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of import compression on real wages and underemployment, while in chapter 7 I investigate the links between capital accumulation, inflation, fiscal deficits, and financial intermediation.

Chapter 8 covers various topics relating to the evolution of the foreign debt, with a detailed discussion of the different debt reschedulings undertaken since 1982 and institutional aspects of the debt management process. The final chapter briefly examines the economy's future prospects and summarizes the main policy implications of the study.

2 The Record of Stabilizing Development

After the devaluation of the peso in 1954, the Mexican economy entered a phase of high growth and low inflation that would last until the end of the sixties. This period has since come to be known as the era of Stabilizing Development (SD). Though it is difficult to pinpoint its exact starting date, there is general agreement that the SD period covered at least the years 1958–70; that is, mainly the administrations of Presidents Adolfo López Mateos (1959–64) and Gustavo Díaz Ordaz (1965–70).

As stated by the then Minister of Finance, Antonio Ortíz Mena, the main objectives of economic policy during SD were to increase private sector savings and capital accumulation, maintain price stability and a fixed parity with the dollar, and increase real wages (Ortíz Mena 1970). These goals were largely achieved (tables 2.1a and 2.1b), leading observers to speak of a "Mexican miracle." The exchange rate was kept fixed at 12.5 pesos per dollar, and the annual inflation rate averaged 3.8 percent. Real output grew at an average rate of 6.7 percent, and the share of gross fixed investment in GDP rose (at 1960 prices) from 16.2 to 20.8 percent. The real industrial sector wage inclusive of fringe benefits grew at an annual average rate of roughly 4 percent. Workers in the urban informal and agricultural sectors also appear to have experienced large real wage gains. (The data bearing on real wages in the latter two sectors will be discussed in section 2.3.2.)

In the next two sections I discuss in detail the macroeconomic, trade, and industrial policies that constituted the SD program.[1] Section 2.3 is a critical examination of the conventional view that the SD strategy was responsible for a severe worsening in underemployment and the distribution of income and that by 1970 it could no longer deliver sustainable, high rates of growth.

Table 2.1a **Macroeconomic Aggregates (% change)[a]**

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Real GDP	5.3	3.0	8.1	4.9	4.7	8.0	11.7	6.5	6.9	6.3	8.1	6.3	6.9
Manufacturing	5.4	9.0	8.5	5.6	4.9	9.2	17.5	10.0	9.6	7.1	10.5	8.4	8.7
Agriculture, forestry, and fisheries	6.9	−3.1	5.2	1.9	3.8	5.2	7.5	5.4	1.7	2.7	3.1	1.1	4.9
Inflation[b]	.5	3.7	5.0	3.4	2.9	3.2	5.9	2.2	4.0	2.8	2.4	4.0	4.8
Gross fixed capital formation	−5.9	1.3	14.9	.8	5.4	11.5	21.8	6.0	8.9	13.7	9.6	7.4	8.3
Real exchange rate[c]	108.7	104.8	100.0	94.7	92.2	89.1	84.7	84.2	83.6	82.3	82.6	82.0	81.6

Table 2.1b **Composition of Output (% of GDP)[d]**

Private consumption	79.6	79.1	76.2	75.3	75.1	73.6	72.6	71.8	72.1	72.5	73.2	71.9	71.9
Government consumption	6.7	6.3	6.3	6.5	7.1	7.4	7.4	7.2	7.3	7.4	7.5	7.4	7.5
Gross fixed capital formation	16.2	15.9	16.9	16.3	16.4	16.9	18.5	18.4	18.7	20.0	20.3	20.5	20.8
Change in inventories	.6	.4	2.7	3.1	2.0	3.1	3.2	4.3	3.2	2.5	1.6	1.9	3.0
Exports	11.5	11.4	10.3	10.7	10.8	10.5	10.5	10.1	9.9	9.1	9.1	10.0	8.7
Imports	14.7	13.2	12.6	11.8	11.5	11.6	12.1	11.8	11.3	11.4	11.8	11.7	11.9

Sources: All national income accounts data is from *Indicadores Economicos* (Bank of Mexico). Wage data is from the Bank of Mexico's survey of large-scale manufacturing firms (*Encuesta Industrial Mensual*).

[a]Real variables are expressed in terms of 1960 prices.

[b]December-to-December change in the CPI.

[c]Calculated as the period average exchange rate multiplied by the ratio of the U.S. wholesale price index (now called the producer price index) to the Mexican GDP deflator.

[d]Output shares at 1960 prices.

2.1 Macroeconomic Policy

Macroeconomic policy was geared toward promoting capital accumulation and industrialization while preserving price and exchange rate stability. A variety of tax and expenditure measures were employed to raise the return on domestic investment. The 1955 industrial promotion law (Ley de Industrias Nuevas y Necesarias) provided an extensive set of tax subsidies to new and "necessary" industries (defined to be industries in which the market share of domestic firms was less than 80 percent). Firms in such industries received rebates covering 40 percent of the corporate income tax and 100 percent of stamp and sales taxes and all duties on imported machinery, equipment, and raw materials (Solís 1981, 6). In 1961 the corporate income tax was amended to allow for accelerated depreciation allowances. Dividends and interest income were taxed at low, flat rates and accumulated to other income sources in calculating the taxable income base. To promote reinvestment of profits, neither capital gains nor retained profits were taxed after 1965. And lastly, high levels of evasion of the corporate income tax were tolerated. The statutory rate of 42 percent was not the effective rate for most firms.

Public sector investment in projects complementary to private sector capital and low prices for publicly provided inputs also enhanced the profitability of private investment. Most public sector prices, especially energy prices, increased more slowly than the inflation rate. According to an index constructed by Clavijo (1980), the real price of goods and services provided by the public sector fell 12.5 percent between 1961 and 1970 (table 2.2).

Public investment favored the industrial sector to a greater extent than in earlier periods. Table 2.3 shows how the composition of public sector capital outlays shifted over the 1954–70 period. The share of the industrial sector in total investment climbed from 35.4 percent in 1954–58 to 40.1 percent during the Díaz Ordaz administration, while the shares of agriculture and communications and transportation declined. In real terms (deflating by the GDP deflator) public sector industrial investment rose 204 percent during

Table 2.2 **Real Prices of Public Sector Goods and Services[a]**

Year	Price	Year	Price
1961	101.7	1966	96.9
1962	99.7	1967	95.9
1963	98.6	1968	96.2
1964	94.4	1969	92.9
1965	97.1	1970	89.0

Source: Clavijo (1980).

[a]Period average price deflated by the period CPI.

Table 2.3 Composition of Public Investment

Period	Agriculture	Industry	Communications & Transportation	Social Welfare	Administration & Defense	Total
1954–58	13.30	35.41	33.55	15.13	2.61	100
1959–64	10.60	37.49	24.86	24.22	2.83	100
1965–70	10.96	40.06	21.83	25.20	1.95	100
1954–70	11.11	38.76	24.08	23.76	2.29	100

Source: Estadisticas Historicas de México (México, D.F.: INEGI [Instituto Nacional de Estadistica Geografia e Informatica], 1985).

SD, with much of the increased expenditures going to expand the supply of electricity and oil.

Monetary policy played an important, complementary role in stimulating capital accumulation. Real interest rates on bank deposits were at positive levels, several points above those prevailing in the United States. The high real rates along with the stable exchange rate succeeded in attracting a much larger fraction of private sector savings into the banking system, producing what some have termed a "financial miracle" (table 2.4). Led by an enormous increase in the demand for interest-bearing, high-liquidity deposits—the real growth of *bonos financieros* averaged 17.5%—the supply of bank funds and private sector credit expanded rapidly.

While tax, expenditure, and monetary policies were all enlisted to stimulate investment and accelerate the pace of industrialization, this effort was combined with a commitment to prudent macroeconomic management. The "rules of the game" were well defined and called for fiscal and monetary policies to be coordinated in a fashion consistent with the goals of price and exchange rate stability. The growth rate of the monetary base was closely monitored, and it was well understood that if the fiscal deficit exceeded the level consistent with the planned rate of monetary emission, expenditures were to be lowered until the gap was eliminated. Institutional arrangements were of crucial importance in this respect. The Ministry of Finance (Secretaria de Hacienda y Credito Publico, or SHCP) was responsible for controlling both revenue collection and public expenditures. This made Hacienda the main economic authority; the Central Bank was in charge of the less important tasks of setting interest rates and regulating the financial system. Reinforcing the centralization of economic power in Hacienda was the immense personal prestige of Ortíz Mena, who headed the Ministry of Finance from 1958 to 1970. Even in periods when relations with the president were strained, Ortíz Mena's authority in financial matters was regarded as indisputable.

Fiscal deficits were generally small but by no means trivial during SD, ranging from 1 to 4 percent of GDP during the sixties.[2] Deficits of this magnitude, however, were not highly inflationary. The main source of

Table 2.4 Monetary Aggregates and Real Interest Rates

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Real growth rates[a]													
Monetary base	—	—	—	4.1	12.3	15.4	20.3	9.8	7.9	13.3	13.0	8.4	5.6
M2	8.7	6.4	2.6	1.4	9.8	12.1	9.9	3.9	6.7	4.7	10.1	6.3	5.4
M3	7.0	7.7	8.4	7.2	12.9	17.3	15.0	13.6	14.1	12.7	13.5	8.2	5.7
M4	—	—	—	9.0	14.7	16.2	13.0	12.8	16.0	15.4	14.2	14.6	12.9
Total stock of bank funds[b]	—	—	—	11.7	17.4	18.1	14.1	15.6	18.8	17.6	14.8	16.4	14.1
Total credit of the banking system[c]	18.8	13.3	20.1	12.3	12.8	10.5	16.3	15.1	13.6	13.0	11.8	15.8	11.0
Percentage of GDP[d]													
Monetary base	—	—	—	8.6	8.9	9.4	9.8	10.7	10.8	11.3	11.9	12.2	12.2
M2	11.2	11.5	11.1	10.8	10.9	11.3	11.1	11.3	11.0	11.0	10.9	11.0	10.9
M3	12.8	14.1	14.0	14.5	15.3	16.4	16.8	18.3	19.4	20.8	21.7	22.5	22.4
M4	—	—	—	17.9	19.1	20.5	20.8	22.3	23.8	26.0	27.6	29.5	31.3
Total stock of bank funds	—	—	—	13.2	14.5	15.8	16.2	17.8	19.4	21.6	23.2	25.1	27.0
Total credit of the banking system	—	—	—	24.7	26.6	27.5	27.7	30.5	32.4	34.6	36.1	38.4	40.6
Interest rate on finance bonds													
Nominal rate	—	—	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.37	9.37
Real rate[e]	—	—	4.0	5.6	6.1	5.8	3.1	6.8	5.0	6.2	6.6	5.4	4.6

Source: All raw financial data are 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.

[a]Real monetary aggregates are calculated as the end-of-year balance deflated by the end-of-year CPI.

[b]M4 less currency held by the public.

[c]Credit of the Central Bank, the development banks, and commercial banks.

[d]Average of the end- and beginning-of-year monetary aggregate relative to GDP.

[e]Nominal rate less the percentage change in the end-of-year CPI.

funds for financing the fiscal deficit was not the printing press but rather forced "loans" extracted from the commercial banking system through the imposition of high reserve ratios (≈ 34 percent). Since bank deposits grew at a rapid pace, this provided a considerable margin for noninflationary financing of the fiscal deficit. In most years, the government was able to extract seignorage in excess of 1 percent of GDP (table 2.5), even though inflation remained very low.

The modest fiscal deficits and brisk growth in tax revenues supported a considerable increase in total public sector expenditures. Real tax revenues rose at a pace of 8.6 percent per annum. As this was well above the growth rate of real output, the share of public sector revenues in GDP increased by almost two percentage points between 1960 and 1970. From table 2.6 it can be seen that direct taxes were the main source of revenue growth. Indirect taxes grew at the sluggish rate of 4 percent per annum and in 1970 supplied only 57 percent of total tax revenues, a rather low figure for a less developed country. The bulk of the growth in direct taxes came from taxation of wages and salaries, which were taxed at increasing marginal rates.

Concern about inequities in the tax system and the desire to finance a more ambitious public investment program led to an attempt at tax reform in 1964–65. I discuss the failure of this attempted tax reform at length *not* because it was, as is often claimed, responsible for mounting fiscal deficits toward the end of the SD era. Tax revenues grew rapidly despite the failure to achieve tax reform and, as is shown later in section 2.3.3, after taking account of the normal workings of the political business cycle, there is no evidence that fiscal discipline deteriorated during the Diaz Ordaz administration. The failed campaign for tax reform in 1964–65 is significant instead because it foreshadowed failures in the following Echeverria, Lopez Portillo, and De La Madrid administrations, when expansion of the tax base *would be* essential for averting a loss of fiscal control.

2.1.1 The Attempt at Tax Reform in 1964–65

In 1963 Ortíz Mena invited Nicholas Kaldor to prepare a report on restructuring the tax system.[3] Kaldor proposed that the fractionalized system of reporting income be replaced by a global income tax. The exemption level

Table 2.5 **Seignorage (% of GDP)**

1961	.67	1966	1.17
1962	1.30	1967	.84
1963	1.73	1968	1.35
1964	1.68	1969	1.14
1965	.75	1970	1.12

Table 2.6 **Tax Revenue Performance**

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Real growth rates[a]													
Total taxes	8.6	2.8	6.8	2.7	8.7	11.1	15.0	−1.4	15.5	5.6	15.5	7.4	7.5
Direct	−4.6	5.4	13.4	7.9	12.6	12.3	25.6	−16.4	36.8	13.6	15.3	11.1	5.3
Indirect	15.4	1.7	3.9	.2	6.6	10.4	9.1	8.3	4.9	.4	15.6	4.7	9.2
Share of GDP													
Total taxes	7.1	7.1	7.0	6.9	7.1	7.3	7.6	7.0	7.6	7.5	8.0	8.1	8.1
Direct	2.1	2.2	2.3	2.3	2.5	2.6	3.0	2.3	3.0	3.2	3.4	3.5	3.5
Indirect	5.0	4.9	4.7	4.5	4.6	4.7	4.6	4.7	4.6	4.3	4.6	4.6	4.6
Share of direct taxes in total tax revenue	30.0	30.7	32.6	34.3	35.5	35.9	39.2	33.2	39.4	42.3	42.3	43.7	42.8

Sources: All data for 1965–70 are from *Estadisticas Hacendarias del Sector Publico: Cifras Anuales, 1965–1982* (SHCP). Data for 1958–64 are from *Estadisticas Historicas de México* (México, D.F.: INEGI, 1985): 632. The series for total taxes from this source differs significantly from that found in *Estadisticas Hacendarias*. Our series for total taxes over 1958–64 is constructed by splicing the *Estadisticas Hacendarias* series to the *Estadisticas Historicas* series using the 1965 overlap.

[a]Nominal revenues deflated by the GDP deflator.

was $1,000, and the taxable base was to be calculated by summing all income regardless of its source. Progressive rates would be applied against the global base, with the maximum rate being 40 percent.

Very modest wealth and inheritance taxes were to supplement the global income tax. The proposed wealth tax required full disclosure of assets and would be levied against both tangible and nontangible wealth (net of liabilities) valued at acquisition prices. The exemption level was set at $40,000; wealth holdings exceeding this level were to be taxed at a rate of 0.25 percent, increasing in equal 0.25 percent intervals with each additional $80,000 until the rate reached a ceiling of 1 percent.

By and large, the proposed tax reform was rejected. A few piecemeal changes were introduced (interest payments from fixed rate securities and housing rents became subject to taxation), but efforts to globalize the income tax and institute a wealth tax foundered on two contentious issues that have ever since undermined attempts at substantive tax reform:

1. *The anonymity of wealth.* The wealth tax required bonds and stocks to be nominative and registered. The private sector (and many important politicians) opposed this measure, which would disclose the amount and possibly the origin of their wealth.
2. *The equal treatment of property and labor income.* This was and continues to be the major obstacle to reaching an agreement on the definition of a broad tax base.

In August 1966 Ortíz Mena (1973, 46–47) stated publicly that tax reform was more a "process" than a "radical change" and suggested leaving the date "adequate for its implementation to more favorable circumstances." After this, the drive for a major tax reform was abandoned.

2.2 Trade and Industrial Policies

The manufacturing sector was the engine of growth during SD. Real manufacturing growth was consistently high, averaging 9.0 percent during the terms of both López Mateos and Díaz Ordaz. As a fraction of GDP, manufacturing output increased from 23.3 percent in 1960 to 27.9 percent in 1970.

Manufacturing growth was fostered by an import-substituting trade strategy involving an escalated structure of protection. Tariff rates were 5–15 percent on raw materials and intermediate products, 20–25 percent on machinery and tools, 25–35 percent on other manufactured goods, and 100 percent on automobiles (Solís 1981, 6). The tariff structure, however, may not accurately reflect the actual pattern and degree of protection in view of the fact that quantitative restrictions came into widespread use in the sixties. While 35.1 percent of imports (in value terms) were subject to licenses in

1957, by 1970 this figure had increased to 68.3 percent (Gil Díaz 1984b, table A-7). Nonetheless, most studies concur that, by LDC standards, the trade regime was modestly protectionist.[4]

Besides the trade regime, public sector pricing policy, interest rates, and tax credits affected the structure of relative factor prices. In the industrial sector, the user cost of capital and the real price of electricity exhibited sharp declines, while real raw material prices increased slightly. The real (product) wage, by contrast, grew very strongly after 1961, ending up 50 percent higher in 1970 than at the beginning of the decade.

It is difficult to ascertain how the mix of trade and industrial policies affected employment growth in different sectors. There are numerous serious problems with the employment data in the 1960 and 1970 population censuses. The original 1960 census was marred by gross processing errors, and the corrected version still appears to overenumerate greatly the size of the agricultural labor force. Classification schemes also differ as between the two censuses, and in the 1970 census a large number of labor force participants were not assigned to any category. (This was also a problem, but to a lesser extent, in the 1960 census.)[5] Estimates of employment growth differ widely depending on the nature of the adjustments made to "correct" these and other flaws in the data.

Although the quality of the data is problematic, the weight of the evidence favors the conclusion that, despite large, sustained increases in the real wage, employment growth in the industrial sector considerably outstripped the growth rate of the labor force. Table 2.7 presents the estimates made by Unikel (1978) and Altimir (1974) for the sixties. According to Altimir's

Table 2.7 **Employment Growth (average annual rate)**

	1950–60	1960–69
Altimir		
Primary[a]	.4	.5
Secondary[b]	3.9	5.2
Tertiary[c]	4.2	3.9
Total	2.0	2.7
	1960–65	**1966–70**
Unikel		
Agriculture	−1.36	−1.92
Industry	3.11	2.80
Services	4.88	4.05
Total	1.40	1.33

Sources: Unikel (1978); and Altimir (1974), cited in Gregory (1986, 30).

[a]Agriculture, livestock, forestry, and fishing.

[b]Mining, petroleum, manufacturing, construction, and electric power generation.

[c]Commerce, finance, transportation, communications, government, and other services.

estimates, employment growth in the high-wage industrial sector accelerated in the sixties and, at an annual average rate of 5.2 percent, was the highest of the sectoral figures. Unikel's estimate of employment growth is much lower, but is still well above the growth rate of the labor force.

2.3 Another Look at the Record of Stabilizing Development

In the initial, quick examination in section 2.1 of the macroeconomic data for 1958–70, I observed that the record of SD with respect to growth of aggregate output, growth of real industrial sector wages, investment, and inflation was impressive. Many students of Mexican economic history, however, are of the view that a more detailed investigation reveals that the SD program was inherently flawed. Conventional wisdom holds that starting sometime around the mid-sixties the Mexican economy was beset by a host of intractable problems:

1. *Inadequate employment growth.*[6] Underemployment is alleged to have worsened as a result of policies aimed at stimulating investment, which made capital relatively cheap and encouraged firms to use less labor-intensive technologies, and the protectionist trade regime, which promoted the capital-intensive, import-substituting industrial sector at the expense of the labor-intensive agricultural sector.
2. *A worsening distribution of income.*[7] Neglect of agriculture and inadequate employment growth meant that the poorest groups gained little in the growth achieved under SD.
3. *Progressive loss of fiscal control.*[8] Concern about the deteriorating distribution of income created pressure to increase social welfare expenditures, leading to a sharp increase in overall public sector spending in the last half of the sixties. Due to an earlier failure to achieve any significant tax reform, revenue growth could not keep pace and the fiscal deficit started rising, climbing from 0.9 percent of GDP in 1965 to 3.8 percent in 1970 (tables 2.8 and 2.9). The larger fiscal deficits, in turn, caused the payments balance to deteriorate, and by 1970 the current account deficit had reached the unprecedented figure of $1.19 billion.
4. *Diminishing growth potential.*[9] It is often claimed that the economy began to lose steam after 1965 when growth in agricultural output declined steeply and the opportunities for "easy" and efficient import-substitution had been largely exhausted.

I am unable to find much support for this critique. Most of the critique, if not incorrect, rests on very shaky foundations.

2.3.1 The Distribution of Income

Utilizing data from various household-expenditure surveys dating back to 1950, numerous studies have been made of how the distribution of income

Table 2.8 **Public Sector Revenues and Expenditures (% of GNP)**

	1965	1966	1967	1968	1969	1970
Expenditure	18.8	18.4	19.7	19.6	20.0	22.3
Current	15.1	14.9	14.7	14.5	14.6	15.3
Interest on foreign debt[a]	.4	.5	.6	.7	.7	.8
Other	14.6	14.4	14.1	13.8	13.9	14.5
Capital	3.7	3.5	5.0	5.1	5.4	7.0
Revenues	18.0	17.3	17.5	17.7	18.1	18.9
Economic deficit	.8	1.1	2.2	1.9	1.9	3.4
Deficit on financial intermediation[b]	.1	.1	.2	.3	.3	.3
Monetary deficit	.9	1.2	2.4	2.2	2.2	3.8

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

[a]Estimated by multiplying public sector interest payments on the foreign debt by the period average controlled exchange rate.

[b]Deficit of La Banca de Desarrollo.

Table 2.9 **Breakdown of the Fiscal Deficit (% of GDP)**

	1965	1966	1967	1968	1969	1970
PEMEX						
Expenditure	3.0	3.1	2.9	2.9	2.8	2.7
Current	2.6	2.7	2.1	2.3	2.4	2.3
Capital	.4	.4	.8	.5	.4	.4
Revenues[a]	3.2	3.2	3.5	3.4	3.4	3.3
Deficit	−.3	0	−.5	−.5	−.6	−.6
Non-PEMEX parastatals[b]						
Expenditure	6.8	6.8	7.2	7.0	7.2	9.9
Current	6.3	6.2	6.2	5.8	6.0	6.3
Capital	.5	.6	1.0	1.2	1.2	3.6
Revenues[a]	6.0	5.5	6.0	5.8	5.9	6.8
Deficit	.8	1.3	1.2	1.2	1.3	3.1
Other[c]						
Expenditure	9.1	8.5	9.5	9.8	10.0	9.7
Current	6.2	6.0	6.3	6.4	6.2	6.7
Capital	2.9	2.5	3.2	3.4	3.8	3.0
Revenues[a]	8.8	8.6	8.0	8.5	8.8	8.8
Deficit	.3	−.1	1.5	1.3	1.2	.9

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

[a]Sum of revenues and taxes paid.

[b]Budget- and nonbudget-controlled parastatal enterprises.

[c]Includes DDF (Department of the Federal District).

evolved during SD. The general conclusion reached by these studies is that the distribution of income worsened significantly. Tables 2.10 and 2.11 show how the distribution of income by decile and several standard distributional measures varied from 1950 to 1977. All of the distributional measures (except possibly Atkinson's Coefficient) suggest a marked increase in inequality between 1958 and 1970. According to table 2.10, the middle classes and the very rich were the main beneficiaries of growth. The income

Table 2.10 Distribution of Income by Deciles

Decile	1950	1958	1963	1968[a]	1970	1975	1977
I	2.43	2.32	1.69	1.21	1.42	0.69	1.08
II	3.17	3.21	1.97	2.21	2.34	1.28	2.21
III	3.18	4.06	3.42	3.04	3.49	2.68	3.23
IV	4.29	4.98	3.42	4.23	4.54	3.80	4.42
V	4.93	6.02	5.14	5.07	5.46	5.25	5.73
VI	5.96	7.49	6.08	6.46	8.24	6.89	7.15
VII	7.04	8.29	7.85	8.28	8.24	8.56	9.11
VIII	9.63	10.73	12.73	11.39	10.44	8.71	11.98
IX	13.89	17.20	16.45	16.06	16.61	17.12	17.09
X	45.48	35.70	41.60	42.05	39.21	45.02	37.99
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Hernandez and Cordova (1979, 443), cited in Gallardo (1983, 2240).

[a]Revised data from the Bank of Mexico.

share of the sixth, seventh, and top deciles rose, while the share of all remaining deciles fell.

Notice, however, that any worsening that may have occurred in the distribution of income took place entirely in the very short period from 1958 to 1963. Between 1963 and 1970, the various income distribution measures either remain stable or improve. The sharp reversal after 1963 raises doubts about how much of the overall deterioration in the distribution of income over 1958–70 can be attributed to the policies of SD. *If* one accepts that there was a strong causal link, one can say from the data either that the distribution of income had ceased to deteriorate by 1963 or that the initial deterioration caused by SD policies was temporary and after 1963 was in the process of being reversed.

The conclusion that the distribution of income deteriorated between 1958 and 1970 is also open to question. Apart from problems in the quality of the data across surveys, the summary income distribution measures may be biased. It is well known, for example, that when individuals change their position in the income distribution ranking, the Gini coefficient and the income share of the poorest may suggest that the distribution of income has worsened when in fact it has unambiguously improved.[10] This would appear to be a potentially serious problem in the Mexican case, for, as noted earlier, employment growth in the industrial sector was well above the growth rate of the labor force during SD. The resulting substantial transfer of labor from low- to high-wage sectors of the economy probably enabled many of the (formerly) poor to move up the income distribution ladder.

The latter observation suggests one final point. Regardless of how the overall distribution of income may have changed, it seems the poor benefitted substantially in absolute terms from the high rates of growth achieved under SD. From the data in table 2.10 one can infer that real incomes of the poorest 40 percent of the population grew at an annual

Table 2.11 **Inequality Indices**

			Atkinson's Coefficient of Inequality[a]			Richest 20%	Middle 30%	% of poor families	
	Gini	Theil	$E = .5$	$E = 1.5$	$E = 3.0$	Poorest 40%	Poorest 40%	A[b]	B[c]
1950	.516	.748	—	—	—	4.5	1.37	60	—
1958	.450	.406	—	—	—	3.6	1.49	45	—
1963	.527	.494	.20	.45	.62	5.5	1.81	35	—
1968	.526	.488	.16	.42	.62	5.4	1.85	30[d]	63.2
1970	.496	.498	—	—	—	4.7	1.86	—	48.6
1975[e]	.570	.556	—	—	—	7.3	2.45	—	49.5
1977	.496	.426	.17	.44	.78	5.0	2.01	—	—

Sources: Measure *A* of the percentage of poor families is from van Ginneken (1980, 19). Measure *B* is based on estimates made by a World Bank mission and is from Solís (1981, 147). The estimates of Atkinson's Coefficient are from Aspe and Beristain (1984b, 45). The other income distribution measures are from Gallardo (1983, 2241).

[a]For the per capita income distribution.

[b]Poverty line is 10,000 pesos per year.

★Poverty line is the 1975 minimum wage.

[d]The figure is for 1969.

[e]The data in the 1975 Income-Expenditure Survey are known to be unreliable.

average rate of 5.8 percent during the SD era.[11] According to a study by van Ginneken (1980), the percentage of families living in poverty declined from 45 percent in 1958 to 30 percent in 1969.[12]

2.3.2 Underemployment

The claim that underemployment worsened during SD strikes me as particularly weak. First, the assertion that decreases in real energy prices and in the user cost of capital slowed employment growth is theoretically dubious. Lower prices for energy and capital might induce firms to adopt less labor-intensive technology, but they also raise the profit-maximizing level of output. From production theory and most empirical estimates one can argue that normally the favorable output effect on labor demand will dominate the adverse substitution effect. Factors of production, in other words, tend to be gross complements so that reductions in the cost of capital and energy would be expected to raise, not lower, the rate of employment growth. Observations that the capital and energy intensity of production increased are beside the point; it is precisely the greater utilization of cooperating, complementary factors that enhances labor productivity and expands labor demand.

The thrust of my analysis so far has been that the SD policies promoted employment growth in the high-wage industrial sector. This is not, of course, sufficient to rule out the possibility that underemployment worsened during SD. Indeed, there is a sizable school of thought which contends that while industrial sector employment growth was respectable, it was achieved at the cost of generally stagnant employment. Shrinking employment opportunities in agriculture, it is asserted, caused a large increase in migration out of rural areas. Only a small fraction of the rural migrants could be absorbed by expansion in the capital-intensive industrial sector; the remainder spilled over into the low-productivity informal sector.

The employment data, unfortunately, are inconclusive on this point. Different stories emerge from the different methods various authors use to adjust the employment data in the 1960 and 1970 population censuses. Referring back to table 2.7, Unikel's estimates show aggregate employment growth lagging behind the growth rate of the labor force. Altimir's estimates, on the other hand, show not only much greater rates of employment growth in agriculture and industry but also a doubling in the growth rate of labor productivity in the tertiary sector from the fifties to the sixties.

On balance, it seems the evidence lends greater support to the view that the SD policies succeeded in greatly reducing the extent of underemployment. Altimir's estimates are corroborated by a number of other findings which suggest that labor demand grew very strongly throughout the sixties. Gregory (1986) reviews the data on wages and productivity in the informal sector and concludes that they strongly contradict the hypotheses that (in the sixties): (a) low wages and low productivity

generally characterize the informal sector and (b) the large shift of labor out of agriculture depressed informal sector incomes. Labor productivity increased strongly in the service sector, and in many branches wages exceeded the minimum wage in 1970 (34–49). Table 2.12, which is constructed from Gregory's tables 7.4 and 7.5, shows that real wages and labor productivity increased substantially across all size establishments in industry, commerce, and services.

Migration studies provide additional evidence of improving employment opportunities.[13] According to anthropological studies and sample surveys of migrants in Mexico City and Monterrey, most migrants found employment very quickly and viewed migration as having substantially improved their standard of living. In addition, the studies do not confirm the notion that migrants flooded into the informal sector. The share of migrants taking their first job in the tertiary sector declined in each succeeding decade from 1930

Table 2.12 **Average Annual Growth Rates of Total Real Remunerations and Net Value-Added per Employee, 1960–70[a]**

Sector and Size of Establishment	Average Remuneration per Employee	Net Valuc-Added per Employee
No paid employees		
Industry	—	5.0
Services	—	—
Commerce	—	—
Establishments with paid employees		
Small		
Industry, 1–5 workers	3.3	4.3
Services, 1–2 workers[b]	6.1	—
Commerce, 1–2 workers	2.4	—
Medium		
Industry, 6–25 workers	2.6	6.7
Services, 3–8 workers[c]	2.9	—
Commerce, 3–8 workers	1.5	—
Large		
Industry, 26–100 workers	1.2	—
Industry, 101–500 workers	3.4	—
Industry, >500 workers	4.4	—
Services, >9 workers[c]	6.1	12.5
Commerce, >9 workers	1.5	—

Sources: The growth rates of real remunerations are calculated from Gregory (1986), table 7-3 (232). Net value-added per employee is calculated by deflating Gregory's estimates of nominal value-added in table 7-5 (240) by a price deflator for industrial sector value-added. The deflator was constructed by forming a weighted average of the price deflators for the manufacturing, construction, mining, and electricity sectors, where the respective weights were given by the sector's share in total industrial value-added in 1960.

[a]Total remunerations are wages and salaries plus fringe benefits and payroll taxes. Nominal remunerations are deflated by the CPI for Mexico City.

[b]1–3 workers in 1960.

[c]4–10 workers in 1960.

[d]11 or more workers in 1960.

to 1970; in the sixties, 56 percent of migrant unskilled workers went into the industrial sector.

2.3.3 Fiscal Discipline

The claim that fiscal discipline began to break down during the Díaz Ordaz administration in the wake of political unrest and pressures to increase social welfare expenditure does not appear to be any better founded than the claims that SD had adverse repercussions on the distribution of income and employment growth. The share of public investment devoted to social welfare did increase during the Díaz Ordaz administration, but the increase was far smaller than in the preceding López Mateos administration. Moreover, while 1965–70 was a time of considerable social and political tension, so also was the 1958–64 period. If Díaz Ordaz had to contend with a students' strike in 1965 and student riots in 1968, López Mateos faced the railroad strike and the teachers' strike in 1959, a rural guerilla campaign in 1962, and a physicians' strike in 1964 (which almost brought down the government).

If there was no weakening of fiscal discipline, what then accounts for the steady increase in the fiscal deficit from 0.9 percent in 1965 to 3.8 percent in 1970? A quite plausible answer is that the growth of the deficit reflected nothing more than the normal workings of a well-defined political expenditure cycle.[14] Table 2.13 displays the results of regressing the detrended values of current, capital, and total government expenditure for 1965–85 on six dummy variables (*D1–D6*) corresponding to the six years making up the presidential term. Serial correlation was tested using the limits for the Durbin-Watson statistic developed by Farebrother (1980) for regression

Table 2.13 **The Political Expenditure Cycle**

	Total Public Sector Expenditure	Current Expenditure	Capital Expenditure
D1	−.076	−.026	−.19
	(2.32)	(.63)	(4.24)
D2	−.063	−.067	−.04
	(1.93)	(1.61)	(.90)
D3	−.151	−.038	.043
	(.46)	(.92)	(.96)
D4	−.016	−.002	.059
	(.15)	(.04)	(1.32)
D5	.12	.082	.218
	(2.98)	(1.62)	(3.96)
D6	.079	.091	
	(2.40)	(2.18)	
R^2	.71	.70	.80
$\bar{R}^2$	.56	.47	.65
Durbin-Watson statistic	1.22	1.47	1.81

equations without a constant term. In those cases where the Durbin-Watson value fell in the indeterminant range, Bartlett's (1946) test was then applied as a second check for serial correlation. In none of the regressions was there evidence of first-order serial correlation.

It is clear from table 2.13 that fiscal policy follows a very distinct cycle. For total government expenditure, the dummy variables are negative and significant in the first two years and positive and significant for the last two years. Capital expenditures exhibit a significant decrease in the first year and a significant increase in the fifth year, while current expenditures show a nearly significant decrease in the second year and a significant increase in the final year.

The expenditure cycle seems to stem from both the perceived political advantages of increasing expenditures shortly before elections and the incongruity between the natural gestation period of investment projects and the fixed, six-year term (*sexenio*) of each administration (reelection is not allowed). Fiscal expansion invariably occurs in the two years preceding the upcoming election. Capital spending first increases strongly in the fifth year in the rush to complete investment projects before the term of the existing administration expires. In the following year, spending surges again as current expenditures rise in the campaign to strengthen political support just before the election. Immediately after the election, spending falls sharply as capital expenditures temporarily decline while a new set of investment projects are being designed and the new administration strives to reduce the fiscal deficit. Fiscal control then prevails until the fifth year when the cycle starts to repeat itself.

Returning to the issue of fiscal discipline in the latter part of the SD period, since 1965 was the first year of the Díaz Ordaz *sexenio*, the increase in the fiscal deficit between 1965 and 1970 was not at all out of the ordinary. The relevant comparison is between the fiscal deficits of 1964 and 1970. This comparison does not support the notion of mounting fiscal problems. In both years, the deficit was approximately 4 percent of GDP.

2.3.4 Diminishing Growth Momentum?

Finally, I also disagree with the claim that the economy's growth momentum began to decline after the mid-sixties. Much has been made of the drop in the growth rate to 4.2 percent in 1971.[15] But this drop is readily explained by the fiscal retrenchment that occurs in the first year of the political expenditure cycle. Table 2.14 confirms the expectation that the expenditure cycle is associated with a similar cycle for real GDP.[16] The difference between the actual growth rate in 1971 and the fitted value of the model is only 0.0012 and is not statistically significant (the SEE is 0.0328). Thus, the 1971 slowdown was hardly unusual.

Concerning the pattern of agricultural output, the high rates of growth between 1945 and 1965 were based on the development of large-scale

Table 2.14 **The Political Expenditure Cycle and Real Output, 1940–85**[a]

	Real GDP
D1	−.02
	(1.85)
D2	−.01
	(.89)
D3	−.006
	(.57)
D4	.015
	(1.30)
D5	.021
	(1.75)
D6	.005
	(.46)
R^2 =	.52
$\bar{R}^2$ =	.45
DW =	1.06

[a] *t*-statistics are in parentheses.

irrigation schemes in the northwest that improved existing lands or brought vast amounts of new land under cultivation. By 1965 this source of growth had been largely exhausted.[17] Agricultural growth fell off sharply after 1965 because of political constraints on land redistribution that prevented investment to develop the more populous, rainfed agricultural areas, not because SD entailed "neglect" of the agricultural sector. Furthermore, despite the deceleration in agricultural growth, overall growth remained satisfactory owing to the strong performance of the industrial sector. Industrial sector productivity continued to grow at an impressive rate, the investment share in GDP increased 2.4 percentage points (measured at 1960 prices), and total output growth averaged 6.8 percent during the Díaz Ordaz administration.

The continuing dynamism of the industrial sector would seem to belie the claim that the process of import substitution was encountering increasing difficulties. The argument that much of this growth was inefficient because it was achieved under a protectionist trade regime is also quite dubious. Free trade is not necessarily optimal if distortions are present and cannot be remedied by the imposition of appropriate lump-sum taxes and subsidies. Recent theoretical work, in fact, suggests that an escalated structure of protection is an appropriate (second-best) policy when either the level of private investment falls short of the socially desired level or the labor market is distorted by wage rigidity in the industrial sector.[18] Given the sizable gap between wages in the industrial sector and the informal and agricultural sectors, the record of sustained growth in industrial productivity, and the moderate nature of Mexican protection, it is difficult to construct a strong case for the view that import-substituting industrialization was inefficient during SD. The one obvious flaw in the trade regime was the relatively high

degree of protection granted to the domestic capital goods sector. A trade regime that did not protect this sector would have been more effective in stimulating economywide capital accumulation.

2.4 Concluding Observations

The SD era was one of the most successful periods of Mexican economic development. A remarkable degree of macroeconomic stability prevailed at the same time that annual GDP growth averaged 6.7 percent. In my view, there is no firm evidence that the accomplishments of high growth and macroeconomic stability were tainted by a worsening in either underemployment or the distribution of income. In fact, some evidence points to the opposite conclusion or, at the very least, to the conclusion that the record of SD was adequate on these two counts. Labor demand grew strongly in the high-wage industrial sector. Even Unikel's pessimistic estimates show industrial sector employment expanding at an annual clip of 3 percent despite real wage growth averaging over 4 percent. And while employment studies yield disparate conclusions about the growth of aggregate employment, wage and productivity data suggest that substantial progress was achieved in reducing the extent of underemployment.

Distributional studies are plagued by problems in the comparability of data at different points in time and likely biases in the summary measures of the income distribution. Putting these reservations aside, the data, such as they are, show that inequality increased between 1958 and 1970. But the worsening in the distribution of income occurred entirely in the 1958–63 subperiod; after 1963, the distribution of income improved. This peculiar pattern, coupled with the substantial transfer of labor from low- to high-wage activities, makes one suspicious of the claim that a heightening of income inequality was inherent in SD policies. Furthermore, though the distribution of income may have deteriorated and SD policies may have been partially to blame, it also seems that in absolute terms the poor reaped substantial gains. Average real income of the poorest 40 percent of the population increased 97 percent, and the percentage of families living in poverty greatly declined.[19]

The SD period was marred by numerous outbreaks of social unrest. It is hardly clear, however, that these outbreaks had much, if anything, to do with the economic policies of SD. The growth of social discontent reflected principally the dissatisfaction of the middle classes at being excluded from the political process. In earlier years, political hegemony had been maintained by co-opting the growing middle class into either the government or party bureaucracy. By 1960 the middle class was simply too large to be placated in this fashion and the political consensus began to unravel.[20]

Some authors (e.g. Tello 1979) contend that the social unrest of the sixties can be traced to increased underemployment and a deterioration in the distribution of income which adversely affected the welfare of the middle

classes. But the claim that underemployment worsened is difficult to substantiate, and the data in the income-expenditure surveys contradict the notion that economic factors underlay middle class dissatisfaction. The income share of the middle classes increased in each succeeding survey (1958, 1963, 1968, 1970) and rose far more over the 1958–70 period than that of any other group.

In vigorously defending the record of SD, I am not saying that policy mistakes were not made. Tax reform, less rapid real wage growth in the industrial sector, and greater efforts at promoting agricultural development would, I believe, have led to greater reductions in underemployment and a more equitable distribution of income. Overall, however, SD worked and worked well.

3 Shared Development and the Echeverría Administration

The presidential campaign of Luis Echeverría generated great enthusiasm and high hopes among the general population. Echeverría crisscrossed the country, exhibiting a level of political energy not seen since the days of Lázaro Cárdenas in the thirties. He repeatedly stressed two basic themes in his campaign: prevention of another social conflict like that of 1968 and preservation of the fixed exchange rate of 12.5 pesos per dollar. The first objective reflected Echeverría's intention to achieve a reconciliation with the young and the middle class. The second signalled a commitment to perpetuate the successful financial system inherited from SD.

Although the Ministry of Finance and Bank of Mexico were placed under the direction of professionals who had served the two preceding administrations, the economic program of SD was rejected as having done too little to reduce underemployment and improve the distribution of income. It was announced that henceforth the government would take a more active role in ameliorating social ills—that is, in promoting "Shared Development." The initial economic program proposed six measures to foster Shared Development and reduce the large current account deficit of 1970:[1]

1. Increase the supply of credit to, and government investment in, the agricultural sector.
2. Replace licenses by tariffs, eliminate tax rebates given to the industrial sector, and redirect trade policy toward export promotion.
3. Increase government revenues by raising public sector prices, by tax reform, and by a reduction of tax evasion.