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## 3.2 Concluding Observations

The Echeverría economic program was a clear failure. For a couple of years following the 1971 recession, output grew strongly. The 1972–74 expansion was necessarily temporary, however, given the fundamental economic imbalances created by large fiscal deficits and mismanaged monetary policy. In the administration's last two years, output and employment growth slowed considerably while inflationary and balance of payments pressures became extreme.

Distributional considerations do not alter this assessment. None of the studies discussed in the previous chapter turn up any evidence that the overall distribution of income improved.<sup>9</sup> Nor does a less formal examination of Echeverría's policies suggest that they benefitted either the urban or rural poor. The real blue-collar manufacturing wage grew at a slower pace than during Stabilizing Development. Public investment in agriculture increased initially but was later severely reduced when budgetary problems became acute in 1975 and 1976. Overall, the agricultural sector stagnated, experiencing average annual growth of only 2.6 percent.

The Echeverría administration failed politically as well as economically. The crisis of political legitimacy that came to the fore in 1968 was never squarely faced. Echeverría made no progress toward reconstructing a stable political consensus and, at the very end of his term, in an effort to revalidate his tarnished populist credentials, he introduced new political tensions through a heavy-handed land expropriation in the northwest. Once again, the political elites could not reach agreement on a presidential successor, and Echeverría had to choose his successor unilaterally, just as he had been chosen unilaterally six years earlier by Díaz Ordaz.

# 4

# The Lopez Portillo Administration

The Lopez Portillo administration began under difficult circumstances. In the last three years of the Echeverría administration, the economy's performance had deteriorated steadily. Real GDP growth fell for the third consecutive year in 1976, dropping to 4.2 percent, while the inflation rate rose to the relatively high level of 27 percent. Despite widespread imposition of import controls, the current account registered a deficit of \$3.68 billion, and in October, after having been pegged at 12.5 pesos per dollar for twenty-two years, the currency was devalued to 23 pesos per dollar. The overall fiscal

deficit increased slightly from the previous year and, at 9.9 percent of GDP, was obviously unsustainable.

Shortly after the October devaluation, a Letter of Intent was submitted to the IMF outlining a stabilization program to be implemented in stages over the next three years. Table 4.1 lists the main targets of the Fund program. The program called for the standard mixture of trade liberalization and economic austerity. Public sector savings, international reserves, and net domestic assets of the Central Bank were to increase, and a \$3 billion limit was imposed on additional foreign borrowing by the public sector. Wage restraint was to accompany monetary and fiscal restraint: annual wage increases of 10 percent, 12 percent, and 15 percent were planned for 1977–79.<sup>1</sup> The trade reforms were aimed at increasing the openness of the economy and rationalizing the system of incentives for exporting and import substitution. Import licenses were to be progressively replaced by tariffs granting, in most cases, a lesser degree of protection.<sup>2</sup>

	1976 Projection	1977	1978	1979
Balance of payments				
Change in international reserves	—	1.0	.5	
Merchandise trade and services balance	-2.3	5	.1	_
Interest payments on the external debt	-1.7	-2.1	-2.2	- 2.2
Transfers and other factor payments	9	-1.0	-1.0	-1.0
Direct investment	1.5	1.6	1.6	1.6
Change in net indebtedness of the public sector	5.7	3.0	2.0	1.0
Public sector operations				
Revenues	26.4	27.7	28.8	30.0
Current expenditures	25.9	25.4	24.8	24.5
Public sector savings	.5	2.3	4.0	5.5
Investment	8.7	8.3	8.0	8.0
Deficit	-8.2	-6.0	-4.0	-2.5
Net external financing	5.7	3.0	2.0	1.0
Net domestic financing	2.5	3.0	2.0	1.5
Savings and investment				
Investment	25.0	26.0	27.0	28.0
Gross fixed investment of the public sector	8.7	8.3	8.0	8.0
Gross fixed investment of the private sector	14.3	15.7	17.0	18.0
Private sector inventory accumulation	2.0	2.0	2.0	2.0
Total savings	25.0	27.0	27.5	28.0
National savings	20.1	22.4	23.9	25.4
Public	.5	2.3	4.0	5.5
Private	19.6	20.1	19.9	19.9
Foreign savings	4.9	4.6	3.6	2.6
Accumulation of international reserves				
(total savings minus investment)	0	1.0	.5	0

 
 Table 4.1
 Macroeconomic Targets for IMF Stabilization Program of September 1976 (% of GDP)

Source: Economic Memorandum, Government of Mexico (13 September 1976).

This stabilization program was fairly successful in its first year. Although the revenue share of the public sector increased only slightly, the consolidated fiscal deficit was still lowered from 9.9 to 6.7 percent of GDP through a sharp reduction in investment spending. Cutbacks in the parastatal sector accounted for a large fraction of the decrease in total real investment spending—nominal non-PEMEX parastatal investment expenditures actually declined by 1.11 billion pesos.

Wage restraint and the reduction in public sector absorption exerted a favorable impact upon the price level and the payments balance. The inflation rate declined from 27.2 to 20.7 percent (December-to-December change), while the current account deficit fell by over \$2 billion in response to sharp increases in real export and import prices. The improvement in the current account was matched by a similarly large improvement in the capital account as capital flight decreased following the stiff devaluation of the currency in the last quarter of 1976. The lower current and private sector capital account deficits together with an additional \$2.7 billion of public sector foreign borrowing enabled Central Bank reserves to increase by \$657 million after declining by over \$1 billion the previous year.

A certain measure of success was also achieved with respect to the targets for real economic activity. The economy went into a recession, but the general downturn was less severe than anticipated: real GDP, which had been forecasted to remain constant, grew 3.4 percent.

The one area in which the economy's performance was unsatisfactory was private sector investment spending. After registering modest growth in the preceding two years, real fixed capital formation in the private sector declined 6.7 percent in  $1977.^3$  This sharp contraction was apparently induced by the series of currency devaluations starting in the last quarter of 1976, which strongly increased the real price of imported capital goods and diminished the profitability of new investment. In the face of a 19.4 percent increase in real import prices, the volume of capital good imports fell 27.6 percent in 1977.<sup>4</sup>

Exactly how the economy would have evolved in the last two years of the stabilization program must be left open to conjecture, for in the course of the year, policy perspectives changed radically as it became widely known that Mexico's oil wealth was far greater than formerly thought. The 1975 figure for proven hydrocarbon reserves of 6.4 billion barrels was increased to 11.2 billion during 1976 and then raised further to 16 billion at the end of 1977 (Zedillo 1985, 304).<sup>5</sup> This constituted a stupendous increase in national wealth; by the time oil prices reached \$31.25 per barrel in 1980, oil wealth would measure 1,370 percent of GNP and 570 percent of the value of the aggregate capital stock (Rizzo 1984, 109).

An immediate consequence of the discovery of enormous oil wealth was the virtual disappearance of any constraints on foreign borrowing. Fierce competition arose among foreign banks to extend new loans to Mexico. Naturally, the Mexican government took advantage of its enhanced credit rating to improve the terms of its foreign debt. During 1978 and 1979, the average maturity on public sector debt was lengthened from a little less than five years to over eight years. In addition, the interest spread over LIBOR (London interbank offer rate for dollar deposits) was reduced from an average (for long-term credits) of 1.625 percentage points in the preceding three-year period to between 0.625 and 0.825 percentage points, a rate that compared favorably with that charged to prime customers in the OECD countries (Zedillo 1985, 308).

A second and more important repercussion of oil wealth came in the policy sphere. Not surprisingly, Mexican officials felt that they now faced a less rigid set of constraints and that economic policy ought to be reoriented toward recovering the development momentum lost in preceding years. The Fund program, therefore, was dropped in favor of a "new," more expansionary policy package.

## 4.1 1978-81: Public-Expenditure-Led Growth Once Again

The new development plan called for large, sustained increases in real government expenditures. In this respect, the plan appeared to continue the discredited public-expenditure-led-growth (PELG) strategy of the Echeverría administration. It was argued, however, that an economic base expanded and strengthened by oil wealth could support a much enlarged role for the public sector. Furthermore, strong fiscal stimulus was to be only one part of a comprehensive reform package that would avoid the main policy errors of the Echeverría administration. The liberal wage increases granted in the early and mid-seventies were discontinued and replaced by a quite restrictive wage policy: even though the 1977 inflation rate was 20.7 percent, the wage increase announced for government employees was only 10 percent in 1978 and the contractual "guideline" for private sector wage increases was set at 12 percent. The exchange rate was to be managed more flexibly in order to avoid balance of payments crises and speculative runs against the peso. Nominal interest rates would also be more flexible and were to be set so as to maintain positive real interest rates and a high level of financial intermediation. To keep the fiscal deficit in check, the operations of the public enterprises would be rationalized and tax revenues would be increased by broadening the tax base and improving tax administration and taxpayer compliance. At the same time that the size of the fiscal deficit would be diminished by these measures, new debt instruments (government bonds known as CETES) would be introduced to reduce monetization of the deficit. Finally, public sector expansion was not to occur at the expense of productive capacity in the private sector. Capital goods were exempted from

the value-added tax (VAT), and a more favorable treatment of depreciation allowances was introduced in an effort to revive private investment.

It is undeniable that between 1978 and 1981 the Mexican economy recorded some impressive accomplishments (tables 4.2a and 4.2b). Real GDP growth ranged between 8.0 and 9.1 percent, and employment growth in the high-wage manufacturing sector and the public sector increased 27.2 and 41.4 percent, respectively. Both private and public sector investment spending increased rapidly. The share of public sector investment in GDP rose (at 1970 prices) from 7.2 to 10.8 percent and that of the private sector increased from 11.7 to 14.1 percent. The inflation rate began creeping upward after 1978, but never exceeded 30 percent.

For 1978 and perhaps part of 1979, it can be argued that the demand stimulus provided by higher public sector spending was an important element in the economic recovery. The source of rapid growth beyond early 1979, however, seems to have been strong supply-side expansion fueled by sharp decreases in the real prices of domestic and imported intermediate inputs (table 4.3). Price controls kept the internal price of energy growing at a pace barely one-third that of the GDP deflator. The relative price of imported intermediates also fell considerably as the "fixed but adjustable exchange rate" proved to be more fixed than adjustable. The nominal exchange rate rose at an annual average rate of 3.6 percent, far less than the spread between the U.S. and Mexican inflation rates. Consequently, the real exchange rate declined by a full 30 percent between 1977 and 1981, provoking a 128 percent increase in the volume of imported intermediate inputs. Since factors are normally gross complements (a decrease in the price of one input raises the demand for other inputs), the large decreases in intermediates prices would be expected to raise strongly the demand for labor and capital, stimulating growth in employment and investment. The elastic supply response also helps to explain why the huge growth in government spending did not prove highly inflationary until the 1982 crisis.<sup>6</sup>

	1976	1 <b>9</b> 77	1978	1979	1 <b>98</b> 0	1981	1982
Real GDP	4.2	3.4	8.3	9.1	8.3	8.0	5
Manufacturing	5.0	3.6	9.8	10.6	7.2	7.0	-2.9
Agriculture, forestry, and fisheries	1.0	7.5	6.0	-2.1	7.1	6.1	6
Inflation <sup>b</sup>	27.2	20.7	16.2	20.0	29.8	28.7	98.9
Manufacturing sector employment <sup>c</sup>	06	1.9	7.9	6.7	7.2	2.9	8.5
General government employment	9.8	5.7	7.5	9.9	10.8	9.6	5.3
Public sector employment	9.1	5.5	7.3	9.2	10.4	9.3	5.9
Real investment	.4	-6.7	15.2	20.2	14.9	14.7	-15.9
Private	6.1	-6.7	5.1	22.7	13.7	14.0	-17.3
Public	-7.6	-6.7	31.6	17.1	16.7	15.8	-14.2

Table 4.2a Macro	economic Aggregat	es (%	change) <sup>a</sup>
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				_		
69.9	69.0	68.9	68.7	68.2	67.9	69.0
9.0	8.6	8.8	8.8	8.9	9.1	9.3
20.9	18.9	20.0	22.1	23.5	24.9	21.0
12.9	11.7	11.3	12.7	13.4	14.1	11.7
8.0	7.2	8.7	9.4	10.1	10.8	9.3
2.3	3.5	3.0	2.8	4.6	5.1	.5
7.9	8.8	9.1	9.3	9.1	9.0	10.2
10.1	8.8	9.9	11.7	14.3	15.9	10.1
	9.0 20.9 12.9 8.0 2.3 7.9	9.0         8.6           20.9         18.9           12.9         11.7           8.0         7.2           2.3         3.5           7.9         8.8	9.0         8.6         8.8           20.9         18.9         20.0           12.9         11.7         11.3           8.0         7.2         8.7           2.3         3.5         3.0           7.9         8.8         9.1	9.0         8.6         8.8         8.8           20.9         18.9         20.0         22.1           12.9         11.7         11.3         12.7           8.0         7.2         8.7         9.4           2.3         3.5         3.0         2.8           7.9         8.8         9.1         9.3	9.0         8.6         8.8         8.8         8.9           20.9         18.9         20.0         22.1         23.5           12.9         11.7         11.3         12.7         13.4           8.0         7.2         8.7         9.4         10.1           2.3         3.5         3.0         2.8         4.6           7.9         8.8         9.1         9.3         9.1	9.0         8.6         8.8         8.8         8.9         9.1           20.9         18.9         20.0         22.1         23.5         24.9           12.9         11.7         11.3         12.7         13.4         14.1           8.0         7.2         8.7         9.4         10.1         10.8           2.3         3.5         3.0         2.8         4.6         5.1           7.9         8.8         9.1         9.3         9.1         9.0

 Table 4.2b
 Composition of Output (% of GDP)<sup>d</sup>

Sources: National Income Accounts, Production Accounts of the Public Sector, 1975–1983 (Mexico, D.F.: INEGI) for government employment data. The manufacturing sector employment series is from *Indicadores Economicos* (Bank of Mexico). All other data is from the National Income Accounts (INEGI).

<sup>a</sup>Real variables are expressed in terms of 1970 prices.

<sup>b</sup>December-to-December change in the CPI.

<sup>c</sup>December-to-December change.

<sup>d</sup>Output shares at 1970 prices.

Table 4.3	<b>Real Prices of Intermediate</b>	Inputs $(1977 = 100)$

	1 <b>9</b> 77	1978	1979	1980	1981
Real exchange rate <sup>a</sup>	100	93.2	86.2	76.4	70.0
Real domestic price of energy inputs <sup>b</sup>	100	89.8	80.6	68.6	63.2

Source: The internal producer price index for energy inputs is from the series "Combustible y Energia" in table 20.8, Estadisticas de México (México, D.F.: INEGI, 1985): 753-57.

<sup>a</sup>Calculated as the period average official exchange rate multiplied by the ratio of the U.S. wholesale price index (now called the producer price index) to the Mexican GDP deflator.

<sup>b</sup>Deflated by the GDP deflator.

While the overall performance of the Mexican economy was impressive during 1978–81, there is considerable disagreement about the extent to which labor benefitted from this phase of historically high growth. Employment in the high-wage public and the manufacturing sectors increased considerably, and though reliable employment data does not exist for other sectors of the economy, it appears that the growth in aggregate labor demand was healthy as well. According to some accounts, labor shortages even began to appear toward the end of 1981 (Zedillo 1985, 305; Gregory 1986, 303).

But if labor gained from better employment opportunities, the limited data available also suggests that real wage compression accompanied employment growth during this period. Various real wage indices are computed in table 4.4. Between 1977 and 1981, the average real minimum wage decreased 10.6 percent and the real public sector wage grew by only 4.4 percent. Of course, the information conveyed by these two wage indices is limited. Neither the minimum wage nor the government sector wage is necessarily an accurate index of private sector wage costs. This would seem to be especially true of the late seventies. Unions strongly resisted government wage guidelines implying real wage cuts, and to avoid or settle strikes many firms agreed to

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	1977	1978	1979	1980	1981	1982
CPI deflator						
Average minimum wage <sup>b</sup>	100	96.6	94.6	87.9	89.4	79.0
Public sector wage <sup>c</sup>	100	100	100.4	97.6	104.4	80.7
Manufacturing sector						
Blue-collar wage	100	97.3	95.7	91.6	92.6	93.3
White-collar wage	100	97.0	96.1	92.4	94.3	89.7
Overall wage (inclusive of fringe benefits)	100	98.0	96.6	93.8	97.1	96.3
Tornell contract wage	100	97.2	95.2	95.7	96.5	
GDP deflator						
Average minimum wage	100	97.2	93.5	85.4	86.9	76.1
Public sector wage <sup>d</sup>	100	103.6	102.0	98.0	101.7	93.1
Manufacturing sector						
Blue-collar wage	100	97.9	94.7	88.9	90.1	89.8
White-collar wage	100	97.7	95.0	89.8	91.7	86.3
Overall wage (inclusive of fringe benefits)	100	98.7	95.6	91.1	94.4	92.6
Tornell contract wage	100	97.9	94.2	93.0	93.8	

#### Table 4.4 Real Wages (1977 = 100)<sup>a</sup>

Sources: Minimum wage data are from INEGI. The blue-collar, white-collar, and overall wage series for the manufacturing sector are from *Encuesta Industrial Mensual*, as reported in *Indices de Precios* (February 1986). The Tornell contract wage is based on the contract wage series found in Tornell (1983).

<sup>a</sup>The minimum wage index is a weighted average of minimum wages in different regions, where the weights are given by the region's share of the total salaried population in the nation. In years in which there is more than one wage adjustment, the period average figure is generated by weighting the wage in each subperiod by the fraction of the year during which it prevailed.

<sup>b</sup>Period average nominal wage deflated by either the period average CPI or the GDP deflator.

°End-of-year wage deflated by the end-of-year CPI.

<sup>d</sup>Average of the beginning- and end-of-year wage deflated by the GDP deflator.

grant wage increases well in excess of the guidelines. Also, a shift toward greater fringe benefits (social security, vacation pay, year-end bonuses, and employer-subsidized housing, food, and transportation) pushed up labor costs more than is suggested by nominal wage settlements.

Fortunately, for the manufacturing sector at least, a good deal is known about the nature of wage contracts during this period. The first three indices in table 4.4 were constructed using the data gathered from the Bank of Mexico's survey of contractual wages in large manufacturing firms. The rows labeled "Tornell contract wage" are based on wage series computed in a careful study by Tornell (1983). Tornell used data from actual contracts to adjust nominal wages for all fringe benefits. A monthly manufacturing sector wage series was then constructed by weighting the wage in each contract by the fraction of the total labor force in the sample covered by that particular contract. The sample consisted of data from forty-one firms that produced more than half of total manufacturing sector output.<sup>7</sup>

The contractual wage series confirm the general picture of real wage restraint in the formal sectors of the economy. Regardless of whether the CPI or the GDP deflator is used, the real contract wage declined over 1977–81, though none of the indices decreased as much as the real minimum wage.

Despite real wage restraint and a substantial increase in the economy's investment rate, the acceleration in growth after the 1977 recession was not sustainable. In retrospect, it is clear that little, if any, policy reform took place and that the oil bonanza simply resulted in the policy mistakes of the Echeverría administration being repeated on a larger scale. Both current and capital expenditures of the public sector grew more rapidly than projected and got completely out of hand after 1980 (table 4.5). Total real public sector expenditure increased by 97.7 percent in the space of four years (calculated by deflating by the period average CPI), climbing from 29.5 percent of GDP in 1977 to 41.3 percent in 1981, a figure some nine percentage points above the peak value recorded during the Echeverría administration. This massive increase in expenditure led to large fiscal deficits as it was not matched by a similar buildup in revenues. After declining to 6.7 percent of GNP in 1977, the consolidated public sector deficit grew steadily and then skyrocketed to 14.7 percent of GNP in 1981 when real public sector spending (net of interest payments on the foreign debt) rose an astounding 28.6 percent.

The breakdown in the overall deficit is shown in table 4.6 and points to stagnation of nonoil revenues, in addition to rapid expenditure growth, as an important factor in the rising deficits. PEMEX initially registered a small surplus, but after 1978, when petroleum exports commenced on a large scale, the surplus rose rapidly, reaching 6.3 percent of GDP in 1980 and then falling back to 4.1 percent in 1981. This sizable revenue windfall was offset to a large extent by slow revenue growth elsewhere in the public sector. Between 1978 and 1981, the deficit of the non-PEMEX parastatal sector increased from 2.8 percent of GDP to 5.1 percent, with more than half of the increment owing to the decline in the sector's revenue share. The 1979 tax reform improved the efficiency and equity of the tax system, but did not succeed in increasing revenues significantly:<sup>8</sup> the revenue share of the nonparastatal sector declined to an even greater extent than that of the (non-PEMEX) parastatal sector, dropping from 10.5 percent of GDP in 1978

	1977	1 <b>9</b> 78	1979	1980	1 <b>9</b> 81	1982
Expenditure	29.5	31.0	32.2	34.6	41.3	46.4
Current	22.0	22.3	22.6	24.9	28.0	36.0
Interest payments on the foreign debt	1.9	2.0	2.1	2.1	2.3	5.1
Other	20.1	20.3	20.5	22.8	25.7	30.7
Capital	7.5	8.7	9.6	9.7	13.3	10.6
Revenues	24.2	25.5	26.2	27.8	27.7	30.1
Economic deficit	5.4	5.5	6.0	6.8	13. <b>6</b>	16.3
Deficit on financial intermediation <sup>a</sup>	1.4	1.2	1.4	1.0	1.2	1.4
Monetary deficit	6.7	6.7	7.4	7.9	14.7	17.6

Table 4.5	Public Sector	Expenditures a	and Revenues	(% of GDP)
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Source: Estadisticas Hacendarias del Sector Publico: Cifras Anuales, 1965–1982 (SHCP). <sup>a</sup>Deficit of La Banca de Desarrollo.

	1977	1978	1979	1980	1981	1982
PEMEX						
Expenditure	3.9	4.8	5.5	5.8	7.5	7.5
Current <sup>a</sup>	2.0	2.1	2.5	2.9	3.6	4.5
Capital <sup>b</sup>	1.9	2.7	3.0	3.0	3.9	3.0
Revenues <sup>c</sup>	4.9	5.8	7.4	12.1	11.6	15.8
Deficit	-1.0	-1.0	-1.9	-6.3	-4.1	-8.3
Non-PEMEX parastatals						
Expenditure	12.0	12.0	11.5	12.0	13.0	12.5
Current <sup>a</sup>	9.8	9.5	8.9	9.0	9.9	9.9
Capital <sup>b</sup>	2.3	2.5	2.7	3.1	3.1	2.6
Revenues <sup>c</sup>	9.0	9.2	8.7	8.2	7.9	8.1
Deficit	3.0	2.8	2.8	3.9	5.1	4.4
Other <sup>d</sup>						
Expenditure	13.6	14.2	15.2	16.7	20.8	26.5
Current	10.3	10.7	11.2	13.0	14.5	21.5
Capital	3.3	3.5	4.0	3.7	6.3	5.0
Revenues	10.2	10.5	10.1	7.5	8.3	6.2
Deficit	3.3	3.7	4.9	9.2	12.5	20.2

 Table 4.6
 Breakdown of the Fiscal Deficit (% of GDP)

Source: Estadisticas Hacendarias del Sector Publico: Cifras Anuales, 1965-1982 (SHCP).

<sup>a</sup>Gasto de operacion plus ajenas de gasto (operating expenditure plus "outside account" expenditure). <sup>b</sup>Physical investment only (excludes financial investment).

<sup>c</sup>The sum of current income, capital income, taxes paid, and *ajenas de ingreso* (outside account income). <sup>d</sup>Includes DDF (Department of the Federal District).

to 8.3 percent in 1981. Moreover, part of current expenditures of the federal government probably reflects expenditures induced by revenue shortfalls in the nonparastatal sector. In the detailed fiscal accounts of Secretaria de Hacienda y Credito Publico (SHCP), it is not possible to trace the majority of transfer payments made by the federal government. These unaccounted for transfers are quite sizable and reflect mostly expenditures to cover the losses of various price support schemes, local "development institutions," and firms in which the government has a minority interest (but which are not classified as state-owned enterprises).<sup>9</sup> Such transfer payments increased steadily throughout the Lopez Portillo *sexenio* and exceeded in each year the deficit of the non-PEMEX parastatal sector (table 4.7). If the unaccounted for transfer payments in the table are treated as a negative revenue item (i.e., "induced" subsidies), the revenue share in GDP of the non-PEMEX public

 Table 4.7
 Hidden Transfer Payments (% of GDP)

	1977	1978	1979	1 <b>98</b> 0	1981	1982
Unaccounted for federal government transfers	3.6	3.4	3.9	4.6	5.7	8.4

Source: Estadisticas Hacendarias del Sector Publico: Cifras Anuales, 1965-1982, p. 22 (SHCP). Sum of unaccounted for current and capital transfers. sector fell by 5.8 percentage points over 1978-81, indicating, remarkably, a three-percentage-point *decrease* in the sum of non-PEMEX revenues and the PEMEX surplus.

There can be little doubt that the large decrease in the share of nonoil revenues was due principally to a reluctance to raise public sector prices. Some evidence in support of this claim is presented in table 4.8. After 1977 the pace of public sector price increases was less than half that of the inflation rate, and sales of goods and services by the non-PEMEX parastatal sector declined relative to GNP. The share of general tax revenues in GDP, on the other hand, exhibited a modest rise before dropping sharply in 1982.<sup>10</sup>

The failure to maintain real public sector prices not only slowed the growth of non-PEMEX revenues but also greatly diminished the size of the PEMEX surplus. Domestic energy prices changed very little as world petroleum prices shot upward after 1973, so that by 1980 the average internal price of petroleum products was less than one-quarter of the world market price (table 4.9). If the share of private sector investment and consumption in GDP is taken as a rough approximation of the private sector share in total energy consumption, the revenue loss from the implicit subsidy on domestic consumption of PEMEX products amounted to 6.2 percent of GDP in 1980, a figure almost as large as the entire public sector economic deficit that year.

As occurred earlier in the Echeverría administration, the large fiscal deficits gave rise to unsustainably large balance of payments deficits which ultimately proved to be the undoing of the PELG strategy. Consider the familiar decomposition of the current account deficit B:

$$B = (S - I) + (R - G),$$

where S is private sector savings, I is private sector investment, and R and G are *total* public sector revenues and expenditures (i.e., including those of the parastatal sector). Strictly speaking, it is improper to make conjectures about

Table 4.8	<b>Public Sector Prices</b>	Public Sector Prices and Revenues							
		1 <b>9</b> 77	1 <del>9</del> 78	1979	1980	1981	1982		
Percentage increa	se in public sector prices <sup>a</sup>	28.4	6.4	8.3	_	24.7	72.4		
Period average int	flation rate	28.9	17.5	18.2	26.3	28.0	58.9		
	on-PEMEX parastatal sales ervices (% of GDP) <sup>b</sup>	6.3	6.5	6.1	5.5	5.3	5.3		
General tax reven	ues (% of GDP) <sup>c</sup>	10.5	10.7	10.9	11.2	10.8	9.0		

Sources: Estadisticas Hacendarias del Sector Publico: Cifras Anuales, 1965–1982 (SHCP) for non-PEMEX revenues from sales of goods and services. Clavijo (1980) for public sector price increases between 1977 and 1979. Indicadores Economicos (Bank of Mexico) for public sector price increases between 1980 and 1982.

<sup>a</sup> Period average increases. There is a series break in 1980.

<sup>b</sup> Budget- and nonbudget-controlled parastatal firms.

<sup>c</sup> Sum of direct taxes, taxes on production and services, value-added taxes, and "other" tax revenues. Does *not* include gas taxes (which I classify as part of PEMEX revenues).

Year	International Price/ Domestic Price <sup>a</sup>	Domestic Subsidy (billion pesos)	Gross Subsidy (% of GNP)	Net Subsidy <sup>b</sup>
1973	1.29	5.4	.8	.7
1974	2.30	39.9	4.4	3.6
1975	1.90	30.0	2.7	2.0
1976	2.90	74.3	5.4	4.4
1977	3.17	114.7	6.2	4.9
1978	3.49	147.0	6.3	4.9
1979	4.06	228.1	7.4	5.8
1980	4.68	350.9	8.2	6.2

Table 4.9 Subsidy on Domestic Energy Consumption

Source: The relative domestic price of PEMEX products and the implicit cost of the domestic subsidy are from Rizzo (1984).

<sup>a</sup>Average international price of PEMEX products relative to the average domestic price.

<sup>b</sup>Net subsidy is obtained by multiplying the gross subsidy by the share of private sector consumption and investment in GNP at current prices. (The change in inventories is not included in private investment.)

the impact of the fiscal deficit on B without specifying a full model that takes into account induced changes in S and I. Nonetheless, the general picture is clear enough in the Mexican case. Private sector investment spending increased from 11.6 to 14.0 percent of GDP (at current prices) over 1978-81 in response to the tax breaks provided in the 1978 tax reform, the large decreases in the real prices of factors complementary to capital, and the fall in the real exchange rate, which effectively subsidized the purchase of imported machinery. The shift in the distribution of income away from labor and agriculture led to an even larger increase in the private sector saving rate (the share of private consumption in GDP declined from 66 to 61 percent at current prices), but the greater surplus of private sector savings over private investment was not nearly large enough to compensate for the massive decrease in public sector savings.

The trend toward rising current account deficits and external indebtedness is spelled out in greater detail in tables 4.10 and 4.11. Trade liberalization combined with real exchange rate appreciation lowered the real price of imports (deflating by the GDP deflator) by approximately 28 percent from 1977 to 1981, provoking a stupendous, across-the-board increase in demand. Between 1978 and 1980, real imports of capital goods and intermediate inputs increased by more than 100 percent. As the relaxation of quotas favored consumption goods more than other types of imports, the volume of imported consumer goods increased even more strongly, rising by over 200 percent in the same three-year period.<sup>11</sup> In 1981, fears about the growing payments deficit resulted in the reimposition of quotas on many items, particularly consumer and capital goods imports. Nevertheless, the overall import volume still rose 15.2 percent.

On the export side, oil sales became very sizable after 1978. From 1978 to 1981, dollar earnings generated by petroleum exports increased 682 percent. Overall export earnings, however, rose at a considerably slower rate as

	1977	1978	1979	1980	1981	1982
Current account deficit (billion \$)	- 1.6	- 2.7	-4.9	-7.2	- 12.5	-6.2
Merchandise exports (billion \$)	4.6	6.1	8.8	15.1	19.4	21.2
Merchandise imports (billion \$)	5.7	7.9	12.0	18.8	23.9	14.4
Real exchange rate <sup>a</sup>	106.0	98.8	91.4	81.0	74.2	112.1
Real price of total merchandise exports <sup>b</sup>	155.7	142.2	156.2	191.1	188.1	256.9
Nonoil manufactures	141.2	119.9	108.7	95.2	82.4	98.8
Real price of total merchandise imports <sup>b</sup>	124.1	118.6	112.3	<b>99</b> .7	89.4	111.2
Volume of total merchandise exports						
(% change)	13.7	29.8	10.0	11.4	7.1	16.9
Nonoil manufactures	8.5	29.4	5.6	-2.8	-4.0	11.1
Volume of total merchandise imports						
(% change)	-6.1	27.8	32.9	36.9	15.2	- 39.0
Intermediate inputs	6.4	25.2	20.8	34.4	12.0	- 36.2
Consumer goods	-18.1	64.2	38.6	81.0	6.5	-46.3
Capital goods	-27.6	26.2	64.8	29.8	25.4	- 42.1

#### Table 4.10 External Accounts

Source: National Income Accounts (INEGI) for traded goods price indices and the indices of import and export volumes. *Indicadores Economicos* (Bank of Mexico) for the current account deficit and dollar value of imports and exports.

 $^{a}$ 1970 = 100; calculated as the period average official exchange rate multiplied by the ratio of the U.S. wholesale price index (now called the producer price index) to the Mexican GDP deflator.

<sup>b</sup>1970 = 100; deflated by the GDP deflator.

nonoil exports suffered from both an appreciating real exchange rate and the dismantling of the CEDIs system of subsidies. After jumping to a decade-level high in 1977, the real price of manufactured exports plummeted, declining more than 40 percent in the next four years. Predictably, the volume of manufactured exports slowed sharply in 1979 and then turned negative in 1980 and 1981.<sup>12</sup>

The financial counterpart to the large current account deficits was a fast-growing level of external indebtedness. The total foreign debt increased almost threefold to \$81 billion at the end of 1981. This figure, however, considerably overstates the increase in *net* foreign debt. Table 4.12 gathers together various estimates of the magnitude of capital flight during this period. The wide variation in the estimates arises from different data bases.<sup>13</sup> According to the Cumby and Levich (1987) estimate (col. 1), capital flight siphoned off roughly 46 percent of the extra debt accumulated between 1977 and 1981. A problem with their estimate is that the net inflow of external resources is calculated from World Bank data on the change in gross external indebtedness. But as Zedillo points out (1987, 175-76), this is not an accurate measure of net new indebtedness because in certain years some of the increment in the reported debt figures simply reflects more extensive coverage by the government's debt-reporting systems. Zedillo (col. 2) uses the Bank of Mexico's balance of payments data to measure the change in net indebtedness (a much more accurate measure), but also makes the odd adjustment of subtracting from the official current account data imputed

	1976	1977	1978	1979	1980	1981	1982
Total debt (billion \$)	27.9	30.3	35.1	42.4	54.4	81.0	87.6
Total debt/GDP <sup>a</sup>	31.4	37.0	34.2	31.5	29.2	33.8	53.4
Public sector debt service <sup>b</sup> (billion \$)	2.5	3.8	6.3	10.2	7.7	10.3	14.9
% of Merchandise exports	67.7	82.5	103.7	115.4	50.8	52.9	70.0
% of Current account income	29.9	41.8	54.0	62.6	30.8	33.4	53.0
% of GDP <sup>a</sup>	2.8	4.7	6.1	7.6	4.1	4.3	9.1
Total debt service <sup>c</sup> (billion \$)	2.9	4.3	6.8	11.0	9.2	13.2	17.4
% of Merchandise exports	78.8	91.8	112.7	124.7	60.8	67.9	82.1
% of Current account income	34.8	46.5	58.7	67.6	36.9	42.8	62.2
% of GDP <sup>a</sup>	3.2	5.2	6.6	8.2	4.9	5.5	10.6
Total debt service #2 <sup>d</sup> (billion \$)		10.9	12.5	15.7	15.5	24.3	39.9
% of Merchandise exports		235.1	206.2	178.6	102.7	125.0	187.8
% of Current account income		119.1	107.2	96.8	62.3	78.8	142.4
% of GDP <sup>a</sup>		13.4	12.2	11.7	8.3	10.1	24.3
Net debt <sup>e</sup> (billion \$)	19.0	22.7	24.3	27.0	31.9	39.1	51.6
Net debt service <sup>f</sup> (billion \$)	2.3	3.8	6.0	9.6	6.9	8.9	12.4
% of Merchandise exports	63.8	81.2	<b>99</b> .7	109.4	45.8	45.6	58.5
% of Current account income	28.2	41.1	51.9	59.3	27.8	28.7	44.3
% of GDP <sup>a</sup>	2.6	4.6	5.9	7.2	3.7	3.7	7.6
Net debt service #2 <sup>g</sup> (billion \$)		10.4	11.7	14.4	13.3	19.9	34.9
% of Merchandise exports		224.5	193.2	163.3	87.7	102.7	164.2
% of Current account income		113.8	100.5	88.5	53.2	64.7	124.5
% of GDP <sup>a</sup>		12.7	11.4	10.7	7.1	8.3	21.3

#### Table 4.11 Debt Burden Measures

Sources: Mexican Economic Outlook (CIEMEX-WHARTON) for data on the total debt and short-term public and private sector debt. All other data come from Indicadores Economicos (Bank of Mexico).

<sup>a</sup>GDP measured in dollars was calculated by dividing nominal GDP by the period average controlled exchange rate. There is *no* correction for deviations of the actual exchange rate from the equilibrium exchange rate.

<sup>b</sup>Public sector interest payments and amortization of the medium- and long-term debt.

<sup>c</sup>Public sector debt service plus private sector interest payments.

<sup>d</sup>The sum of public and private sector interest payments, public sector amortization of the short-, medium-, and long-term debt, and amortization of the short-term private sector debt. Amortization of the short-term debt is assumed to equal the previous period's short-term debt.

eCalculated as the cumulated value of official current account deficits starting from 1951.

<sup>6</sup>Calculated by scaling total interest payments by the public and private sectors by the ratio of net debt to total debt. No attempt is made to adjust for the fact that the interest rate on private sector foreign assets differs from the rates charged for foreign loans to the public and private sectors.

<sup>8</sup>Calculated as the sum of public sector amortization of the short-, medium-, and long-term debt, amortization of the short-term private sector debt, and net interest payments. Net interest payments are total interest payments by the public and private sectors scaled down by the ratio of net debt to total debt. Amortization of the short-term debt is assumed to equal the previous period's short-term debt.

interest payments in identified Mexican deposits abroad. (For some reason, reinvested interest income from foreign assets is not treated as capital flight.) In the third column, labeled "Modified Zedillo," I remove this latter adjustment. This gives a figure for capital flight that is \$3.9 billion less than that of Cumby and Levich. Finally, in the fourth column, the previous three estimates are corrected using Gulati's estimates (1987, 73) of net capital flight effected through trade-invoice faking. In Mexico, *underinvoicing* of imports exceeded underinvoicing of exports during this period, so that estimated capital flight is reduced. The Gulati adjustment suggests that

	Cumby and Levich	Zedillo		Gulati-Adjusted		
Year			Modified Zedillo <sup>b</sup>	CL°	Zď	MZe
1977	4.99	.69	.98	5.61	1.31	1.60
1978	1.76	.07	.60	1.17	52	.01
1979	2.37	.23	1.06	1.52	62	.25
1980	6.75	68	3.89	3.72	- 3.71	.86
1981	8.56	9.73	14.03	6.15	7.32	11.62
1982	7.24	8.23	9.03	6.60	7.59	8.39
1983	11.71	2.42	3.39	6.88	-2.41	- 1.44
1984	6.02	2.33	3.67	66	- 4.35	- 3.01
1985	_	1.92	3.75	_	68	1.15
Cumulative total 1977-82	31.67	18.27	29.59	24.77	11.37	22.69
Cumulative total 1977-85	_	24.94	40.40		10.83	26.29

Table 4.12 Capital Flight (billion \$)\*

Sources: Cumby and Levich (1987, 58), Gulati (1987, 73), and Zedillo (1987, 177).

<sup>a</sup>Morgan Guaranty definition of capital flight: the change in the foreign debt plus net foreign direct investment plus the current account surplus minus the change in short-term foreign assets of the banking system minus change in foreign exchange reserves. The Zedillo estimates also subtract the change in other official external assets.

<sup>b</sup>Estimate obtained using Zedillo's data and the official figures for the current account deficit.

<sup>c</sup>Cumby-Levich estimate with current account data adjusted by Gulati's estimate of net trade invoice faking.

<sup>d</sup>Zedillo estimate with current account data adjusted by Gulati's estimate of net trade invoice faking.

\*Modified Zedillo estimate with current account data adjusted by Gulati's estimate of net trade invoice faking.

approximately one-third of the increase in total gross debt may have ended up financing capital flight.<sup>14</sup>

Nearly all of the new debt was contracted by the public sector; the private sector debt tripled during 1978–81, but still stood at only \$21.9 billion in 1981. Most of the \$53 billion of debt held by the public sector took the form of medium- or long-term commercial loans extended to different SOEs (PEMEX alone had contracted \$15.7 billion of foreign debt by 1981), but the short-term debt also grew rapidly and by the end of 1981 accounted for 20.3 percent of the total public sector debt. Since over half of private sector borrowing was short term, for the aggregate debt the corresponding figure is a much higher 27.7 percent. By contrast, just three years earlier the share of short-term debt stood at only 13.5 percent.<sup>15</sup>

Despite the large windfall conferred by oil discoveries and the high rates of GNP growth achieved between 1978 and 1981, it seems safe to say that an increase of this magnitude in the foreign debt was excessive. The standard debt burden measures may be found in table 4.11.<sup>16</sup> The net debt service measures take account of the fact that the private and public sectors hold income-earning foreign assets as well as foreign debts. In these figures, the net debt is calculated, crudely, as the cumulative value of past official current account deficits starting from 1951.

While all of the debt burden measures decreased sharply after 1980 when oil exports increased by \$6.5 billion, it is also evident that the heavy binge of short-term borrowing in the immediately preceding years had placed the country in a financially precarious position. Even in 1981, debt service inclusive of short-term amortization claimed nearly 80 percent of total current account income. If short-term amortization is excluded (which gives a better sense of the medium-run debt service profile), the debt service burden was not particularly onerous in 1980 or 1981, judged by the usual standards. Observe, however, that just one year later and notwithstanding a 13 percent increase in the dollar value of oil exports, a much less sanguine picture emerges. In 1982, debt service exclusive of short-term amortization absorbed 62.2 percent of total current account income and 10.6 percent of GNP.<sup>17</sup> The corresponding figures for net debt service are smaller but still quite large.

Even though the burden of debt service eased considerably in 1980, the large current account deficit in that year was a clear warning signal that some adjustment in economic policy was needed. For reasons that are difficult to fathom, the signal was ignored. Apparently still in the grip of oil euphoria, the Lopez Portillo administration bulled ahead with yet more vigorous fiscal expansion, faithfully following the dictates of the political expenditure cycle.<sup>18</sup> Although the budget approved by Congress called for an unchanged nominal fiscal deficit, in practice no serious attempt was made to achieve fiscal restraint. Just as Echeverría had done earlier, Lopez Portillo overrode the congressional budget by routinely authorizing *ampliaciones presupuestales* (''out-of-budget'' expenditures). Those likely to object to such practices were simply excluded from policymaking circles: since early 1980, the head of the Central Bank had not been invited to attend economic meetings of the cabinet (Zedillo 1985, 312).

In mid-1981, developments in the oil market forced a reevaluation of economic policy. The 1981 budget had been predicated on the assumption that Mexico would be able to increase its oil exports by 75 percent at a price 10 percent above that prevailing at the end of 1980 (Zedillo 1985, 313). By June it had become clear that additional oil sales could not be made without accepting a cut in price. As the perception spread that a devaluation of the peso was on the horizon, Mexdollar accounts swelled and capital flight assumed tremendous proportions.

Confronted with an impending financial crisis, the Lopez Portillo administration exhibited massive inertia. The daily crawl of the peso continued at an annual rate of just 9 percent. On the fiscal front, an across-the-board, 4 percent cut in expenditures was announced, but the proposed cuts were with respect to the higher than budgeted levels of expenditures and, in any case, were not actually carried out. In fact, spending increased apace so that by the end of the year the share of public expenditures (net of interest payments on the foreign debt) in GDP had increased by six percentage points and the deficit was more than double its originally projected value. Foreign lending was undoubtedly an important permissive factor in allowing necessary policy reforms to be postponed. The current account deficit in 1981 reached the staggering figure of \$12.5 billion, and capital flight was of the same magnitude if not several billion dollars larger. To stem the potentially large drain on reserves, the public sector contracted an additional \$20.3 billion of foreign debt. The new debt was obtained at a stiff price and bought the government only a very short breathing spell. Short-term loans constituted almost half of the total, and the favorable interest rate spreads of earlier years disappeared. This is certainly one of the most puzzling episodes in recent Mexican economic history. It is more than a little difficult to understand why commercial banks were willing to grant new loans of this magnitude in the absence of any evidence that the Lopez Portillo administration was committed to reversing the direction of economic policy.<sup>19</sup>

### 4.2 The 1982 Crisis

The inability to substantively alter the course of economic policy persisted through the first half of 1982. In mid-February, the Economic Adjustment Program was announced. The program entailed an immediate 40 percent devaluation of the peso and severe import restrictions, and called for an immediate increase in public sector prices and a substantial curtailment in public expenditures over the coming year. A number of these measures, however, were introduced only after a delay of several months or were not implemented at all. The first increases in controlled prices and the prices charged for public sector goods and services did not occur until early June. And while certain expenditure cuts took place, a host of other measures strongly boosted public sector spending: the large currency devaluation of February 17 was followed three weeks later by a compensating 30 percent wage increase; in many sectors, the pressure to finish projects started in earlier years overrode the intention to reduce expenditures; to aid firms holding dollar debt, it was announced that the state would absorb 42 percent of the capital losses due to changes in the exchange rate (Villareal 1983); an emergency scheme involving fiscal relief and outright subsidies was drawn up to support "productive firms"; and finally, to fortify labor demand, CEPROFIs (Fiscal Incentive Certificates) providing tax exemptions equalling 15 percent of the monthly payroll were granted to firms that could prove they had maintained employment levels.<sup>20</sup>

The net effect of these conflicting measures was further fiscal and monetary expansion. Real public sector investment spending contracted sharply, but the various aforementioned subsidy schemes apparently induced a large increase in current expenditure. (Unaccounted for federal government transfers jumped to 8.4 percent of GNP.) Higher interest charges on the public sector foreign debt were an important but secondary factor in the loss of fiscal control. *Net* of interest payments on the foreign debt, real current expenditure increased by 20.5 percent and total public sector spending by 6.9 percent (calculated by deflating by the period average CPI). As a result, despite a 37.6 percent increase in real revenues provided by PEMEX, the consolidated public sector deficit rose to 17.6 percent of GNP.<sup>21</sup>

Not surprisingly, the Economic Adjustment Program did little to allay the fears of the private sector, and the flight out of peso-denominated assets and Mexdollars recommenced on a large scale beginning in mid-March.<sup>22</sup> In the second quarter alone, capital flight totalled \$3.65 billion.<sup>23</sup> The government staved off another sizable devaluation of the peso by borrowing an additional \$5.7 billion through three medium-term, syndicated loans. The difficulty in arranging the last and largest loan (\$2.5 billion), in which the federal government was the debtor, underscored the recent, rapid deterioration in Mexico's creditworthiness: despite being offered very attractive terms, 575 of 650 banks invited to form the syndicate initially refused to subscribe to the loan facility (Zedillo 1985, 316).

Finally, in August, massive capital flight forced the government's hand.<sup>24</sup> Additional large price increases were announced for bread and tortillas (100 percent) and gasoline (50 percent), and a dual exchange rate system was established, involving a preferential rate set initially at 50 pesos and a free rate. The preferential exchange rate was adjusted by a daily crawl and applied to most merchandise trade and foreign debt payments. All other transactions (tourism, nonessential imports, capital account items) had to be financed through the free market.

The dual exchange system proved incapable of containing capital flight and was followed in short order by two desperate measures. On August 13, dollar deposits at Mexican commercial banks were converted into pesos at an unfavorable exchange rate. Less than three weeks later, on September 1, the banking system was nationalized and comprehensive exchange controls were imposed.

None of this brought Mexico much closer to being able to service its foreign debt. The public sector faced \$14.3 billion of payments on principal coming due in 1983 and 1984.<sup>25</sup> The private sector's repayment schedule was even more onerous. Of \$18 billion owed by the private sector to foreign commercial banks, two-thirds was to be repaid by the end of 1984. It was soon conceded that Mexico could not adhere to the existing repayment schedule and negotiations began to restructure the public sector's foreign debt. In the last four months of the year, a de facto moratorium on debt service existed; all payments on the private sector debt ceased, as did most payments of principal on the public sector debt.

Nineteen eighty-two came to a close with Mexico burdened not only by an immense foreign debt but also by severe stagflation and a depressed level of private investment spending. The strong growth in notional supply that had checked inflationary pressures in previous years was reversed as extremely restrictive quotas and a series of large real devaluations of the peso forced a 36.2 percent reduction in imports of intermediate inputs. Contraction on the supply side coupled with expansionary fiscal policy sent the inflation rate soaring to 99 percent while, for the first time since 1932, real output fell. The large fiscal deficit led to a large real increase in the domestic component of the monetary base, but expectations that the peso would be devalued and the failure to adjust deposit rates in step with inflation caused a substantial decrease in the volume of real bank funds (table 4.13). Thus, at the same time that real credit to the public sector expanded 44.8 percent, real lending to the private sector contracted 23.8 percent. The credit crunch together with a 42 percent curtailment of capital goods imports provoked a 17.3 percent decrease in real private sector investment spending. The decline in investment spending and the cutback in imported intermediates (90 percent of which go to the manufacturing sector) hit the manufacturing sector hardest. After increasing strongly in the first quarter, manufacturing sector output and employment declined by 13.2 and 9.5 percent, respectively, in the succeeding three quarters.

1977	1978	1979	1980	1981	1982
9.8	10.6	12.5	8.7	12.8	-4.3
4.6	13.3	11.3	2.7	3.6	-22.4
1.5	7.0	13.9	5.6	4.5	- 10.5
8.9	16.0	12.8	6.6	16.4	-14.6
13.2	16.9	13.7	7.8	17.1	-15.3
12.0	6.2	9.3	4.5	18.8	14.1
_	20.3	12.5	8.8	7.5	-23.8
13.9	14.3	14.4	14.3	15.0	16.1
10.2	10.4	10.5	10.1	9.8	8.8
15.9	15.5	15.5	15.2	15.0	14.9
24.7	26.1	26.9	26.4	27.9	28.2
20.2	21.7	22.6	22.4	23.8	24.0
41.9	42.6	41.4	39.7	42.1	51.9
—	17.6	19.4	20.0	20.3	19.3
-7.8	-1.1	-3.6	-9.1	1	- 58.5
—	4.3	2.8	3.9	17.3	- 26.5
	9.8 4.6 1.5 8.9 13.2 12.0  13.9 10.2 15.9 24.7 20.2 41.9 	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Table 4.13 Monetary Aggregates and Real Interest Rates

Sources: The bank deposit rate series is from Mexican Economic Outlook (CIEMEX-WHARTON). All other data is from Indicadores Economicos (Bank of Mexico).

Notes: M2 = Currency held by the public + peso- and foreign-currency-denominated demand deposits. M3 = M2 + liquid savings accounts. M4 = M3 + nonliquid (i.e., fixed-term) savings accounts.

<sup>a</sup>Real monetary aggregates are calculated as the end-of-year balance deflated by the end-of-year CPI.

<sup>b</sup>M4 less currency held by the public.

°Credit of the Central Bank, the development banks, and the commercial banks.

<sup>d</sup>Average of the end- and beginning-of-year monetary aggregate relative to GDP.

"End-of-year interest rate (December value) less the December-to-December inflation rate.

fWeighted average of bank deposit interest rates (CPP, or costo promedio porcentual).

# 4.3 Concluding Observations

The 1982 debt crisis came, ironically, at the end of a period in which the Mexican economy had been presented an exceptional opportunity to embark upon an era of high and stable growth. During 1977–82, Mexico enjoyed very favorable terms of trade and was blessed by the discovery of enormous oil wealth.<sup>26</sup> The Lopez Portillo administration simply squandered these windfalls in a sustained bout of extraordinary fiscal indiscipline. Real public expenditures (net of interest payments on the external debt) increased by 115.1 percent between 1977 and 1982. This huge increase in fiscal spending was not matched by a similar buildup of the public sector revenue base. Instead, nonoil revenues were allowed to decline to the point where they largely offset the fiscal surplus yielded by PEMEX, and the ensuing fiscal deficits were financed by taking out ever greater amounts of foreign debt. When the inevitable reversal in net foreign lending occurred in 1982, the inconsistencies in policy immediately drove the economy into deep stagflation.

Oil wealth and favorable external conditions provided such a large margin for error that, despite the policy blunders, Mexico was not in serious difficulties until 1981. At that stage, a doubling of the gasoline tax, higher public sector prices, and modest restraint in the growth of real government expenditure could have lowered the fiscal deficit to 2–4 percent of GDP in a year or two. Confoundingly, fiscal policy became not more restrained, but rather more reckless. Political pressures reinforced by the naive belief that future oil sales would cure all macroeconomic imbalances appear responsible for the total collapse in fiscal control in 1981 and 1982. The political business cycle called for strong expenditure increases in the last two years; higher public sector prices would have hurt the middle and upper-middle classes disproportionately, alienating the main political base of the PRI (Institutional Revolutionary Party).<sup>27</sup>

The overly rapid accumulation of foreign debt by the Lopez Portillo administration would not have inflicted lasting damage on the economy had the funds been used to finance efficient investment projects. Unfortunately, this did not happen. According to the various estimates I discussed earlier, between 50 percent and 83 percent of the debt financed capital flight. A large portion of the remainder financed higher public sector consumption and investment. It is difficult to believe that the increase in current expenditures did much to enhance the economy's productive capacity, particularly as the share of human-capital-related expenditures remained small. And though little hard data exists on the productivity of state-owned enterprises, there is little doubt that many of the public sector investments undertaken in this period were fundamentally unsound and have subsequently yielded very low social returns. 5

After making due allowance for capital flight, the splurge in government consumption, and inefficient investments by the parastatal sector, it is difficult to escape the conclusion that Mexico obtained remarkably little for the \$59.7 billion of foreign loans taken out during the Lopez Portillo years. Perhaps the best evidence in support of this conclusion is provided by the extreme hardship the economy has subsequently suffered in servicing the debt. This is the topic of the next chapter.

# The De La Madrid Administration and the Present Crisis

The De La Madrid administration began with a two-year respite from large-scale debt service payments. On 10 December 1982, an agreement was reached with the commercial banks to reschedule \$23 billion of capital payments on the public sector debt coming due between 23 August 1982 and 31 December 1984. The maturity of the debt was extended to eight years and allowed for a four-year grace period. The price for lengthening the repayment period was a 1 percent restructuring fee and an increase in the interest rate of approximately one percentage point. Whereas the previously contracted debt involved spreads of 0.83 and 0.66 percentage points over the U.S. prime rate and LIBOR, respectively, the restructured debt gave lenders the option of a rate 1.75 percentage points over the prime rate or 1.875 percentage points over the ILBOR. The new (public sector) debt service schedule involved minimal amortization until the end of 1984 and then called for \$61.4 billion of capital payments from 1985 to 1990.

The debt restructuring at the end of 1982 was followed in 1983 by two additional, smaller reschedulings. Private firms able to convert their short-term debt into long-term debt according to government guidelines became eligible for a program of insurance against exchange rate risk (covering both principal and interest) offered by FICORCA (see sec. 8.3 below for a detailed description of the program). By the end of October, some \$12 billion of private sector liabilities were tentatively covered by the FICORCA facility; almost all of this debt was renegotiated to mature at eight or more years and included a four-year grace period. Earlier, in June, \$2 billion in export credits had also been rescheduled.

These reschedulings were supplemented by \$5 billion in new loans to the public sector. The new loans carried even harder terms than the restructured