537

Part XI: Development of Data

CHAPTER 34

CHANGES IN MEXICO SINCE 1895: CENTRAL GOVERNMENT REVENUE, PUBLIC SECTOR EXPENDITURE, AND NATIONAL ECONOMIC GROWTH

by

James W. Wilkie

James W. Wilkie and Adam Perkal, eds., *Statistical Abstract of Latin America*, vol. 24 (Los Angeles: UCLA Latin American Center Publications, University of California, 1985).

Patterns in Mexico's State Activity Since 1895

A major problem in examining Mexico's history has been the lack of long-term economic statistics that are relatively comparable across time for each series. The purpose of this essay is to develop some basic historical series, dealing specifically with the growth of the Mexican economy, the increase in state expenditures, and patterns in the source of central government revenues.

Of interest here are the presidential periods since the dictatorship of Porfirio Díaz, whose regime was overthrown by the Mexican Revolution of 1910. Out of Mexico's revolutionary upheaval came a periodization that I characterize like this:

1. Two decades (1910–30) of political solutions for Mexico's problems, including violence (to 1920) and a decade of national reconstruction (to 1930)
2. A decade (1930–40) of state emphasis on social reform
3. Two decades (1940–60) of state emphasis on industrialization
4. A decade (1960–70) of attempt to achieve balance between the political, social, and economic approaches to Mexico's problems
5. A period (since 1970) of statism

To place the post-1910 period into some perspective, I trace back data to the year 1900 where possible or feasible.

During the periods outlined above, what began after 1910 as the growth of active state policy intent on balancing private and public needs subsequently grew into statist policy. Under the active state the government sector steadily expanded its attempts to control the economic and social life of Mexico until 1970 when the government began to assert itself as more important than the private sector. This statement is all the more true when the Mexican government's regulatory functions are taken into account along with the nationalization of the private banking system in 1982.

In a significant step to end Mexico's civil war of 1914–17, the contenders for power wrote the country's twentieth-century constitution. Although the Constitution of 1917 has provided for balance between the private and public sectors, the political reality since 1929 of rule by one political party (the Official Party of the Revolution)[1] has led almost inevitably to state domination of affairs.

AUTHOR'S NOTE: In two recent articles (Wilkie 1985*a*, 1985*b*) the author has made use of the data defined, organized, and prepared in yearly or periodic form in this chapter of SALA to measure the emergence of the modern Mexican state.

[1] The Official Party has enjoyed three names since 1929: from 1929 to 1938, the Party of National Revolution (PNR); from 1938 through 1945, the Party of the Mexican Revolution (PRM); and since 1946, the Party of Institutional Revolution (PRI).

To understand the extent and pace of the state's emerging role in Mexico, important items on the research agenda include the determination of patterns in types of "revenue" collected by the central government as well as the development of series on the *real* amount of money expended by the government and the *real* value of Mexico's yearly economic production of goods and services (gross domestic product or GDP).

In all epochs people complain with reason that the money of "today" is no longer worth what it was "yesterday." To analyze the economic growth of the state we must convert the value of money which is "current" at different times into amounts according to what that money could really buy as time passes. If we did not adjust for inflation to determine the real value of money, the mere facts of price increases and increasing amounts of money in circulation would prevent us from comparing the situation in one period to that of another.

Therefore, I develop here the following time-series:

1. Composite price index
2. Total and per capita expenditures by the central sector of government as well as the decentralized government (or parastate) sector—which is not dependent upon the Mexican Treasury Department for most of its income as is the central government
3. GDP's value and its relation to national government expenditures
4. Index of GDP and of GDP/C (that is, GDP divided by the size of changing population) in order to know the extent to which GDP is keeping up with or falling behind the size of population which the economy must support
5. Pattern in type of central government revenue collections (including loans received)

Although Mexico's Dirección General de Estadística (DGE) and Banco de México (BDM) have developed data for the above series, the results are not always consistent or presented in meaningful terms.

To prepare data on all but the last series, it is necessary to develop at the outset a single price index that covers all of the years since 1900.

Comparative Price Indexes for Mexico

The Mexican government agency historically in charge of measuring inflation was the DGE. The DGE series covered wholesale prices in Mexico City and extended back into the nineteenth century. Until recently, it stood out as the sole

major price index that also covered at least some of the years of Mexico's civil war (except 1914–17). Thus I used the DGE index for my analyses of Mexico's budgets (1967, 1970, 1978), the first to compare planned and actual expenditures and to examine them in terms of real value.

To compete with the DGE wholesale price index, beginning with data for the year 1939 the Banco de México began to develop a wholesale price index that "improved" on the DGE index by including about four times more items in the "basket" of goods measured for change in prices. Unfortunately, the BDM index did not include data prior to 1939.

Apparently realizing the time-depth deficiency in its wholesale price index, the BDM began working seriously on a price index to adjust its historical estimates of real change in Mexico's GDP since 1900. If the BDM did produce a major new index, it did not publicize it as such, and for many years simply let others calculate the "GDP deflator index" by comparing its data on "current GDP" with "real GDP." In short, as a byproduct of its reconstructing the change in real GDP back to 1900, the BDM had created a new price index (without openly publishing its methodology). Known as the implicit deflator of GDP, this BDM index was well refined by 1970 and came to constitute a competing index that could allow knowledgeable observers to assess the amount of yearly inflation in Mexico.

Meanwhile, debate had arisen in Mexico over which *wholesale* price index should be used to adjust time series for the inflation factor (see Wilkie 1974:142). By the early 1970s the DGE wholesale price index was showing inflation to be at an embarrassingly high level compared to the BDM wholesale price index. The issue was resolved in 1975 when the government of President Luis Echeverría Alvarez (1970–76), realizing that it could enjoy better propaganda mileage out of the BDM wholesale price index (and could hold down increases in wage levels if the higher index were dropped), suppressed the DGE wholesale price index.

To resolve the question about which of the three indexes has best measured inflation, table 3400 offers the data for each. The indexes are all based upon the year 1950 as equal to 100 so that not only are data comparable to the same base but also figures for the earliest years show as whole numbers.

Ironically, the DGE's wholesale series and the BDM's GDP deflator are remarkably similar from 1900 to 1965 (except for 1947, 1953, and 1955–57). After 1965, although the deflator and DGE index began to show different amounts of inflation for some years, the two were always closer than the BDM's wholesale price index, which appears to dramatically understate inflation.[2]

[2] It can be argued that theoretically the wholesale price index should yield less inflation than the GDP deflator because, for example, the former involves cost of consumption items (many under government cost control) within the country and the latter includes cost of production and import items that will not directly (if at all) affect most people's lives. But, given the misvaluation of the peso at such a low level over many years, import goods were not necessarily more expensive than goods purchased in Mexico.

It is interesting to see that the DGE index from 1953 through 1964 (except for 1962) shows slightly more inflation than the BDM's GDP deflator index, after which this situation reversed with the BDM deflator showing more inflation. Through 1964 the indexes were essentially similar and if either can be used for the previous 65 years, the DGE price index covered six years (1911–13 and 1918–20) that the GDP deflator index did not include.

The demise of the DGE index of wholesale prices prevents updating my budgetary analysis without using a new index to deflate the Mexican government's planned and actual expenditures. Fortunately, because of the close relationship of the GDP deflator price to the DGE index, the two can be linked at the year 1965 to create what I call the DGE-BDM composite index of prices. The indexes were almost equal in 1963; in 1964 the DGE was higher and in 1965 the GDP deflator became permanently higher. The choice of 1965 as the linkage year means that since 1963, when the indexes were nearly the same, the CPI gives the consistently higher result for the years of overlap up through the 1976 suppression of the DGE index.

The DGE-BDM composite index of prices is given in table 3401. This composite index allows us to link previous, DGE index–based research to present and future research that is based upon the GDP deflator index. In this manner, we maintain a framework for study that yields relatively consistent results over the long term. In any case, it should be clear from the above discussion that there is no one "truth" about the nature of inflation in Mexico, and the composite index of prices is as "realistic" as any we know at present.[3]

To show the use of the DGE-BDM composite index of prices, let me now turn to Mexican public expenditures.

Expenditures of the Mexican National Government

There are not one but two national governments in Mexico. One, the central (or federal) sector, carries out traditional legislative, judicial, and executive functions, including defense, police, mails, transportation, and so on. The other national government, the decentralized (or parastate) sector, administers:

1. The activities of nationalized companies, often formerly owned by foreign interests, such as PEMEX (the national oil company) and Ferrocarriles Nacionales (the national railway system)
2. Companies owned wholly or jointly with minority private shareholders (such as Ferrocarril Chihuahua al Pacífico, S.A. de C.V.)
3. The national trust funds (such as Instituto Mexicano de Seguro Social, the Mexican social security institute)

[3] For research on Mexico's price incexes, see Jeffrey L. Bortz, "Industrial Wages in Mexico City" (Ph.D. dissertation, University of California, Los Angeles, 1984).

4. Trust funds administered jointly with state and local governments (such as the Junta Federal de Mejores Materiales de Acapulco)
5. Other autonomous activities, such as funding programs to stimulate agriculture (e.g., Fideicomiso Relativo a las Siembras de Maíz, Frijol y Cacahuate) and export development (e.g., Impulsora de Empresas Turísticas, S.A. de C.V.)

Several of these parastate agencies and funds are not audited, but their total planned and actual outlays may be included in the total for parastate activity.

Central Government Expenditures

Data on central government planned and actual gross expenditures are given in table 3402. The data include amortization of the debt and transfers to decentralized agencies, states, and local government (discussed in Wilkie 1985*b*), and they are converted to pesos of 1950 with the DGE-BDM composite price index. Essentially these are the figures given in several of my previous studies (1967, 1970, and 1978), except that here I have carried forward since 1976 the data in current pesos and have revised since 1965 the figures in pesos of 1950, utilizing the DGE-BDM price series (which links the DGE series to the BDM series in 1965). I have also revised actual expenditures from 1930 to 1947 to account for "off-budget" spending by presidents Lázaro Cárdenas, Manuel Avila Camacho, and Miguel Alemán. This off-budget activity involved foreign loans for road building and it was considered to be extraordinary until 1947 when all such loans were incorporated into the regular budget process by President Alemán, who included them in a newly created budgetary category entitled *erogaciones adicionales*.

Development of the long-term yearly budgetary series in table 3402 allows us to summarize in table 3403 and figure 34:1 the average number of per capita real pesos of 1950 available during each presidential term. The figures allow us to more clearly assess the differences among the country's political leaders.

The data in table 3403 show startling variation. Under the dictator Díaz, the central government projected expenditure at 31.8 pesos per person and actually spent the amount, 31.9 pesos. (No per capita funds really reach each person, of course, but only show us how much funding is available in relation to population.) Presidents from 1911 through 1924 averaged less than projected; Venustiano Carranza spent less than half that planned owing to civil war. By the early 1940s actual expenditures were in real terms running far ahead of per capita plans, reaching a percentage increase of 60.2 percent under Manuel Avila Camacho, as shown in figure 34:2. The record gain in actual underprojected outlay came under Gustavo Díaz Ordaz, who ran up an increase averaging 82.6 percent. Subsequently, after the results of my budgetary analysis (1967 and 1970) had brought about a reform to limit such increases, the gain in actual underprojected per capita real expenditures was contained at about 20 percent.

Parastate Expenditures

Table 3404 gives the yearly figures on gross decentralized expenditures, including transfers from the central government and parastate transfers to the private and subnational (state and local) units of government as well as amortization of the debt. Although transfers and amortization figures include some double-counting of funds, they are not deducted here because we are interested in knowing the expenditure power of each national sector—that is, the amount of funds each sector controls with respect to kind and amount of allocation.[4] It is important to recall that the parastate agencies mostly have their own funds (either collected for services rendered, as with the national airlines; gained from sales, as with nationally controlled companies; or held in trust funds, as for pensions) and except to cover losses or special expenditures are not dependent (as are agencies of the central government) upon the Treasury Department for allocation of tax revenues.

Actual gross expenditure per capita by the parastate agencies has grown as the decentralized sector has become more important over time and as coverage of the sector has become increasingly complete. The real amount shown in table 3404 came to only about 90 pesos per person in 1940, when fragmentary data are first available. By 1976 when the parastate sector was brought under central government jurisdiction to the extent that projected and actual expenditures must be reported (and an increasing number of agencies audited), the amount per person came to about 625 pesos. As the power of the agencies increased, by 1981 the per capita figure reached 1,178 pesos, before falling during 1982's economic recession to 943 pesos.

Data on expenditures can also be related to GDP, a relationship we are now ready to examine in several ways.

Mexico's National Government Expenditure as Share of GDP

Table 3405 presents yearly data on GDP in current (nondeflated) terms and gives actual central government expenditures also in current terms. These two series allow us to calculate the central government's percentage share in GDP. Under Díaz that share fell from 4.5 percent in 1900 to 3.3 percent in 1910. No GDP figures are available for the years from 1911 through 1920, but by the early 1920s the central government's share in GDP had exceeded by several percentage points the Díaz shares. Not until the Cárdenas era (1935–40) did the share reach more than 7 percent. Under Alemán the share increased to over 10 percent in two of his years in the presidency. During the following years, from 1953 through 1971, central government expenditure as a share of GDP remained in the 10 percent to 12 percent range.

During the 1970s and 1980s, the relative power of central government increased rapidly. From about 14 percent in 1972, the share reached over 20 percent by 1976 when

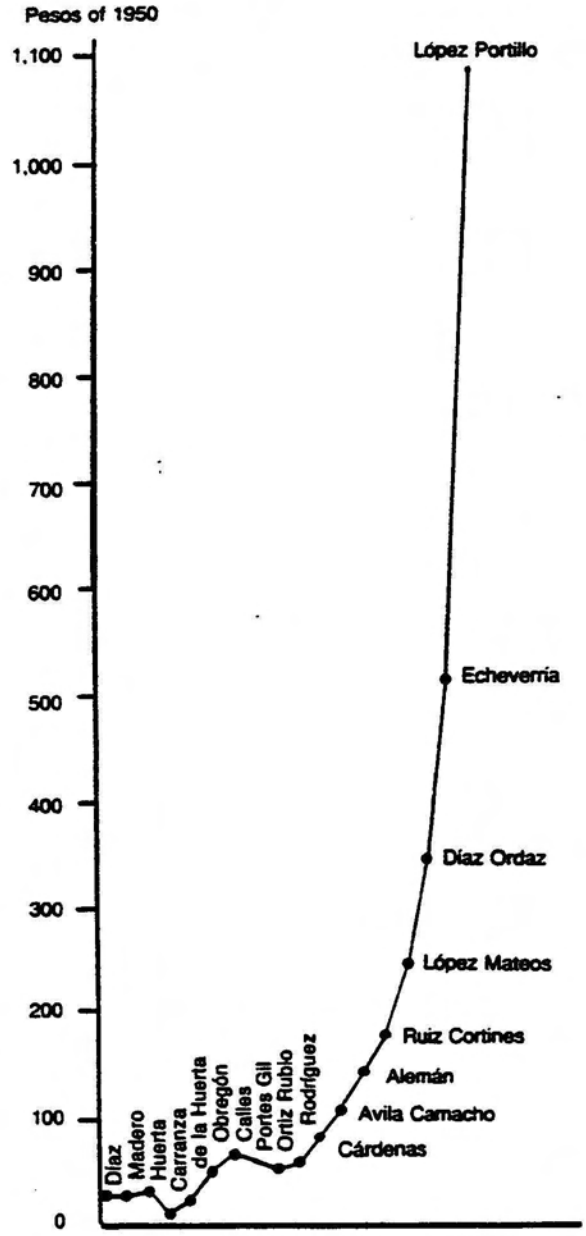
[4] For further discussion, see Wilkie 1985*b*.

545

Figure 34:1

MEXICAN CENTRAL GOVERNMENT ACTUAL GROSS EXPENDITURE PER CAPITA, IN REAL TERMS, AVERAGE BY PRESIDENT, 1900–82

(Pesos of 1950)

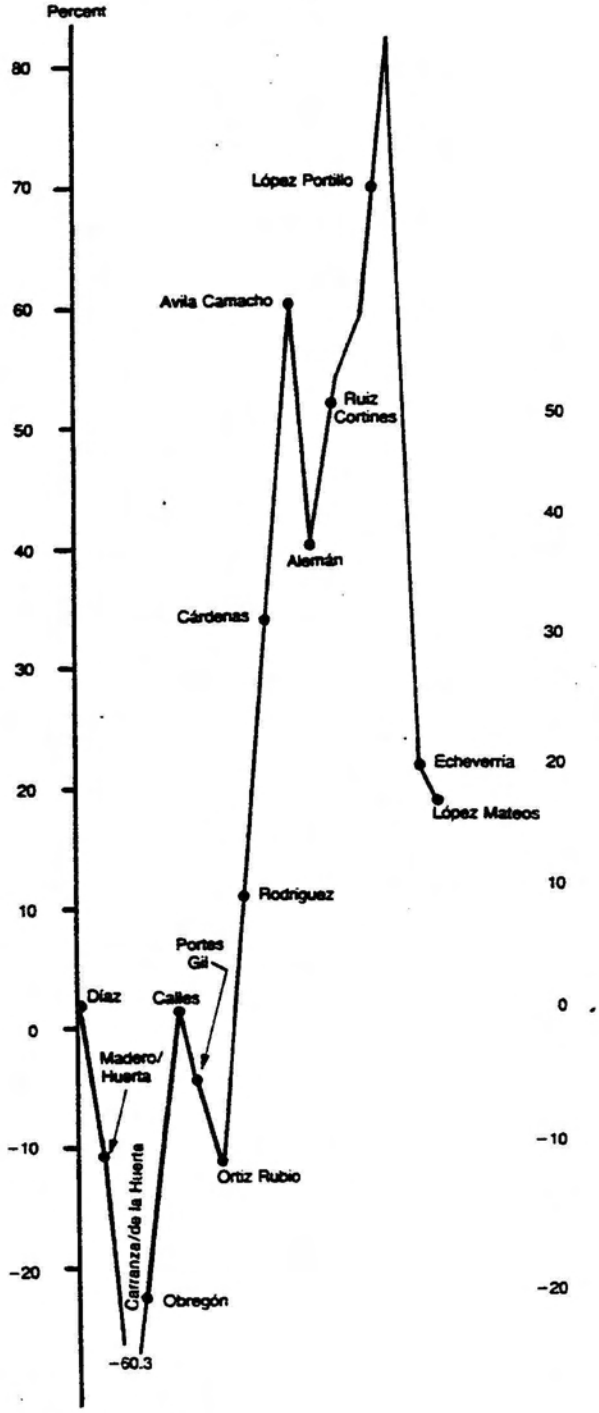


SOURCE: Table 3403.

Figure 34:2

ACTUAL GROSS EXPENDITURE COMPARED TO PROJECTED GROSS EXPENDITURE IN MEXICO, BY PRESIDENT, 1900–82

(Percent Change)



SOURCE: Table 3403.

547

Echeverría left the presidency. During the López Portillo administration and the oil boom of the late 1970s, the stage was set to expand the power of the central government even after the oil boom began to falter in the early 1980s. In 1981 the share reached 42.7 percent, before "declining" to about 36 percent in the face of economic recession in 1982.

In the meantime, the power of the national government was also expanding, illustrated by the parastate's expenditure as a share of GDP (table 3406). Between 1940 and 1958, years for which data are available, the decentralized share ranged from about 5 percent to about 8 percent of GDP. By 1965 when data become more complete on a yearly basis and included more agencies, the share was about 10 percent. The share increased each year after that, except for 1968, 1972, 1976, 1979, and 1982.

During four of the five years when parastate expenditures as share of GDP declined, there was a loss of no more than about 1 percent. In 1982 the parastate sector underwent its first major recorded decline, falling from a share of GDP that had reached 27.4 percent in 1981 to 22.7 percent in 1982.

Taking office at the end of 1982, President Miguel de la Madrid spoke of austerity in the face of Mexico's inability to resolve its economic problems as world oil prices fell. Further, de la Madrid promised to reduce parastate power by selling off agencies to the private sector. Although he did not return the nationalized banks to their former owners (as some thought possible), he did permit them to reacquire 34 percent of the bank shares and 339 of 467 nonbanking companies that had been nationalized as part of the private bank holdings (Wilkie 1985*b*).

Mexico's Growth of Real GDP and Real GDP/C

The figures relating national government expenditure to GDP do not tell us the extent to which GDP has grown over the course of this century. Although the Official Party takes credit for growth, like most governments, it tries to avoid responsibility for economic downturns.

Fortunately for Mexico's Official Party, GDP has grown very impressively. Table 3407 shows that in real terms the economy averaged 31.1 on the index I have created wherein 1950 equals 100, a level reached when Alemán was president. Since 1950 the index of GDP has grown at a tremendous rate, doubling between the time of Alemán and the López Mateos years. The index of GDP again more than doubled in the following two presidential administrations. By the term of López Portillo, the index averaged 641.3, or almost 21 times the GDP of the Díaz years and over 12 times that of the Cárdenas years.

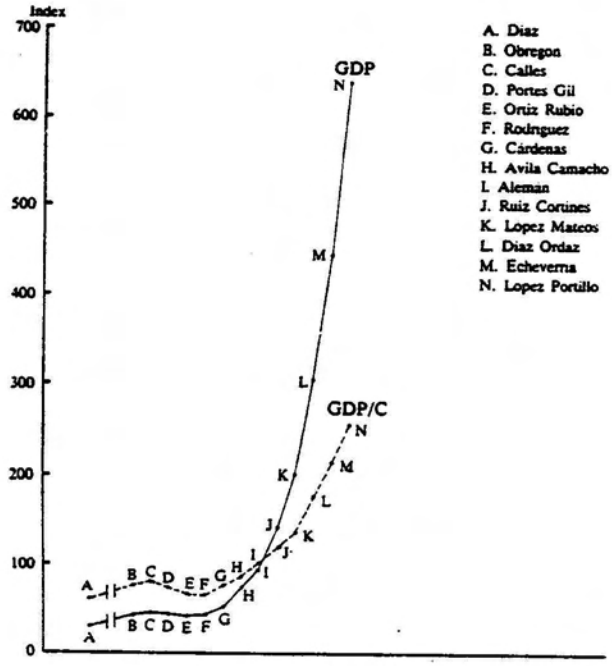
Impressive as the growth of GDP is (see figure 34:3), once GDP is divided by the size of Mexico's population (table 3407), we can see (figure 34:3) how seriously the economic power of the country has been reduced by the population's demands on the economic system. If Mexico had been able to control its population growth earlier, it would be a much richer country today.

Mexico's GDP/C was quite favorable in relation to GDP through the 1940s, as the trends in figure 34:3 reveal, but with the post-World War II improvements in public health, the Mexican population began to overwhelm the ability of the government to maintain social services and provide jobs, especially because Mexico has needed to direct much of its economic wealth into the development of transportation and industrial infrastructures.

Figure 34:3

REAL GDP AND GDP/C IN MEXICO, BY PRESIDENTIAL PERIOD, 1895–82

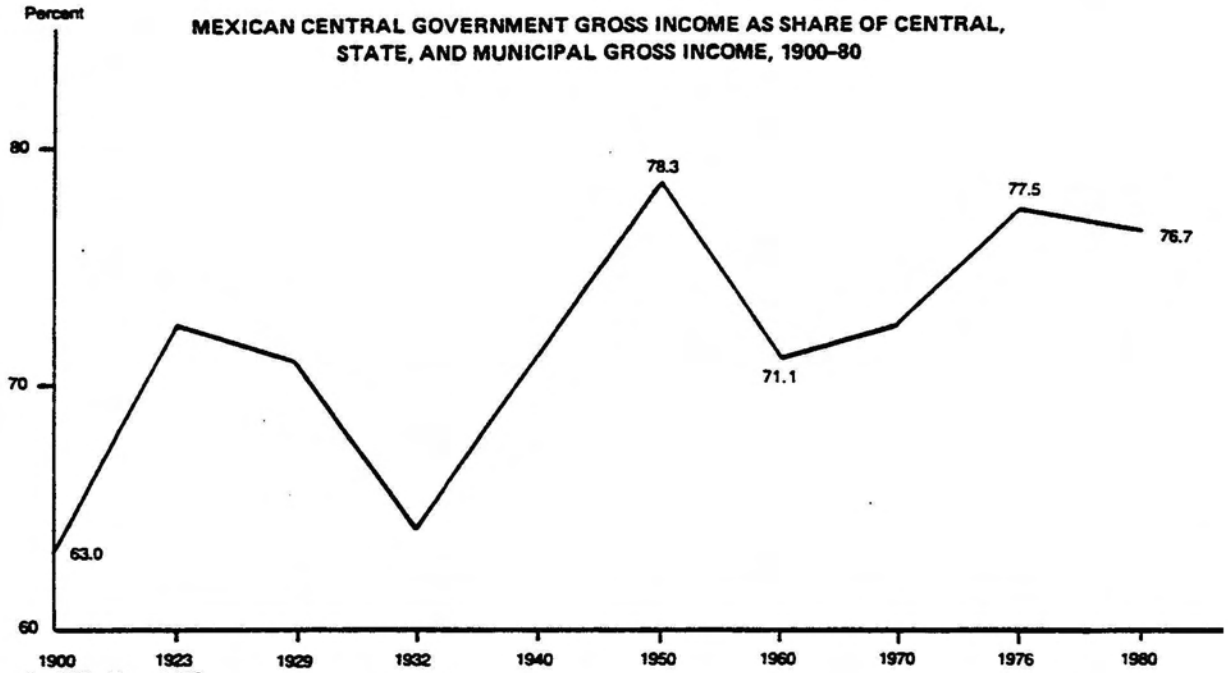
(1950 = 100)



SOURCE: Table 3407.

549

Figure 34:4



SOURCE: Table 3408.

In the meantime, Mexico's local governments, with differing regional needs, have faced crisis because of a declining share of funds.

Government Based Upon Pooled Finances in Mexico

Table 3408 shows the gross income of Mexico's traditional government which depends upon taxation and borrowing that is pooled for allocation of funds at the federal (or central), state, and local levels. Traditional government contrasts sharply with the parastate agencies which have their own sources of funds, depending upon the central government only to pay for deficits and special programs.

Data in table 3408 reveal that local government (equivalent to county government in the United States) has seen its share of gross income fall from about 13 percent through 1923 to less than 10 percent by the late 1920s and to less than 4 percent by the 1950s.

Meanwhile, state government has seen its share of gross income remain relatively steady over time, the high of 27.1 coming in 1932 and the low of 14.5 in 1923 (table 3408). The high state figure is explained by the central government's retrenchment in the face of world depression. The low can be attributed to the effects of the 1923 military rebellion, which upset state economies.

Although the state income has not greatly varied—at least for the years sampled here—the central government has seen its power in revenue grow at the expense of local government. The central government share is shown in figure 34:4. President de la Madrid has promised to reverse this trend, but so have most presidents—to no avail.

Revenue in Mexico, 1935–82

Central government revenues are clearly the most important source of pooled funds. To understand the components of that revenue, table 3409 shows the major categories of funds, which I have adjusted to develop relative consistency across time. As can be surmised from the complicated generation of data by comparing and adjusting sources, sources of revenue in Mexico have not been clearly understood by the central government officials, who come and go according to administration.

The introduction of the value added tax (VAT), in my view, has not only unnecessarily complicated understanding, but has contributed greatly to inflation in Mexico. The VAT has yet to prove itself of much value at all.

To clarify the meaning of income taxes in relation to borrowing, table 3410 shows that by excluding borrowing in analysis of revenues, the Mexican government has at times made the income tax far more important that it really is. Apparently income taxes were reaching about 40 percent of central government revenues. But when borrowing is considered as revenue (Wilkie 1985*a*), the "true" importance of the income tax falls to somewhat over 20 percent. Borrowing has become the most important source of regular and recurrent revenue in Mexico, as can be seen in figure 34:5.

Conclusion

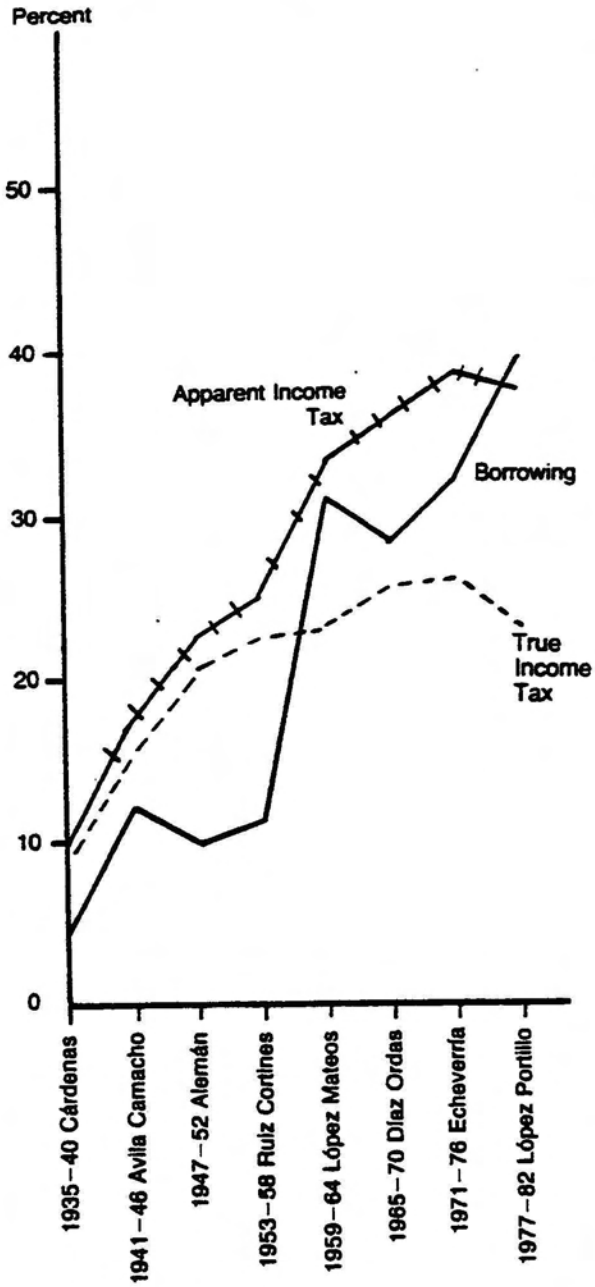
In developing the long-term series presented in this chapter, my purpose has been to suggest new approaches for understanding Mexico's increasingly complicated devel-

551

Figure 34:5

MEXICAN CENTRAL GOVERNMENT REVENUE SHARES, 1935–82

(%)



SOURCE: Table 3410.

opment patterns. Historical statistics offer a unique way to delve behind the rhetoric of politics.

Clearly I have not analyzed all of the meaning in the series given here, but in developing the methodology for examining some major series, I hope to have provided the kinds of statistics that can be interpreted by others as well as reorganized for different types of analysis.

References

Solís, Leopoldo

1981 *La Realidad Económica Mexicana*. México, D.F.: Siglo XXI.

Wilkie, James W.

1967 *The Mexican Revolution: Federal Expenditure and Social Change Since 1910*. Berkeley and Los Angeles: University of California Press.

1970 *The Mexican Revolution: Federal Expenditure and Social Change Since 1910*. 2d ed. Berkeley and Los Angeles: University of California Press.

1974 *Statistics and National Policy*. Los Angeles: UCLA Latin American Center Publications, University of California.

1978 *La Revolución Mexicana (1910–1976): Gasto Público y Cambio Social*. México, D.F.: Fondo de Cultura Económica.

1985*a* "Borrowing as Revenue, 1935–1982." *The Mexican Forum* 5(2), 3-7.

1985*b* "The Dramatic Growth of Mexico's Economy and the Rise of Statist Government Budgetary Power, 1910–1982." *The Mexican Forum* 5(4) forthcoming.

553

Table 3400

COMPARATIVE PRICE INDEXES FOR MEXICO, 1900–82
(1950 = 100)

Year	BDM GDP Deflator[1]	DGE Mexico City Wholesale Prices[2]	BDM Mexico City Wholesale Prices[3]
1900	11.3	12.0	••
1901	14.0	14.7	••
1902	14.3	15.0	••
1903	14.3	15.0	••
1904	13.8	14.7	••
1905	15.5	16.3	••
1906	15.3	16.2	••
1907	15.3	15.9	••
1908	15.7	16.6	••
1909	16.8	17.6	••
1910	19.5	20.7	••
1911	••	19.6	••
1912	••	19.4	••
1913	••	19.2	••
1914	••	••	••
1915	••	••	••
1916	••	••	••
1917	••	••	••
1918	••	43.3	••
1919	••	34.6	••
1920	••	36.3	••
1921	31.9	33.1	••
1922	26.2	27.8	••
1923	27.7	29.8	••
1924	26.0	28.5	••
1925	27.7	30.0	••
1926	27.3	29.4	••
1927	26.0	28.7	••
1928	26.0	27.6	••
1929	26.2	27.5	••
1930	26.8	28.0	••
1931	23.5	24.7	••
1932	21.0	22.5	••
1933	22.2	23.9	••
1934	22.9	24.7	••
1935	23.3	24.9	••
1936	25.4	26.4	••
1937	31.2	31.3	••
1938	32.9	32.7	••
1939	33.3	33.6	32.0
1940	34.8	33.8	32.8
1941	35.6	35.9	35.2
1942	39.0	39.7	38.4
1943	45.9	47.5	46.4
1944	61.2	60.9	56.8
1945	65.0	67.0	64.0
1946	82.8	78.5	73.6
1947	88.9	80.1	77.6
1948	91.0	85.0	83.2
1949	95.0	90.0	91.2
1950	100.0	100.0	100.0
1951	119.7	120.6	124.0

Table 3400 (Continued)

COMPARATIVE PRICE INDEXES FOR MEXICO, 1900–82
(1950 = 100)

Year	BDM GDP Deflator[1]	DGE Mexico City Wholesale Prices[2]	BDM Mexico City Wholesale Prices[3]
1952	129.1	132.5	128.0
1953	128.1	135.2	126.6
1954	141.9	145.6	137.6
1955[a]	160.0	168.0	156.0
1956	170.8	178.3	164.0
1957	181.5	189.3	170.4
1958	192.3	198.0	178.4
1959	200.0	200.8	180.0
1960	209.2	212.3	188.8
1961	212.3	214.2	191.2
1962	220.0	217.2	194.4
1963	220.0	221.2[b]	195.2
1964	224.6	228.4	204.0
1965[c]	244.6	237.3	208.0
1966	255.4	239.6	210.4
1967	256.9	239.7	216.0
1968	263.1	243.9	220.8
1969	273.8	246.8	226.4
1970	303.1	258.2	240.0
1971	320.0	265.3	248.8
1972	340.0	276.5	255.2
1973	384.6	332.9	296.0
1974	472.3	418.9	362.4
1975	546.2	475.9	400.0
1976	652.3	550.3	489.6
1977	850.8	••	691.2
1978	993.8	••	800.2
1979	1,195.4	••	946.4
1980	1,538.5	••	1,177.6
1981	1,956.9	••	1,466.4
1982	3,155.4	••	2,288.8

1. Used as part of DGE-BDM Composite Price Index developed in table 3401 for period beginning in 1965.
2. Used as part of DGE-BDM Composite Price Index developed in table 3401 to cover period through 1964.
3. This 210-item wholesale price index for Mexico City should not be confused with BDM's 32-item wholesale price index for Mexico City which was suspended in 1979.

a. Solís (1981) gives 159.3 or .7 difference.
b. Later DGE revision equals 220.5.
c. DGE-BDM linkage point in Composite Index given in table 3401.

SOURCE: BDM's GDP Deflator Index through 1954 is from Solís (1981:92), and since 1955 from IMF-Y, 1984; base converted from both sources.
DGE's Wholesale Price Index through 1963 from Wilkie (1970: 22-23), and 1964–1976 from Wilkie (1978:350).
BDM's Wholesale Price Index is from BDM, *Indicadores Económicos* (Carpeta), "Acervo Histórico" II (1983:II-H-14).

555

Table 3401

DGE-BDM COMPOSITE INDEX OF PRICES FOR MEXICO, 1900–82

(1950 = 100)

Year	Prices	Year	Prices
1900	12.0	1945	67.0
1901	14.7	1946	78.5
1902	15.0	1947	80.1
1903	15.0	1948	85.0
1904	14.7	1949	90.0
1905	16.3	1950	100.0
1906	16.2	1951	120.6
1907	15.9	1952	132.5
1908	16.6	1953	135.2
1909	17.6	1954	145.6
1910	20.7	1955	168.0
1911	19.6	1956	178.3
1912	19.4	1957	189.3
1913	19.2	1958	198.0
1914	**	1959	200.8
1915	**	1960	212.3
1916	**	1961	214.2
1917	**	1962	217.2
1918	43.3	1963	221.2
1919	34.6	1964	228.4
1920	36.3	1965[a]	244.6
1921	33.1	1966	255.4
1922	27.8	1967	256.9
1923	29.8	1968	263.1
1924	28.5	1969	273.8
1925	30.0	1970	303.1
1926	29.4	1971	320.0
1927	28.7	1972	340.0
1928	27.6	1973	384.6
1929	27.5	1974	472.3
1930	28.0	1975	546.2
1931	24.7	1976	652.3
1932	22.5	1977	850.8
1933	23.9	1978	993.8
1934	24.7	1979	1,195.4
1935	24.9	1980	1,538.5
1936	26.4	1981	1,956.9
1937	31.3	1982	3,155.4
1938	32.7		
1939	33.6		
1940	33.8		
1941	35.9		
1942	39.7		
1943	47.5		
1944	60.9		

a. Linkage point for DGE's wholesale price index and BDM's GDP deflator index to create here what I denominate as the DGE-BDM Composite Index of Prices. For discussion of methodology, see text.

SOURCE: See table 3400.

557

Table 3402

PROJECTED AND ACTUAL GROSS CENTRAL GOVERNMENT EXPENDITURE IN MEXICO, CURRENT AND DEFLATED TERMS, 1900–82

	A. Thousands of Current Pesos	B.	C.	D. Thousands of Pesos of 1950	E.	F.
	Projected Budget[1]	Actual Budget	DGE-BDM Composite Price Index (1950 = 100)[2]	Projected Budget	Actual Budget	Percent Change from Projected (D) to Actual (E)
1900–01	58,941	59,832	14.7	400,959	407,020	1.5
1910–11	102,294	101,237	19.6	521,908	516,515	-1.0
1911–12	105,432	97,293	19.4	543,464	501,510	-7.7
1912–13	111,370	111,272	19.2	580,052	579,542	-.1
1913–14	141,356	~	••	~	~	••
1914–15	140,466	~	••	~	~	••
1917	178,524	73,024	••	~	~	••
1918	187,138	109,717	43.3	432,189	253,388	-41.4
1919	203,482	59,167	34.6	588,098	171,003	-70.9
1920	213,250	131,966	36.3	587,466	363,543	-38.1
1921	250,803	226,353	33.1	757,713	683,846	-9.4
1922	383,659	228,093	27.8	1,380,068	820,478	-40.5
1923	348,487	235,354	29.8	1,169,419	789,779	-32.5
1924	297,982	276,570	28.5	1,045,551	970,421	-7.2
1925	291,864	302,164	30.0	972,880	1,007,213	3.5
1926	304,405	324,938	29.4	1,035,391	1,105,231	6.7
1927	318,721	310,082	28.7	1,110,526	1,080,425	-2.7
1928	291,118	287,946	27.6	1,054,775	1,043,283	-1.1
1929	288,283	275,541	27.5	1,048,302	1,001,967	-4.4
1930	293,774	279,122	28.0	1,049,193	996,864	-5.0
1931	298,489	226,478	24.7	1,208,457	916,915	-24.1
1932	212,987	211,625	22.5	946,609	940,556	-.6
1933	215,015	245,951	23.9	899,644	1,029,084	14.4
1934	243,062	264,740	24.7	984,057	1,071,822	8.9
1935	275,795	300,822	24.9	1,107,610	1,208,120	9.1
1936	286,000	406,098	26.4	1,083,333	1,538,250	42.0
1937	333,226	478,756	31.3	1,064,620	1,529,572	43.7
1938	418,555	536,955	32.7	1,279,985	1,642,064	28.3
1939	445,266	620,291	33.6	1,325,196	1,846,042	39.3
1940	447,800	658,335	33.8	1,324,852	1,947,367	47.0
1941	492,000	777,594	35.9	1,370,474	2,166,003	58.0
1942	554,747	1,005,675	39.7	1,397,348	2,533,186	81.3
1943	707,332	1,195,516	47.5	1,489,120	2,516,876	69.0
1944	1,101,000	1,463,838	60.9	1,807,882	2,403,675	33.0
1945	1,004,250	1,660,149	67.0	1,498,881	2,477,834	65.3
1946	1,200,000	1,920,810	78.5	1,528,662	2,446,892	60.1
1947	1,665,000	2,208,601	80.1	2,078,652	2,757,305	32.6
1948	2,300,000	2,773,365	85.0	2,705,882	3,262,782	20.6
1949	2,550,000	3,740,587	90.0	2,833,333	4,156,208	46.7
1950	2,746,057	3,463,290	100.0	2,746,057	3,463,290	26.1
1951	3,101,713	4,670,088	120.6	2,571,901	3,872,378	50.6
1952	3,995,949	6,464,230	132.5	3,015,811	4,878,664	61.8
1953	4,158,057	5,490,402	135.2	3,075,486	4,060,948	32.0
1954	4,827,681	7,916,807	145.6	3,315,715	5,437,367	64.0
1955	5,681,399	8,883,121	168.0	3,381,785	5,287,572	56.4
1956	6,696,374	10,270,112	178.3	3,755,678	5,760,018	53.4
1957	7,577,874	11,303,248	189.3	4,003,103	5,971,077	49.2
1958	8,402,552	13,287,707	198.0	4,243,713	6,710,963	58.1
1959	9,385,756	14,157,742	200.9	4,674,181	7,050,668	50.8

559

Table 3402 (Continued)

PROJECTED AND ACTUAL GROSS CENTRAL GOVERNMENT EXPENDITURE IN MEXICO, CURRENT AND DEFLATED TERMS, 1900–82

	A. Thousands of Current Pesos	B.	C.	D. Thousands of Pesos of 1950	E.	F.
	Projected Budget[1]	Actual Budget	DGE-BDM Composite Price Index (1950 = 100)[2]	Projected Budget	Actual Budget	Percent Change from Projected (D) to Actual (E)
1960	10,251,341	20,150,330	212.3	4,828,705	9,491,441	96.6
1961	11,041,481	20,362,040	214.2	5,154,753	9,506,088	84.4
1962	12,320,000	20,219,159	217.2	5,672,192	9,309,006	64.1
1963	13,801,440	20,294,906	221.2	6,239,349	9,174,912	47.0
1964	15,953,541	28,285,590	228.4	6,984,913	12,384,234	77.3
1965	17,854,280	36.715,603	244.6	7,299,379	15,010,467	105.6
1966	20,132,252	32,495,967	255.4	7,882,636	12,723,558	61.4
1967	22,108,293	40,852,939	256.9	8,605,797	15,902,273	84.8
1968	24,221,169	41,124,294	263.1	9,206,070	15,630,670	69.8
1969	26,512,844	49,816,139	273.8	9,683,289	18,194,353	87.9
1970	28,133,881	52,679,003	303.1	9,282,046	17,380,074	87.2
1971	30,763,000	55,786,000	320.0	9,613,000	17,433,000	81.3
1972	54,744,000	77,230,000	340.0	16,101,000	22,715,000	41.1
1973	89,381,000	102,241,000	384.6	23,240,000	26,584,000	14.4
1974	114,128,000	135,795,000	472.3	24,164,000	28,752,000	19.0
1975	186,107,000	200,416,000	546.2	34.073,000	36,693,000	7.7
1976	238,043,000	274,963,000	652.3	36,493,000	42,153,000	15.5
1977	349,787,000	355,132,000	850.8	41,113,000	41,741,000	1.5
1978	434,303,000	442,471,000	993.8	43,701,000	44,523,000	1.9
1979	571,401,000	651,432,000	1,195.4	47,800,000	54,495,000	14.0
1980	839,018,000	1,002,013,000	1,538.5	54,535,000	65,129,000	19.4
1981	2,166,369,000	2,506,818,000	1,956.9	110,704,000	128,101,000	15.7
1982	2,216,316,000	3,381,792,000	3,155.4	70,239,000	107,175,000	52.6

1. For distinctions between presidential and congressional budgets, see Wilkie (1970:23).
2. Data can be converted to standard pesos for other years as follows: for example, to shift to pesos of 1970, recalculate index from 1950 = 100 to 1970 = 100 and divide the current pesos by the rebased index to get pesos of 1970.

SOURCE: Projected and actual expenditures:
1900–63, Wilkie (1970:22-23), except 1938–47 revised here to take into account actual "off-budget" spending by presidents Cárdenas, Avila Camacho, and Alemán. The latter incorporated the off-budget amounts into a new budget category called *erogaciones adicionales*.
1964–76, Wilkie (1978:350), except data in pesos of 1950 revised here with DGE-BDM Composite Index of Prices.
1976–82, México, Secretaría de Programación y Presupuesto, *Cuenta Pública*, yearly.
DGE-BDM composite index of prices:
1900–82, table 3401, above.

561

Table 3403

AVERAGE PER CAPITA REAL AMOUNT OF MEXICAN CENTRAL GOVERNMENT GROSS BUDGETARY EXPENDITURE, BY PRESIDENTIAL TERM, 1900–82

(Pesos or 1950)

A. Projected Expenditure				B. Actual Expenditure				C.
Years	President	No. of Years in Average	Per Capita[1]	Years	President	No. of Years in Average	Per Capita[1]	Percent Change in Actual over Projected Per Capita Expenditure
1900–11	Díaz	2[a]	31.8	1900–11	Díaz	2[a]	31.9	.3
1911–13	Madero	2	37.5	1911–12	Madero	1	33.4	-10.9
				1912–13	Huerta	1	38.6	••
1917–20	Carranza	4	38.0	1917–19	Carranza	3	15.1	-60.3
				1920	De la Huerta	1	25.3	••
1921–24	Obregón	4	74.5	1921–24	Obregón	4	55.8	-25.1
1925–29	Calles	4	66.9	1925–28	Calles	4	67.9	1.5
1929–30	Portes Gil	2	63.9	1929	Portes Gil	1	61.5	-3.8
1931–32	Ortiz Rubio	2	63.4	1930–32	Ortiz Rubio	3	56.4	-11.0
1933–34	Rodríguez	2	53.5	1933–34	Rodríguez	2	59.6	11.4
1935–40	Cárdenas	6	63.3	1935–40	Cárdenas	6	85.5	35.1
1941–46	Avila Camacho	6	70.6	1941–46	Avila Camacho	6	113.1	60.2
1947–52	Alemán	6	105.3	1947–52	Alemán	6	147.3	39.9
1953–58	Ruiz Cortines	6	118.6	1953–58	Ruiz Cortines	6	180.8	52.4
1959–64	López Mateos	6	151.0	1959–64	López Mateos	6	256.4	69.8
1965–70	Díaz Ordaz	6	190.5	1965–70	Díaz Ordaz	6	347.8	82.6
1971–76	Echeverría	6	423.5	1971–76	Echeverría	6	516.9	22.1
1977–82	López Portillo	6	907.5	1976–82	López Portillo	6	1,081.7	19.2

1. Total pesos in table 3402 divided by population data in Appendix table 34-A.

a. 1900–01 and 1910–11.

SOURCE: Wilkie (1970:36), except averages beginning in 1964 and revisions for 1935–52 are calculated from table 3402.

563

Table 3404

PROJECTED AND ACTUAL PARASTATE GROSS EXPENDITURE IN MEXICO,[1] CURRENT AND DEFLATED TERMS, 1940–82

	A.	B.	C.	D.	E.	F.
	Millions of Pesos			Millions of Pesos		
	Parastate Expenditure		DGE-BDM[2] Composite Price Index (1950 = 100)	Parastate Expenditure		Actual Expenditure Per Capita[3]
Year	Projected	Actual		Projected (A/C)	Actual (B/C)	
1940[a]	~	597	33.8	~	1,766	89.9
1946[a]	~	1,324	78.5	~	1,687	74.1
1952[a]	~	3,675	132.5	~	2,774	101.2
1958[a]	~	9,971	198.0	~	5,036	153.2
1965	19,154	27,304	244.6	7,831	11,163	268.6
1966	32,252	33,558	255.4	12,629	13,139	305.4
1967	33,419	38,599	256.9	13,009	15,025	337.5
1968	37,193	42,298	263.1	14,137	16,077	348.9
1969	39,583	48,185	273.8	14,457	17,599	369.0
1970	44,095	56,582	303.1	14,548	18.668	378.2
1971	48,893	65,545	320.0	15,279	20,483	401.1
1972	68,635	71,538	340.0	20,187	21,041	398.5
1973	84,498	101,792	384.6	21,970	26,467	485.0
1974	116,832	140,688	472.3	24,737	29.788	528.4
1975	160,551	200,234	546.2	29,394	36,659	629.9
1976	201,600	245,065	652.3	30,906	37,569	625.5
1977	327,620	375.461	850.8	38,507	44,130	712.3
1978	478,147	495,363	993.8	48,113	49,845	780.3
1979	552,568	614,778	1,195.4	46,225	51,429	781.3
1980	844,394	1,016,587	1,538.5	54,884	66,077	974.6
1981	1,440,724	1,608,703	1,956.9	73,623	82,207	1,178.3
1982	1,104,253	2,132,974[b]	3,155.4	34,996	67,598	942.6

1. Coverage becomes more complete after 1965, but as of 1985 many parastate agencies remain to be incorporated (such as the 1982 nationalized banking sector).
2. See table 3401, above.
3. Column E divided by population data in Appendix table 34-A.

a. Estimates, often in net terms, exclude dozens of agencies including the most important, Petróleos Mexicanos, which is added here from Bermúdez (operations + subsidies + capital investments = total).

b. Petróleos Mexicanos spent 617,139 million pesos more than projected, or 56% of the entire parastate budget as originally projected.

SOURCE: 1940–58, Roberto Santillán López and Rosas Figueroa, *Teoría General de las Finanzas Públicas y el Caso de México* (México, D.F.: Universidad Nacional Autónoma de México, 1962), Appendix 18; and Antonio J. Bermúdez, *The Mexican Petroleum Industry* (Stanford: Institute of Hispanic and Luso-Brazilian Studies, 1963), p. 252.

1956–82, México, Secretaría de Programación y Presupuesto, *Cuenta Pública*; México-NAFINSA-MV, Feb. and Nov. 1975.

565

Table 3405

CENTRAL GOVERNMENT GROSS EXPENDITURE AS SHARE OF MEXICO'S GDP, 1900–82

	A.	B.	C.
	Current Pesos		
Year[1]	GDP Millions	Actual Central Government Expenditure Thousands	% (B/A)
1900	1,316.8	59,832[a]	4.5
1901	1,774.1	63,081	3.6
1902	1,672.3	68,223	4.1
1903	1,859.0	76,382	4.1
1904	1,835.7	79,153	4.3
1905	2,272.8	79,470	3.5
1906	2,216.6	85,077	3.8
1907	2,346.0	93,197	4.0
1908	2,407.6	92,967	3.9
1909	2,643.1	95,039	3.6
1910	3,100.5	101,237	3.3
1921	5,455.0	226,353	4.1
1922	4,590.2	228,093	5.0
1923	5,013.6	235,354	4.7
1924	4,632.6	276,570	6.0
1925	5,238.5	302,164	5.8
1926	5,468.8	324,938	5.9
1927	4,987.0	310,082	6.2
1928	5,017.8	287,946	5.7
1929	4,862.9	275,541	5.7
1930	4,667.7	279,122	6.0
1931	4,218.8	226,478	5.4
1932	3,205.5	211,625	6.6
1933	3,781.7	245,951	6.5
1934	4,150.9	264,740	6.4
1935	4,540.3	300,822	6.6
1936	5,345.7	406,098	7.6
1937	6,800.4	478,756	7.0
1938	7,281.1	536,955	7.4
1939	7,785.1	620,291	8.0
1940	8,248.8	658,335	8.0
1941	9,232.4	777,594	8.4
1942	10,680.8	1,005,675	9.4
1943	13,035.3	1,195,516	9.2
1944	18,801.2	1,463,838	7.8
1945	20,565.7	1,660,149	8.1
1946	27,929.6	1,920,810	6.9
1947	31,022.6	2,208,601	7.1
1948	33,101.2	2,773,365	8.4
1949	36,411.8	3,740,587	10.3
1950	42,162.8	3,463,290	8.2
1951	54,374.7	4,670,088	8.6
1952	60,992.6	6,464,230	10.6
1953	60,663.7	5,490,402	9.1
1954	73,935.6	7,916,807	10.7

Table 3405 (Continued)

CENTRAL GOVERNMENT GROSS EXPENDITURE AS SHARE OF MEXICO'S GDP, 1900–82

	A.	B.	C.
	Current Pesos		
Year[1]	GDP Millions	Actual Central Government Expenditure Thousands	% (B/A)
1955	90,053.3	8,883,121	9.9
1956	102,919.9	10,270,112	10.0
1957	118,205.7	11,303,248	9.6
1958	131,376.8	13,287,707	10.1
1959	140,771.5	14,157,742	10.1
1960	159,703.2	20,150,330	12.6
1961	173,236.1	20,362,040	11.8
1962	186,780.7	20,219,159	10.8
1963	207,952.3	20,294,906	9.8
1964	245,500.5	28,285,590	11.5
1965	267,420.2	36,715,603	13.7
1966	297,196.0	32,495,967	10.9
1967	325,024.8	40,852,939	12.6
1968	359,857.7	41,124,294	11.4
1969	397,796.4	49,816,139	12.5
1970	444,271.4	52,679,003	11.9
1971	490,011.0	55,786,000	11.4
1972	564,726.5	77,230,000	13.7
1973	690,891.5	102,241,000	14.8
1974	899,706.8	135,795,000	15.1
1975	1,100,049.8	200,416,000	20.0
1976	1,370,968.3	274,963,000	20.1
1977	1,849,262.7	355,132,000	19.2
1978	2,337,397.9	442,471,000	18.9
1979	3,067,526.4	651,432,000	21.2
1980	4,276,490.4	1,002,013,000	23.4
1981	5,874,385.6	2,506,818,000	42.7
1982	9,417,089.4	3,381,792,000	35.9

1. No data on GDP for the years from 1911 through 1920.

a. Expenditure through 1910 is for fiscal years, e.g., 1900–01.

SOURCE: GDP from BDM, *Indicadores Económicos* (Carpeta), "Acervo Histórico" II (1983, tables II-H-1 and 2); and "Acervo Histórico" III (1984, tables II-H-1 and 2). Expenditure is from table 3402 above, except data for 1901–09 are from [Fernando Rosenzweig], *Fuerza de Trabajo y Actividad Económica por Sectores* (México, D.F.: El Colegio de México, [1965?], p. 251).

(567)

Table 3406

PARASTATE ACTUAL EXPENDITURE AS SHARE OF MEXICO'S GDP, 1940–82

A. SELECTED YEARS, 1940–58

Year	%
1940	7.2
1946	4.7
1952	6.0
1958	7.6

B. YEARLY, 1965–82

Year	%	Year	%
1965	10.2	1975	18.2
1966	11.3	1976	17.9
1967	11.9	1977	20.3
1968	11.8	1978	21.2
1969	12.1	1979	20.0
1970	12.7	1980	23.8
1971	13.4	1981	27.4
1972	12.7	1982	22.7
1973	14.7		
1974	15.6		

SOURCE: Calculated from expenditure data in table 3404, Col. B, and GDP data in table 3405, Col. A.

Table 3407

MEXICO'S REAL GDP, AVERAGE BY PRESIDENTIAL PERIOD, 1895–1982

(Pesos of 1970 and Index for 1950)

	Total		Per Capita		
Year	Pesos of 1970 (Million)	Index (1950 = 100)[1]	Pesos of 1970 GDP/C	Index (1950 = 100)[2]	President
1895–1910	38,845.3	31.1	2,763.8	60.6	Díaz
1911–20[a]	~	~	~	~	~[b]
1921–24	52,217.5	41.8	3,527.4	77.4	Obregón
1925–28	57,326.5	45.9	3,633.8	79.7	Calles
1929	54,915.3	44.0	3,344.2	73.4	Portes Gil
1930–32	49,966.3	40.0	2,944.1	65.0	Ortiz Rubio
1933–34	52,058.1	41.7	2,935.3	64.4	Rodríguez
1935–40	64,821.3	51.9	3,407.8	74.8	Cárdenas
1941–46	87,769.5	70.3	3,992.8	87.6	Avila Camacho
1947–52	120,592.4	96.6	4,543.6	99.7	Alemán
1953–58	172,501.9	138.2	5,333.0	117.0	Ruiz Cortines
1959–64	247,367.5	198.2	6,330.5	138.9	López Mateos
1965–70	378,397.2	303.3	7,980.6	175.1	Díaz Ordaz
1971–76	555,428.6	445.1	9,646.1	211.6	Echeverría
1977–82	800,220.7	641.3	11,651.4	255.6	López Portillo

1. GDP Index of 100 for 1950 equals 124,779.4 million pesos of 1970.
2. GDP/C Index of 100 equals 4,558 pesos of 1970.

a. No data for civil-war period.
b. Competing leaders, for whom no GDP data available.

SOURCE: Calculated as follows:

A. 1895–1949, GDP in table 3405, above, deflated by BDM in source B, below, and divided by population data in Appendix table 34-A. Data averaged and index calculated here.

B. 1950–82, Banco de México, *Indicadores Económicos* (Carpeta), "Acervo Histórico," II (1983), tables II-H-1 and 2. Data average and index calculated here.

569

Table 3408

GROSS INCOME IN MEXICO: CENTRAL, STATE, AND LOCAL GOVERNMENT SHARES IN SELECTED YEARS, 1900–82

Year	Total Pesos Per Capita of 1950	Percent			
		Total	Central	State[1]	Municipio[1]
1900	63	100.0	63.0	24.1	12.9
1923	84	100.0	72.6	14.5	12.9
1929	101	100.0	71.1	21.2	7.7
1932	86	100.0	64.0	27.1	8.9
1940	122	100.0	71.4	23.3	5.3
1950	180	100.0	78.3	18.4	3.3
1960	369	100.0	71.1	26.3	2.6
1970	480	100.0	72.6	24.4	3.0
1976	945	100.0	77.5	20.5	2.0
1981	1,546	100.0	76.7	21.3	2.0

1. Includes subsidies from the central government.

SOURCE: 1900–60, Wilkie (1967, p. 4).
1970–81, México, DGE, AE (1978), pp. 806-812, (1980), p. 176, (1982), p. 499.

Table 3409

ACTUAL MEXICAN CENTRAL GOVERNMENT REVENUE AND SELECTED SHARES, 1935–82

Year	Gross Revenue[1]	Selected Shares												Total Selected Shares[6]
		Borrowing		Income		Industry[2]		Commerce[3]		VAT[4]		Foreign Trade[5]		
	M Pesos A.	M Pesos B.	% C.	M Pesos D.	% E.	M Pesos F.	% G.	M Pesos H.	% I.	M Pesos J.	% K.	M Pesos L.	% M.	% N.
1935	331	18	5.4	31	9.4	67	20.2	24	7.3	(data begin in 1979)		73	22.1	64.4
1936	385	5	1.3	37	9.6	83	21.6	29	7.5			92	23.9	63.9
1937	451	16	3.5	41	9.1	89	19.7	33	7.3			134	29.7	69.3
1938	466	28	6.0	43	9.2	96	20.6	35	7.5			119	25.5	68.8
1939	596	30	5.0	41	6.9	120	20.1	45	7.6			187	31.4	71.0
1940	612	35	5.7	57	9.3	124	20.3	56	9.2			170	27.8	72.3
1941	780	115	14.7	55	7.1	125	16.0	65	8.3			243	31.2	77.3
1942	941	195	20.7	78	8.3	158	16.8	77	8.2			223	23.7	77.7
1943	1,276	182	14.3	218	17.1	198	15.5	94	7.4			314	24.6	78.9
1944	1,313	18	1.4	302	23.0	253	19.3	96	7.3			334	25.4	76.4
1945	1,585	181	11.4	296	18.7	274	17.3	126	7.9			383	24.2	79.5
1946	2,228	216	9.7	371	16.7	356	16.0	232	10.4			486	21.8	74.6
1947	2,245	190	8.5	479	21.3	362	16.1	235	10.5			482	21.5	77.9
1948	2,655	387	14.6	451	17.0	379	14.3	235	8.9			549	20.7	75.5
1949	3,891	840	21.6	586	15.1	466	12.0	319	8.2			882	22.7	79.6
1950	3,641	196	5.4	766	21.0	512	14.1	394	10.8			991	27.2	78.5
1951	4,884	130	2.7	1,196	24.5	580	11.9	489	10.0			1,406	28.8	77.9
1952	6,338	360	5.7	1,441	22.7	741	11.7	482	7.6			1,486	23.4	71.1
1953	5,023	229	4.6	1,137	22.6	789	15.7	472	9.4			1,370	27.3	79.6
1954	7,714	1,297	16.8	1,262	16.5	844	10.9	579	7.5			1,884	24.4	76.1
1955	9,024	1,148	12.7	1,985	22.0	1,066	11.8	719	8.0			2,560	28.4	82.9
1956	10,194	998	9.8	2,565	25.2	1,215	11.9	821	8.1			2,566	25.2	80.2
1957	10,870	1,171	10.8	2,778	25.6	1,224	11.3	880	8.1			2,263	20.8	76.6
1958	13,183	1,352	10.3	2,802	21.3	1,487	11.3	1,003	7.6			2,702	20.5	71.0
1959	14,163	3,814	26.9	3,071	21.7	1,575	11.1	1,155	8.2			2,927	20.7	88.6

571

Table 3409 (Continued)

1960	19,458	6,641	34.1	3,648	18.7	1,717	8.8	1,312	6.7			3,087	15.9	84.2
1961	19,941	7,576	38.0	4,073	20.4	1,875	9.4	1,491	7.5			2,954	14.8	90.1
1962	20,398	6,439	31.6	4,725	23.2	2,226	10.9	1,696	8.3			3,041	14.9	88.9
1963	19,704	3,924	19.9	5,475	27.8	2,347	11.9	1,803	9.2			3,278	16.6	85.4
1964	28,976	9,886	34.1	7,262	25.1	2,776	9.6	2,187	7.5			3,813	13.2	89.5
1965	35,781	13,758	38.5	6,008	16.8	3,096	8.7	2,480	6.9			4,627	12.9	83.8
1966	33,255	8,794	26.4	8,631	26.0	3,495	10.5	2,833	8.5			4,844	14.6	86.0
1967	40,517	13,069	32.3	10,235	25.3	3,972	9.8	3,099	7.6			5,980	14.8	89.8
1968	42,894	10,929	25.5	12,084	28.2	5,182	12.1	3,873	9.0			5,761	13.4	88.2
1969	48,861	12,716	26.0	14,020	28.7	5,645	11.6	4,427	9.1			6,335	13.0	88.4
1970	52,092	10,725	20.6	15,478	29.7	6,800	13.1	4,944	9.5			7,386	14.2	87.1
1971	54,874	10,324	18.8	16,858	30.7	8,931	16.3	5,465	10.0			6,783	12.4	88.2
1972	76,624	22,333	29.1	21,010	27.4	11,755	15.3	6,119	8.0			7,472	9.8	89.6
1973	102,927	33,682	32.7	26,094	25.4	12,021	11.7	13,484	13.1			7,512	7.3	90.2
1974	141,137	47,005	33.3	34,409	24.4	18,140	12.9	19,125	13.6			10,354	7.3	91.5
1975	203,049	70,548	34.7	49,203	24.2	30,566	15.1	25,451	12.5			13,386	6.6	93.1
1976	286,814	123,557	43.1	66,046	23.0	31,260	10.9	32,352	11.3			15,002	5.2	93.5
1977	359,722	127,487	35.4	93,411	26.0	47,879	13.3	42,970	11.9			26,240	7.3	93.9
1978	454,330	144,713	31.9	132,184	29.1	56,405	12.4	56,484	12.4			35,439	7.8	93.6
1979	669,848	251,101	37.5	173,015	25.8	a	a	~a	~a	71,606,	10.7	62,964	9.4	83.4
1980	1,039,258	355,478	34.2	246,077	23.7	59,973	5.8	~a	~a	110,379	10.6	184,222	17.7	92.0
1981	1,618,424	686,647	42.4	331,783	20.5	a	a	~a	~a	174,288	10.8	258,146	15.6	89.3
1982	3,527,619	2,007,198	56.9	463,837	13.1	a	a	~a	~a	216,285	6.1	500,003	14.2	90.3

1. Gross revenue includes borrowing and compensating subsidies and virtual income.
2. Prior to 1955 may exclude minor amounts shifted from commerce taxes with reorganization of categories in 1955.
3. Includes mercantile and stamp taxes.
4. Includes industry and commerce, among other categories.
5. Includes export and import taxes.
6. Column N equals total of columns B + D + F + H + J + L.

a. Included in value added tax (VAT).

SOURCE (by column and periods within column):

A, 1935–82: Mexican government's *Cuenta Pública*, yearly, checked against:

A1, 1935–49: México-NAFINSA-EMC (1981, pp. 306-308), corrected here by adding to net income the loans given in source B1, except 1936–37 and 1949 loans are already included in gross totals—data for 1943 corrected with source A.

A2, 1950–78: Source A1, pp. 308-310, deducting parastate sector data.

B, 1935–82: *Cuenta Pública*, yearly, checked against:

B1, 1935–49: Roberto Santillán López and Aniceto Rosas Figueroa, *Teoría General de las Finanzas Públicas y el Caso de México* (México, D.F.: Universidad Nacional Autónoma de México, 1962), anexo 6. (Source A1 includes 1936–37 in "Aprovechamientos," 1949 in "productos," and gives no data on borrowing for other years until 1949.)

B2, 1950–78: Source A1, pp. 308-310.

B3, 1979–82: Source A.

C, 1935–82: Calculated.

D, 1935–70: Source A.

D1, 1970–74: Source A1, p. 310.

D2, 1975–82: Source A.

E, 1935–82: Calculated.

F, 1935–82: Same as D, D1, D2.

G, 1935–82: Calculated.

H, 1935–72: Source A.

H1, 1973–78: Source A1, p. 310.

H2, 1979–82: Source A.

I, 1935–82: Calculated.

J, 1935–82: Source A.

K, 1935–82: Calculated.

L, 1935–78: Source A1, pp. 306-310.

L1, 1979–82: Source A.

M, 1935–82: Calculated.

573

Table 3410

APPARENT AND TRUE SHARES OF INCOME TAX COMPARED TO BORROWING AS SHARE OF MEXICAN CENTRAL GOVERNMENT REVENUES, 1935–82

(%)

Period	President	A. Apparent Income Tax (In Net Total Revenue[1])	B. True Income Tax (In Gross Total Revenue[2])	C. Borrowing (In Gross Total Revenue[2])
1935–40	Lázaro Cárdenas	9.3	8.9	4.5
1941–46	Manuel Avila Camacho	16.9	15.2	12.0
1947–52	Miguel Alemán	22.3	20.3	9.8
1953–58	Adolfo Ruiz Cortines	24.8	22.2	10.8
1959–64	Adolfo López Mateos	32.9	22.8	30.8
1965–70	Gustavo Díaz Ordaz	35.7	25.7	28.2
1971–76	Luis Echeverría Alvarez	38.4	25.9	32.0
1977–82	José López Portillo	37.7	23.0	39.7

1. Net excludes borrowing.
2. Gross includes borrowing.

SOURCE: Calculated from table 3409.

(575)

Appendix Table 34-A

MEXICO'S ESTIMATED POPULATION, 1895–1982

Year	T	Year	T
1895	12,632	1940	19,654
1896	12,827	1941	20,208
1897	13,022	1942	20,657
1898	13,217	1943	21,165
1899	13,412	1944	21,674
1900	13,607	1945	22,233
1901	13,755	1946	22,779
1902	13,905	1947	23,440
1903	14,056	1948	24,129
1904	14,209	1949	24,825
1905	14,363	1950	25,791
1906	14,519	1951	25,585
1907	14,677	1952	27,403
1908	14,837	1953	28,246
1909	14,998	1954	29.115
1910	15,160	1955	30,011
1911	15,083	1956	30,935
1912	15,007	1957	31,877
1913	14,931	1958	32,868
1914	14,855	1959	33,880
1915	14,780	1960	34,923
1916	14,705	1961	36,075
1917	14,630	1962	37,265
1918	14,556	1963	39,238
1919	14,482	1964	39,781
1920	14,409	1965	41,557
1921	14,335	1966	43,012
1922	14,444	1967	44,517
1923	14,693	1968	46,075
1924	14,945	1969	47,688
1925	15,204	1970	49,357
1926	15,468	1971	51,060
1927	15,738	1972	52,796
1928	16,012	1973	53,565
1929	16,296	1974	56,366
1930	16,553	1975	58,198
1931	16,876	1976	60,060
1932	17,170	1977	61,952
1933	17,470	1978	63,873
1934	17,776	1979	65,821
1935	18,089	1980	67,796
1936	18,410	1981	69,762
1937	18,764	1982	71,715
1938	19,071		
1939	19,413		

SOURCE: 1895–1900, data interpolated from [Moisés González Navarro], *Estadísticas Sociales del Porfiriato, 1877–1910* (México, D.F.: El Colegio de México, 1956), p. 7;
1900–20, México-NAFINSA-EMC (1981, p. 3);
1921–63, Wilkie (1967, p. 24);
1964–82, México-NAFINSA-EMC (1981, p. 3).