	8.1	7.4	8.6	8.6
Provinces						7.6	5.9	6.1	6.7	6.6	7.0	6.1	5.7	7.0	8.2
Others						0.8	1.2	1.8	1.9	2.1	1.9	2.0	1.7	1.6	0.4
Current balance <sup>c</sup>						-4.9	3.1	2.4	1.2	-0.6	-3.5	-2.1	-3.3	-1.1	1.6
Capital revenues <sup>g</sup>	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.4	0.6	0.2	1.7	1.3
Capital expenditures	3.5	3.0	2.4	2.7	2.6	2.9	1.6	1.5	1.6	1.7	1.5	1.0	0.8	0.7	1.2
Fixed investment	3.2	2.7	2.1	2.4	2.4	2.4	1.4	1.3	1.3	1.5	1.3	0.9	0.6	0.2	0.4
Machinery and equipment						0.6	0.3	0.3	0.3	0.3	0.3	0.1	0.2	0.1	0.2
Construction						1.8	1.1	1.0	1.0	1.2	1.1	0.7	0.5	0.1	0.2
Changes in inventories						0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Financial investment	0.4	0.3	0.2	0.3	0.3	0.4	0.1	0.2	0.3	0.1	0.2	0.1	0.1	0.5	0.8
<b>2. Social security</b>															
Revenues						4.7	2.6	3.6	4.0	3.9	4.7	3.3	5.0	5.7	7.9
Expenditures						6.1	5.6	5.6	5.5	5.1	5.2	3.6	5.7	6.0	8.2
<b>3. Primary balance<sup>g</sup></b>															
National administration						-9.6	-1.5	0.1	-0.3	-3.2	-5.8	-1.4	-2.1	0.4	3.4
Social security						-4.4	4.4	3.8	1.9	-0.4	-1.8	0.8	-0.8	2.0	3.4
SOEs						-1.4	-3.0	-2.0	-1.5	-1.2	-0.5	-0.3	-0.7	-0.3	-0.3
SOEs	-2.1	-2.5	-3.0	-1.7	-2.8	-3.8	-2.9	-1.7	-0.7	-1.6	-3.5	-1.9	-0.6	-1.3	0.3
4. Interest expenditures	3.0	3.1	3.4	7.1	10.2	5.8	5.0	5.4	3.8	3.5	2.8	3.3	3.1	2.1	1.7
5. Non-financ. publ. sector bal.						-15.4	-6.3	-5.4	-4.2	-6.7	-8.6	-4.7	-5.1	-1.7	1.7
6. Quasi-fiscal balance <sup>h</sup>						-1.1	-2.5	-2.8	-1.6	-3.4	-1.4	-5.8	-1.0	-0.6	-0.2
7. Overall balance						-16.5	-8.8	-8.2	-5.8	-10.1	-10.0	-10.5	-6.1	-2.3	1.5
<b>Memo</b>															
Provincial revenue, incl. transfers						11.6	10.4	10.8	11.2	8.0	10.3	9.4	9.0	10.3	13.2
Provincial expenditure						11.4	11.9	11.4	11.1	12.9	12.3	10.6	13.2	13.5	12.8

Sources: "El déficit del sector público y la política fiscal en Argentina, 1978-1987". Comisión Económica para América Latina, 1991, Serie Política Fiscal, N. 4 and Secretary of Finance Saving-Investment Plans, in World Bank, "Argentina: public finance review: from insolvency to growth", 1993.

<sup>a</sup>National Administration includes Central Administration, Decentralized Agencies, and Special Accounts.

<sup>b</sup>Includes coparticipated revenues.

<sup>c</sup>For 1988-92, interest bill includes obligations of the public enterprises.

<sup>d</sup>Real component of domestic interest payments for 1983-1991; 1992 is nominal due to return to stability.

<sup>e</sup>Accrued interest due.

<sup>f</sup>Excludes transfers to SOEs.

<sup>g</sup>Includes revenues from privatization. For 1988-92, capital revenues includes revenues from the public enterprises.

<sup>h</sup>Real earnings on assets less real interest costs of Central Bank; IMF definition, 1983-87; IBRD definition 1986-92;

<sup>i</sup>Projected.

TABLE A.3.2  
ARGENTINA: FISCAL ACCOUNTS OF STATE-OWNED ENTERPRISES, 1978-92  
(% OF GDP)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 <sup>c</sup>
Current revenue	11.1	8.8	8.6	10.3	9.7	11.0	10.5	13.6	12.1	11.8	12.8	12.8	8.8	6.7	6.0
Current expenditures <sup>a</sup>	9.5	8.7	9.8	12.2	13.6	13.6	12.0	15.1	11.6	11.6	11.8	11.9	7.6	6.4	5.2
Personnel expenditures	3.0	3.1	3.4	3.0	2.2	3.0	3.2	3.1	3.0	3.2	3.2	3.0	2.3	1.9	1.2
Goods and services	4.7	4.2	3.8	4.6	6.1	7.1	6.4	8.9	6.5	5.6	6.8	7.9	5.3	4.5	4.0
Interest on debt <sup>a</sup>	1.1	1.1	1.6	3.5	4.1	2.5	2.0	2.5	1.5	1.7					
Domestic	0.7	0.7	1.1	2.4	1.9	0.5	0.3	0.6	0.1	0.1					
External	0.4	0.4	0.5	1.1	2.2	2.0	1.7	2.0	1.4	1.6					
Other current expenditures	0.7	0.3	1.2	1.2	1.2	1.1	0.4	0.6	0.7	1.1	1.8	1.0	0.0	0.0	0.0
Current balance <sup>a</sup>	1.6	0.1	-1.2	-1.9	-3.9	-2.6	-1.5	-1.5	0.5	0.2	1.0	0.9	1.2	0.3	0.8
Capital revenues <sup>b</sup>	0.3	0.2	0.2	0.2	0.4	0.2	0.1	0.2	0.1	0.1					
Capital expenditures	5.1	3.9	3.6	3.5	3.4	3.9	3.6	2.9	2.8	3.6	4.5	2.8	1.9	1.6	0.5
Fixed investment	4.7	3.7	3.4	3.2	3.3	3.7	3.3	2.8	2.6	3.2	4.2	2.5	1.7	1.6	0.5
Machinery and equipment						1.7	2.0	1.3	1.2	1.4	1.9	1.1	0.8	0.6	0.2
Construction						1.9	1.4	1.5	1.4	1.7	2.3	1.4	1.0	1.0	0.3
Financial investment	0.4	0.2	0.2	0.3	0.1	0.2	0.2	0.1	0.2	0.4	0.3	0.3	0.1	0.0	0.0
Primary deficit <sup>b</sup>	2.1	2.5	3.0	1.7	2.8	3.8	2.9	1.7	0.7	1.6	3.5	1.9	0.6	1.3	-0.3
Operational deficit	3.2	3.6	4.6	5.2	6.9	6.3	4.9	4.2	2.2	3.3					

Sources: "El deficit del sector publico y la politica fiscal en Argentina, 1978-1987". Comision Economica para America Latina, 1991, Serie Politica Fiscal, N. 4 and Secretary of Finance Saving-Investment Plans, in World Bank, "Argentina: public finance review: from insolvency to growth", 1993.

<sup>a</sup>For 1988-92, interest obligations of public enterprises are included in national administration.

<sup>b</sup>For 1988-92, capital revenues of public enterprises are included in national administration.

<sup>c</sup>Projected.

TABLE A.4.1  
BRAZIL: FISCAL ACCOUNTS OF CONSOLIDATED PUBLIC SECTOR, 1978-92 (% OF GDP)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Federal, state and municipal governments															
Net revenue	24.2	24.1	23.7	23.6	24.0	23.5	21.1	21.7	22.5	24.4	24.6	26.1	31.7		
Disposable tax revenue	25.7	24.7	24.7	24.7	25.3	25.1	21.8	22.5	24.9	23.3	21.9	22.0	28.2		
Federal government	19.3	18.5	18.4	18.6	19.2	19.2	16.1	16.4	17.5	16.9	15.7	14.8	18.9	15.7	16.4
Fiscal budget	8.6	8.1	8.1	7.9	7.3	9.0	8.6	8.9	8.9	8.4	8.7	7.1	10.8	6.5	7.1
Income tax	3.0	3.2	2.9	3.1	3.2	3.7	4.0	4.4	4.5	3.7	4.1	4.0	4.4	3.2	3.4
Industrial prod. tax	2.7	2.3	2.2	2.1	2.1	2.0	1.3	1.7	2.1	2.3	2.0	2.0	2.4	2.2	2.3
Financial tax	0.4	0.4	1.0	1.1	1.1	0.7	0.8	0.5	0.6	0.6	0.3	0.2	1.3	0.6	0.6
Others	2.5	2.3	2.0	1.5	1.0	2.6	2.6	2.2	1.7	1.8	2.3	0.9	0.3	0.6	0.8
Social security	8.5	8.3	7.5	7.8	9.1	8.3	7.0	7.0	8.2	7.1	6.3	7.4	9.6	8.3	8.5
Other tax revenue	2.2	2.0	2.8	2.9	2.8	1.9	0.4	0.6	0.5	1.4	0.6	0.3	0.6	0.9	0.8
States	5.7	5.4	5.3	5.3	5.4	5.2	5.2	5.6	6.7	5.9	5.6	6.6	8.3	7.7	7.2
Municipalities	0.7	0.8	0.9	0.8	0.7	0.7	0.6	0.5	0.6	0.6	0.6	0.6	1.0	1.3	1.2
Other net current rev. <sup>a</sup>	-1.5	-0.6	-1.0	-1.1	-1.3	-1.6	-0.8	-0.9	-2.4	1.0	2.7	4.1	3.5		
Current expenditures	20.1	19.9	21.3	21.3	22.4	22.6	20.6	21.5	23.5	24.4	24.0	29.7	27.2		
Personnel	6.9	6.9	6.3	6.5	7.1	6.7	5.8	6.8	7.3	7.7	7.9	9.7	10.4		
Goods and services	2.8	2.9	2.9	2.9	3.0	3.1	2.7	2.9	3.4	4.4	4.7	4.6	5.1		
Transfers	8.6	8.2	8.5	9.3	9.8	10.1	10.5	10.3	11.4	10.6	10.3	13.5	10.1		
Social security	8.1	7.7	7.7	8.2	8.6	8.5	8.0	7.1	7.9	7.5	7.2	7.5	8.2		
Domestic debt <sup>b</sup>	0.5	0.6	0.8	1.1	1.1	1.6	2.5	3.3	3.5	3.1	3.1	6.0	1.9		
Subsidies	1.9	1.9	3.7	2.7	2.5	2.7	1.6	1.5	1.4	1.6	1.2	1.9	1.7		
To SOEs			3.1	1.9	1.9	1.9	0.7	0.8	0.8	0.8	0.8	0.9	0.6	0.7	
Physical investment	3.1	2.4	2.3	2.6	2.4	1.9	1.9	2.3	3.0	3.1	3.2	2.9	3.5		
Balance	0.9	1.4	-0.1	-0.3	-0.5	-0.6	-0.9	-2.6	-4.4	-3.2	-2.7	-6.6	0.0		
2. Federal SOEs balance			-0.4	-1.3	-2.7	-1.9	-1.6	-1.3	-1.0	1.0	2.5	-2.4	-0.4	-0.5	-0.2
3. Consolidated balance			-0.5	-1.6	-3.2	-2.5	-2.5	-3.9	-5.4	-2.2	-0.2	-8.7	-0.4		
Memo															
Interest on external debt <sup>c</sup>			0.4	0.3	1.2	1.1	1.3	1.0	2.0	0.7	0.9	0.5	0.6		

Sources: FGV/Ibre/CEF and R. Villela, 1991, "Crise e ajuste fiscal nos anos 80: um problema de política econômica ou economia política?"; in *Perspectivas da Economia Brasileira*, 1992. Rio de Janeiro: IPEA. We thank Ricardo Villela and Lia Pereira for updating this information.

<sup>a</sup>Other gross revenues (including capital transfers and revenues) net of expenditures with intra-inter-government (non-tax) transfers, transfers to the private sector (including SOEs) and to foreigners (including interest payments on the external debt).

<sup>b</sup>Expenses with real interest (excluding monetary and exchange rate correction) and other expenses on domestic debt, including expenses with domestic debt in the Central Bank.

<sup>c</sup>Of Federal, State and City governments.

TABLE A.4.2  
BRAZIL: FISCAL ACCOUNTS OF STATE-OWNED ENTERPRISES, 1980-92  
(% OF GDP)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
<b>1. Federal SOEs</b>													
Total revenue	13.6	14.6	13.6	15.4	15.1	14.2	15.6	18.0	18.5	13.6	10.8	13.1	14.3
Goods and services	11.8	12.6	11.8	12.9	13.6	12.6	12.6	13.7	12.9	11.9	9.8	11.9	13.3
Treasury transfers	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.6	0.5	0.0	0.0	0.0
Other revenues	1.4	1.5	1.3	2.1	1.0	1.2	2.5	3.6	4.9	1.9	1.0	1.2	1.0
Total expenditures	14.8	17.1	17.2	18.0	17.3	16.2	17.4	19.3	17.8	16.4	11.4	14.0	14.6
Personnel	2.0	2.2	2.3	2.0	1.7	1.9	2.0	2.6	2.7	3.4	2.3	2.1	2.1
Interests	0.9	1.3	1.9	2.3	2.5	2.6	2.7	2.3	2.4	2.5	1.1	1.1	0.9
Domestic	0.2	0.6	0.5	0.6	0.5	0.5						0.5	0.5
External	0.7	0.8	1.4	1.7	2.1	2.0						0.6	0.5
Investments	4.6	5.3	4.8	3.7	3.3	3.1	3.0	3.5	3.0	2.5	1.6	2.2	2.2
Other expenditures	7.4	8.3	8.2	10.0	9.7	8.7	9.7	11.0	9.8	8.0	6.5	8.6	9.4
Balance	-1.2	-2.5	-3.6	-2.5	-2.2	-2.0	-1.9	-1.3	0.7	-2.8	-0.6	-0.9	-0.3
Treasury capital transfers	0.8	1.2	0.9	0.6	0.6	0.7	0.9	2.3	1.8	0.4	0.2	0.4	0.1
Overall balance (budget criterion)	-0.4	-1.3	-2.7	-1.9	-1.6	-1.3	-1.0	1.0	2.5	-2.4	-0.4	-0.5	-0.2
<b>2. Adjustment (Cash-flow/budget criteria)</b>													
							0.2	0.8	-1.3	0.8	0.3	0.3	0.4
<b>3. State/City SOEs' net borrowing requir.</b>													
							0.5	1.5	1.0	1.3	-0.7	1.1	-0.5
<b>4. Adjustment (BACEN financial criterion)</b>													
							-0.3	-0.5	3.7	-0.6	0.6	-1.0	1.1
<b>5. SOEs' net borrowing requirements</b>													
					1.1	2.3	1.4	0.9	1.0	2.4	0.0	0.3	0.4

Sources: Min. Economia, Fazenda e Planejamento; Central Bank and "O deficit do setor publico e a politica fiscal no Brasil, 1980-88". Comision Economica para America Latina, 1991, Serie Politica Fiscal, N. 14.

<sup>a</sup>Data for 1980-87 is not strictly comparable with that for remaining years due to changes in accounting methodology.  
<sup>b</sup>(-) = Surplus.

---

## BIBLIOGRAPHY

- ABREU, M., WERNECK, R.L.F. **Privatization and regulation in Brazil: the 1990-92 policies and the challenges ahead.** Rio de Janeiro, PUC, 1993 (Texto para Discussão, 300).
- BAER, Werner, VILLELA, A.V. **Privatization and the changing role of the state in Brazil.** Paper presented at the XVII International Congress of the Latin American Studies Association. 1992.
- BID (Interamerican Development Bank). **Informe socio-económico, Chile - 1991.** 1991.
- **Informe socio-económico, Mexico - 1992.** 1992.
- CARDOSO, E. **Privatization in Latin America.** 1991, mimeo.
- CARNEIRO, D.D., WERNECK, R.L.F. **Public and private investment: requirements for growth resumption in the Brazilian economy.** Rio de Janeiro, PUC, 1992 (Texto para Discussão, 283).
- CEPAL. **El déficit del sector público y la política fiscal en Mexico, 1980-1989.** 1991a. (Serie Política Fiscal, 10).
- **El déficit del sector público y la política fiscal en Argentina, 1978-1987.** 1991b (Serie Política Fiscal, 12).
- **O déficit do setor público e a política fiscal no Brasil, 1980-1988.** 1991c (Serie Política Fiscal, 14).
- DEVLIN, R. **Las privatizaciones y el bienestar social.** *Revista de La Cepal*, n.49, p.155-181, 1993.
- FISHLOW, A. **The Latin American State.** *Journal of Economic Perspectives*, v.4, n.3, p.61-74, 1990.
- GALAL, A. et alii. **Welfare consequences of selling public enterprises: case studies from Chile, Malaysia, Mexico, and the U.K.** Washington, DC, World Bank, 1992.
- GERCHUNOFF, P. et alii. **Las privatizaciones en la Argentina.** Washington, D.C., BID, 1992 (Serie de Documentos de Trabajo, 121).

- 
- HACHETTE, D., LUDERS, R. **Privatization in Chile.** San Francisco, International Center for Economic Growth, 1993.
- HELLER, P.S. The budgetary impact of privatization: examples from New Zealand and prospects for Ireland. In: FRANK, J. C. and MOORE, M. (eds). **Privatization.** Gill and Macmillian, 1990.
- HEMMING, R., MANSOOR, A. **Privatization and public enterprises.** Washington, DC, 1988 (IMF. Occasional Paper, 56).
- HYMAN, H. Privatization: the facts. In: VELJIANOVSKI (ed.). **Privatization & Competition.** Billings and Sons, 1989.
- KIKERI, S., NELLIS, J., SHIRLEY, M. **Privatization: the lessons of experience.** Washington, World Bank, 1992.
- LAMOUNIER, B., MOURA, A.R. **Política econômica e abertura no Brasil, 1973-1983.** Unpublished paper, 1983.
- MANSOOR, A. **The budgetary impact of privatization.** Washington, DC., 1988 (IMF. Occasional Paper, 59).
- MARCEL, M.B. **Privatización y finanzas públicas: el caso de Chile, 1985-88.** Colección Estudios Cieplan, n.26, p.5-60, 1989.
- MELLO, M.A. **privatização no Brasil.** São Paulo, USP, 1992 (Tese de Doutorado).
- MELLO, M.F. **Privatização e ajuste fiscal no Brasil.** Rio de Janeiro, PUC/Departamento de Economia, 1993, mimeo.
- MITCHELL, J. Britain: Privatization as Myth? In: RICHARDSON, J. (ed.). **Privatization and Deregulation in Canada and Britain.** Worcester, Billings & Sons, 1990.
- PASSANEZI FILHO, R. **Questões sobre a privatização no Brasil.** Fundap, 1993 (Nota Técnica, 8).
- PINHEIRO, A.C., GIAMBIAGI, F. As empresas estatais e o programa de privatização do governo Collor. **Pesquisa e Planejamento Econômico**, v.22, n.2, 1992.
- **Brazilian privatization in the 1990s.** *World Development*, v.22, n.5, May 1994.
-

- 
- PINHEIRO, A.C., OLIVEIRA FILHO, L.C. de. **Brazilian privatization: a decade of experience.** Rio de Janeiro, Cebrap, 1991a (Texto para Discussão, 7).
- . **Privatização no Brasil.** Rio de Janeiro, IPEA, 1991b (Texto para Discussão, 230).
- . O programa brasileiro de privatização. **Perspectivas da Economia Brasileira.** Rio de Janeiro, IPEA, 1991c.
- PRZEWORSKI, A. **Democracy and the market.** Cambridge: Cambridge University Press, 1991.
- RODRIK, D. Credibility of trade reform: a policy maker's guide. **World Economy**, v.12, n.1, p.1-16, Mar. 1989b.
- . Promises, promises: credible policy reform via signalling. **The Economic Journal**, v.99, p.756-772, Sep. 1989a.
- . Policy uncertainty and private investment in developing countries. **Journal of Development Economics**, v.36, p. 229-242, 1991.
- . The limits of trade policy reform in developing countries. **Journal of Economic Perspectives**, v.6, n.1, p.87-105, Winter 1992.
- SCHNEIDER, B. R. Partly for sale: privatization and state strength in Brazil and Mexico. **Journal of Interamerican Studies and World Affairs**, v.30, p.89-116, 1988.
- . **Politics within the state: elite bureaucrats and industrial policy in authoritarian Brazil.** Pittsburgh, University of Pittsburgh Press, 1991.
- . Privatization in the Collor government. In: CHALMERS, D., SOUZA, M.C.C. de, BORON, A. (eds.). **The Right and Democracy in Latin America.** New York, Praeger, 1992.
- SHCP (Secretaria de Hacienda y Credito Publico). **El proceso de enajenación de entidades paraestatales.** Mexico, DF, 1992.
- SMITTIN, J.N. **Macroeconomics after Thatcher and Reagan.** Edward Elgar, 1990.
- TANDON, P. **Welfare consequences of selling public enterprises, Mexico.** Washington, D.C., World Bank, 1992.
-

- 
- TOURINHO, O.A.F., VIANNA, R. Avaliação e agenda do Programa Nacional de Desestatização. **Perspectivas da Economia Brasileira - 1994**. Rio de Janeiro, IPEA, 1993.
- TREBAT, T.J. **Brazil's state-owned enterprises**. Cambridge, Cambridge University Press, 1983.
- VERNON, R. Introduction. In: VERNON (ed.). **The promise of privatization**. New York, Council on Foreign Relations, 1988.
- VICKERS, J., YARROW, G. Economic perspectives on privatization. **Journal of Economic Perspectives**, n.3, p.111-132, 1991.
- VILLELA, R. Crise e ajuste fiscal nos anos 80: um problema de política econômica ou de economia política? **Perspectivas da Economia Brasileira, 1992**. Rio de Janeiro, IPEA, 1991.
- VON DOELLINGER, C. **Privatização: um roteiro institucional**. Rio de Janeiro, IPEA, 1990, mimeo.
- WATERBURY, J. The heart of the matter? In: HAGGARD, S., KAUFMAN, R. (eds.). **The politics of economic adjustment**. Princeton, Princeton University Press, 1992.
- WERNECK, R. Aspectos macroeconômicos da privatização no Brasil. **Pesquisa e Planejamento Econômico**, v.19, p.277- 308, 1989.
- **Government failure and wretched statecraft: lessons from the Brazilian vicious circle**. Rio de Janeiro, PUC, 1993 (Working Paper, 301).
- WILLIAMSON, J. **The progress of policy reform in Latin America**. Washington, D.C., Institute for International Economics, 1990.
- WORLD BANK. **Private beats public 11-1**. Policy Research Bulletin, v.3, n.4, 1992a.
- **Privatization: lessons from experience**. Washington, D.C., 1992b, mimeo.
- **Brazil: privatization and the steel sector**. Washington, D.C., 1992c, mimeo.
- **Argentina: public finance review, from insolvency to growth**. Feb., 1993.
-





---

## PUBLISHING DEPARTMENT

### Coordination

Cláudio Passos de Oliveira

### Supervision

Everson da Silva Moura

Reginaldo da Silva Domingos

### Typesetting

Bernar José Vieira

Cristiano Ferreira de Araújo

Daniella Silva Nogueira

Danilo Leite de Macedo Tavares

Diego André Souza Santos

Jeovah Herculano Szervinsk Junior

Leonardo Hideki Higa

### Cover design

Luís Cláudio Cardoso da Silva

### Graphic design

Renato Rodrigues Buenos

*The manuscripts in languages other than Portuguese  
published herein have not been proofread.*

---

### Ipea Bookstore

SBS – Quadra 1 – Bloco J – Ed. BNDES, Térreo

70076-900 – Brasília – DF

Brazil

Tel.: + 55 (61) 3315 5336

E-mail: [livraria@ipea.gov.br](mailto:livraria@ipea.gov.br)







### **Ipea's mission**

Enhance public policies that are essential to Brazilian development by producing and disseminating knowledge and by advising the state in its strategic decisions.



**ipea** Institute for Applied  
Economic Research

Secretariat of  
Strategic Affairs

