

POLICY CYCLES IN MEXICAN PRESIDENTIAL POLITICS*

Dale Story

University of Texas at Arlington

Several aspects of presidential politics in Mexico have become well-established traditions. The president of Mexico is constitutionally limited to a single term of six years. Also, the president is always a member of the Partido Revolucionario Institucional (PRI). Although the details of the selection process are not well known, the PRI presidential candidate for the next election is hand-picked by the sitting president. Despite an assured victory for the PRI candidate, the nominee always mounts a barnstorming campaign covering all of Mexico, a procedure that helps to legitimize the domination of the PRI. All of these factors are the "givens" in the equation explaining presidential successions in Mexico. But at least one phenomenon—that of policy changes associated with presidential successions—has been much discussed but never critically tested. Briefly stated, various hypotheses suggest that new presidents significantly alter the policies of their predecessor, that predictable shifts from one side of the ideological spectrum to the other occur as presidents succeed one another, and that even certain patterns in policy innovation are evident within six-year presidential terms in Mexico. All of these hypotheses assume that policy decisions and outcomes are greatly affected by the politics of presidential transitions. The purpose of this article is to initiate a process of examining more rigorously the various propositions relating to policy cycles in Mexican politics.

The proposal that public policies become politicized in terms of policy cycles has some theoretical and empirical basis in comparative research. One theoretical perspective emphasizes the relationship between a political change, such as a presidential succession, and changes in economic policies. In the context of policies in the United States, Edward Tufte (1978) has developed the theory of an "electoral-economic cycle," in which broad economic changes are related to presidential

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elections. He has shown that trends in two crucial economic variables—growth in disposable income and levels of unemployment—are heavily influenced by the timing of national elections. U.S. presidents manipulate economic policies so as to insure relative prosperity in election years. Thus policy change is linked to the threat of political change due to an election. This relationship also proves to be an international phenomenon, at least in the advanced industrial nations. Valerie Bunce (1981) has also used presidential or leadership changes as an independent variable and policy changes (particularly budgetary expenditures) as the dependent variable. She found that in various political settings (fourteen nations equally divided between capitalist and communist systems), leadership succession does produce substantial budget alterations.¹

Mexican politics obviously pose many differences from the Tufte electoral-economic cycle. Mexican elections are not competitive, and reelection is forbidden by the Mexican constitution. As a result, Mexican presidents are lame-duck officeholders with no political incentive to manipulate the economy when an election approaches. But the political change represented by presidential succession in Mexico can have important repercussions on economic and other public policies. Hence one could surmise that the theory of an electoral-economic cycle in the United States is paralleled by a theory of a “succession-economic cycle” in Mexico in which a presidential transition produces important changes in the economic realm.

Various characteristics of the Mexican political system provide this theory with some degree of plausibility. Even though presidents personally choose their successors, demands for change are made on the new leaders when they assume office. The outgoing president retains no real influence in the political process, and the incoming president has the opportunity to build a new political coalition (Martínez de la Vega 1976). Previously dominant groups will have to establish fresh relations with the executive, and previously dispossessed groups will be able to reshape their ties to the presidential office. In order to put their own stamp on their administrations, the new leaders are likely to formulate a different support base by offering unique policy solutions to the critical problems left by the outgoing president. Indeed, in a noncompetitive system like Mexico where presidents are not strictly “the people’s choice,” the new executives must build their mandate after the succession (rather than during the election) and will be pressured to show through their policy initiatives that they are different from and better than their predecessor. Thus a new executive without an electoral mandate must create support independent of the prior administration by demonstrating a fresh or different viewpoint.

Other factors have also contributed to policy differences between presidential administrations in Mexico.² First, although elections are predetermined affairs, the unbeatable candidate of the official party always conducts a long and vigorous campaign before the election. Candidates travel extensively throughout Mexico, presenting themselves to the people and thereby establishing their own identity with the masses. Secondly, because patronage is such an important political resource for Mexican leaders, each presidential succession is characterized by an enormous turnover in government personnel. A crucial fact of life in Mexican politics is the formation of factions (*camarillas* or *equipos*) loyal to particular leaders. A presidential succession brings a change in the *camarillas* in power. Because policy is primarily decided in the bureaucracy (formulated at the highest levels and implemented at lower levels), important shifts in policy parallel the sexennial change of administrations and *camarillas*. Finally, some have argued that political stability in Mexico is partially dependent upon shifts in the orientation of consecutive presidents. The Mexican political system has successfully incorporated (or coopted) most of the significant political groupings, including large capitalists, small businessmen, industrial labor, and rural workers. All of these groups must be courted by the political leadership, albeit at different times. If one president is perceived to favor, even slightly, a particular group or ideology, the next president must balance the scales by leaning in the opposite direction. This shift promotes stability and a balance of forces by alternately satisfying different interests.

In the broad context of Mexican presidential politics, three specific hypotheses of policy cycles will be tested here. The first posits that new political leaders produce substantial policy changes and that these policy innovations are concentrated in the early stages of a presidential administration. The second hypothesis expands upon the first by suggesting that policies vary in a predictable pattern in the course of presidential terms. This so-called pendulum effect asserts that successive Mexican presidents tend to oscillate between the ideological left and the ideological right. The third hypothesis focuses on policy changes within presidential terms, suggesting that budgetary decisions at least follow a certain cycle during each six-year term.

The analysis employed here is strictly time-series, and except for a brief overview of distinctions among Mexican presidents since Lázaro Cárdenas, it is quantitative. The data employed are largely longitudinal measures of spending and investment that indicate policy intent in some cases and policy impact in others. Although the theories to be examined here are potentially significant, they have received so far only descriptive and superficial treatment in the existing literature. The idea

that domestic and foreign policies are partially determined by political demands that create predictable changes between and within presidential terms certainly could be very useful in understanding Mexican politics. Thus, given the lack of any rigorous analysis of these propositions, my objective here is to test by statistical methods the validity of hypotheses relating policy cycles to Mexican presidential terms.

DATA AND SOURCES

The time period covered by the data begins with the institution of the first six-year presidential term (*sexenio*) in Mexico in 1934 and continues through the most recently completed *sexenio* in 1982. This period includes the administrations of eight Mexican presidents: Lázaro Cárdenas (1934–40), Manuel Avila Camacho (1940–46), Miguel Alemán (1946–52), Adolfo Ruiz Cortines (1952–58), Adolfo López Mateos (1958–64), Gustavo Díaz Ordaz (1964–70), Luis Echeverría (1970–76), and José López Portillo (1976–82).

The principal indicators of public policies utilized in this analysis are measures of federal government expenditures in constant prices. The significance of expenditure decisions in Mexico has been well documented in the existing literature and need not be reviewed here.³ Assuming that what a president is able to accomplish is more important than his intentions, all expenditure measures reflect amounts actually spent rather than those planned or authorized. Total federal government expenditures are used to test for policy cycles within *sexenios* as well as any initial innovations in policy accompanying each new president. The total expenditures do not include the outlays of the sector called *paraestatal* (that of public enterprises), which was added as a separate category to the federal budget in 1965.

To detect any differences in policy priorities among *sexenios*, two disaggregated categories of federal expenditures were selected, the first being public education and the second, health and public assistance. Expenditures on public education are found in the federal budget under the heading of the Secretaría de Educación Pública, but the outlays on health and public assistance have been located in various categories since 1934. Between 1934 and 1936, they were included only under the Departamento de Salubridad Pública; from 1937 to 1943, they were divided between this *departamento* and the Secretaría de Asistencia Pública; and since 1944, they have been unified under the Secretaría de Salubridad y Asistencia. These disaggregated measures are more valid indicators of policy priorities than such broad distinctions as “economic” and “social” expenditures, yet they are not so disaggregated that they lack any policy significance.⁴

In addition to the data on expenditures, measures of national investment were included in the data base in order to examine further any policy changes. Distinctions were first made between total public and total private fixed investment. Public investment was then broken down into industrial investment and investment for social benefits. Public industrial investment includes petroleum and petrochemicals, electrical energy, steel, and other industries; investment in social benefits includes public services, health and social security, education, and housing. These disaggregated investment categories provide further indicators of the policy priorities of different administrations. Finally, data on total foreign investment in Mexico is utilized to detect any impact of changes in foreign investment policy among Mexican presidents. Although this kind of data relates only to a particular aspect of foreign policy, it is the best quantitative measure available for comparing the foreign policies of Mexican presidents.

While most of the data are either expenditure or investment statistics, my analysis does include one important domestic policy area that has been related to policy cycles among Mexican presidents, the domestic policy area of agrarian reform (Needler 1971, 47). Some presidents are said to have emphasized agrarian reform as a redistributive policy, while others are depicted as having largely ignored it. Such shifts can be examined by analyzing two measures of agrarian reform: the total volume of the land redistributed and the number of beneficiaries.

In collecting data, I relied as much as possible upon primary sources that were comparable across time. One of the greatest problems of longitudinal data is the lack of consistency in the methodologies used by the agencies elaborating the data. Thus, to maximize the comparability of the time-series data and to reduce the measurement error from methodological discrepancies, the fewest possible sources were utilized for each indicator. The sources for all the data are summarized in the appendix.

INITIAL INNOVATION

The first hypothesis to be tested here holds that new presidents do produce policy changes (especially in budgetary decisions) and that these changes are accomplished early in a presidential term. One of the most significant findings of the Bunce (1981) research in fourteen countries was that new political leaders do make a difference and that they tend to concentrate most of their policy changes in the first year or two (the honeymoon period) and then stabilize in a pattern of fairly predictable priorities until the next succession. This policy cycle can be de-

scribed as initial innovation followed by incrementalism and could plausibly be argued to apply to the Mexican experience. With the changes in personnel and the need to build a new mandate, a new president could be expected to initiate substantial changes early in the sexenio. Moreover, as one Mexican scholar has noted, a new sexenio “awakens an optimistic attitude” and generally allows Mexicans to renew their hopes and to trust the intentions of a new president (Loaeza 1977, 121). One recent example of the so-called honeymoon could be the first year of Miguel de la Madrid’s presidency. Facing the worst economic crisis in decades, de la Madrid quickly instituted a harshly austere package of economic policies; and despite dire predictions of social upheaval, the measures were accepted surprisingly well by all major sectors.

Using budgetary data, one can test this hypothesis of a policy cycle emphasizing early innovations by measuring the extent to which the overall spending level in the year following a succession (the first year in which the new president has control over the budgetary process) is similar to spending levels of the previous administration. Utilizing an interrupted time-series research design, my analysis employs Mexican federal government expenditures here as the dependent variable in regression analysis with time (or years) as the independent variable (Caporaso and Pelowski 1971). A prediction equation that yielded predicted expenditures for the first complete fiscal year of the incoming presidency was generated for each Mexican presidential administration. Differences between predicted and actual spending in this first year were then calculated, and statistical significance was determined by a *t*-test (the ratio of the difference over the standard error of the equation).

The notion of initial policy innovation is partially confirmed by this analysis predicting budgetary levels in the first full fiscal year of an incoming administration (see table 1). In four of the seven sexenios, the differences between the actual level and the predicted level of expenditures in the first fiscal year are statistically significant; and, with two exceptions, the trend has been toward increasing total federal government spending. Thus in every case except Díaz Ordaz and López Portillo, the new president has boosted expenditures in the first year well above the levels predicted from the prior administration. In the two cases in which the new president actually decreased initial budgetary appropriations (not including the de la Madrid presidency), the differences are not statistically significant. Apparently, the honeymoon period has prompted most Mexican presidents to increase total budgetary outlays substantially. Even more important for testing the theory of initial innovation, the data analysis demonstrated that an incoming president does alter the pattern of budgetary policies in the first fiscal year.

TABLE 1 *Policy Innovation in Initial Year*

<i>President (Initial Year)</i>	<i>Total Expenditures^a (1929 mn pesos)</i>	<i>Total Foreign Investment (mn dollars)</i>	<i>Number of Beneficiaries from Agrarian Reform</i>
Avila Camacho (1941)	34*	- 17	- 39449
Alemán (1947)	184*	10	123
Ruiz Cortines (1953)	221	91	17213*
López Mateos (1959)	626*	- 53	- 515
Díaz Ordaz (1965)	- 339	191	- 25886
Echeverría (1971)	1433*	- 5	- 22266
López Portillo (1977)	- 957	- 581	- 38127*

Note: All numbers are actual levels minus predicted levels. Statistically significant differences are shown by an asterisk.

^aThis is not the first year of the sexenio but the first year in which the new president was responsible for shaping the budget (for example, 1942 for Avila Camacho.)

The analysis is not so conclusive in regard to foreign investment policy and land reform, however (see table 1). In the first year of a sexenio, none of the differences between actual and predicted levels of total foreign investment in Mexico are statistically significant. In absolute figures, the largest difference occurred in 1977, when foreign investment turned out to be five hundred million dollars less than the level predicted for that year based upon the pattern of the Echeverría term. Although this finding is intriguing, the difference is not meaningful in a statistical sense. Thus the data generally disconfirm the theory that new presidents innovate in areas of foreign investment policy (as measured by the impact of that policy on total foreign investment) during their first year in office. The analysis of agrarian reform (indicated by the total number of individual beneficiaries from land reform) also tends to disconfirm the policy innovation hypothesis. Only two of the seven sexenios present a significant difference in this measure. Although the absolute numbers suggest a trend toward reducing the number of beneficiaries from agrarian reform, only in the cases of López Portillo (1977) and Ruiz Cortines (1953) did the new president significantly deviate from the pattern of land redistribution set by his predecessor.

PENDULUM EFFECT

The notion of a predictable swing in Mexican presidencies between the left and the right on the ideological spectrum has been cited

often in the literature. Indeed, various scholars of Mexican politics have commented that the pendulum notion is among the longest lived generalizations concerning Mexican politics. Briefly stated, the argument claims that the political stability of the Mexican system is dependent upon the successful incorporation of all sectors. This process of incorporation in turn depends partly on periodic shifts between more "conservative" policies that favor the private sector and foreign investment and more "populist" policies that tend to benefit urban labor and campesinos and to limit the penetration of foreign capital. Martin Needler (1971, 47) first suggested that these shifts in policy (the swings of the pendulum) occurred over periods of two sexenios. For example, beginning with a president on the left of the ideological spectrum, his successor (a moderate) would initiate the move to the right, which would then culminate in a truly "right-wing" president following the moderate president. Then the pendulum would begin moving back toward the left with the next succession.

More recent extrapolations of this idea have emphasized that the ideological and policy shifts in direction occur with each change in administration. In analyzing the Mexican authoritarian state, Merilee Grindle posited that shifts in public policy coincide with each presidential change in Mexico: "In general, policy making in Mexico is an intra-bureaucratic process which is clearly demarcated by the sexennial change of administrations" (1977a, 525). E. V. K. FitzGerald (1978b, 3) also suggested that expenditure patterns in Mexico follow the pendulum effect. Analysis of foreign investment policy by a business research group stressed the swings from left to right with each new administration (Business International Corporation 1979, 6–8). Examinations of Mexican foreign policy in general by Harvey Kaye (1975, 90) and William Hamilton (1975, 53) also referred to the validity of the pendulum theory. Several authors have emphasized the idea that swings of the policy pendulum are somewhat limited. For example, Linda Hall (1980, 49) argued that no Mexican president can stray too far from the goals of economic growth or social justice. Daniel Levy and Gabriel Székely suggested that the swing of the pendulum is very narrow, staying strictly within the accepted norms of the political establishment (1983, 111).⁵

Even the "popular" press has referred to the pendulum effect. In fact, the only quantitative evidence for the idea was a comparison of total public and private investment in four sexenios published in the *Economist* in 1978 (Gordon 1978, 16). This aggregate data led the author to conclude that indeed a left-right transition had occurred among sexenios. Specifically, López Mateos and Echeverría heavily emphasized public investment, while Ruiz Cortines and Díaz Ordaz promoted private investment (see table 2). In September of 1981, *Business Week* erroneously predicted that "this is the year for a 'radical' candidate, after

'conservative' López Portillo, in what has historically been an alternation between left and right in the PRI" (14 September 1981, 57).

Many of the well-known qualitative distinctions lend some credence to the pendulum notion of left-right shifts between successive presidencies. Lázaro Cárdenas (1934–40) was the first president to serve a full six-year term, and his government was clearly leftist in its political orientation. His presidency has often been referred to as the "Revolution within the Revolution." On the domestic front, he strongly supported the causes of the popular sector, particularly labor and peasants, and the state assumed a more direct economic role in order to promote both economic growth and a more equitable distribution of wealth. Cárdenas was attempting to fulfill the objectives of the Revolution to redress the imbalance of economic and political power that had evolved in the late nineteenth century. He demonstrated an even stronger tilt toward the left in his foreign policy, particularly in regard to nationalizations. The 1936 expropriation law was applied in the well-known instances of expropriating minority foreign interests in National Railways in 1937 and nationalizing the foreign-owned oil companies in 1938.

The presidency of Manuel Avila Camacho (1940–46) definitely represented a shift away from the populism of the 1930s. In the first place, he soothed the ruffled feathers of the expropriated property owners. Claims of U.S. and British companies were all settled by the mid-1940s. Domestically, Avila Camacho also adopted policies favorable to private entrepreneurs. Although he continued to invest considerable sums in the public sector, the goal was to promote economic growth and to stimulate industrialization. Directly benefiting the private sector, Avila Camacho initiated the first major programs designed for industrial promotion and protection.

The following *sexenio*, however, provides a stark exception to the theory of shifts between each administration (although it fits Needler's contention of changes over a longer term). Instead of swinging back to the left, the political ideology of Miguel Alemán produced policies even more conservative than those of Avila Camacho. Alemán was continuing and, in fact, deepening the break with the policies of Cárdenas. He made industrial promotion an even higher priority by means of easier credit for the private sector and the introduction of import controls. He stressed more efficient operations in the state-owned industrial infrastructure, and he tried to produce a more "positive business climate." In the process, he alienated urban labor by the harsh repression of strikes and peasants by his lack of interest in agrarian reform.

This conservative trend in policies moderated only slightly in the generally uneventful presidency of Ruiz Cortines from 1952 to 1958.

TABLE 2 Mean Annual Growth Rates of Investment, 1953–1976

<i>Administration</i>	<i>Public Investment (%)</i>	<i>Private Investment (%)</i>
1953–1958 Ruiz Cortines (“rightist”)	6.6	10.1
1959–1964 López Mateos (“leftist”)	12.1	5.3
1965–1970 Díaz Ordaz (“rightist”)	7.7	15.4
1971–1976 Echeverría (“leftist”)	15.0	2.8

Source: Gordon 1978, 16.

Initially, Ruiz Cortines was somewhat less enthusiastic about private and foreign capital because he was facing a slight downturn in economic activity in the aftermath of the Korean War. But overall, his policy orientation did not differ drastically from his two immediate predecessors. The pendulum did not swing back to the left until 1958 and the administration of Adolfo López Mateos, whose populist ideology was especially evident in his nationalistic foreign policy. The 1959 petrochemical law, the 1961 mining law, and the 1962 automotive industry decree were all nationalistic in their intent. Essentially, López Mateos was the first president to take seriously the policy of “Mexicanization” (requiring majority Mexican ownership). He either nationalized or “Mexicanized” a number of crucial sectors: the telephone system, electrical power, mining, petrochemicals, raw materials and basic products, and automotive inputs. In a noneconomic foreign policy issue, López Mateos opposed the U.S. attempt to impose sanctions on Castro’s Cuba. His domestic policies were not quite as spectacular, but he placed more emphasis on agrarian reform than any president since Cárdenas and introduced profit sharing in industry.

The sexenio of López Mateos marked the first presidential transition since that between Cárdenas and Avila Camacho to demonstrate some characteristics of the pendulum effect. Each successive presidential term from 1958 up to 1982 has continued to provide some evidence for this theory, with the sharpest shifts coming in the latest sexenios. In contrast to López Mateos, Gustavo Díaz Ordaz was more open to foreign investment and took a more antagonistic stand toward the popular sector in Mexico, as exemplified in the killings of hundreds of unarmed student demonstrators by government forces at Tlatelolco in 1968. Most recently, Presidents Echeverría and López Portillo can be seen as having pursued decidedly different policies, their sexenios being the two that have probably provoked much of the interest in the pendulum theory.

Luis Echeverría took office with a reputation as a close associate of Díaz Ordaz (having served as his *Secretario de Gobernación*) and as

a conservative; he was also viewed by many as responsible for the murders at Tlatelolco. But in almost all areas, including domestic economic policies and international issues, Echeverría as president turned to the left. The principal tenets of his expansionist economic programs were income redistribution, an enlarged economic role for the state, controls on foreign investment, and a sometimes openly hostile relationship with private business. Although Echeverría's income redistribution policies often contained more rhetoric than results, during his administration wages increased faster than consumer prices, some improvements were made in public housing, and he ended his term with the spectacular expropriation of one hundred thousand hectares of fertile farmland in the Northwest. Echeverría produced more concrete results in terms of enlarging the public sector.⁶ Total government revenue increased from 8 percent of the GDP in 1970 to 12.5 percent in 1975 (Smith 1979, 280), and the federal deficit for 1976 was over fifteen times as large as the 1971 deficit. In terms of foreign investment policy, the most important accomplishment was the 1973 law to promote Mexican investment and regulate foreign investment, which required that all new firms have at least 51 percent Mexican ownership. This mix of policies caused the private sector to become increasingly alienated from the Echeverría administration; the various business associations and confederations even formed the Consejo Coordinador Empresarial (CCE) to present a united front against the perceived excesses of the government.

In the same way that Echeverría's policies can be interpreted as responses to political pressures to placate the leftist groups in the aftermath of the conservative policies of Díaz Ordaz and the Tlatelolco killings, the policies of José López Portillo can also be viewed as the result of his having perceived the need to restore a political balance by appealing to the groups alienated by Echeverría. The key to López Portillo's strategy, at least for his first five years, was to restore the confidence and the cooperation of the business groups. The ties between López Portillo and private business developed into what he called the *Alianza para la Producción*, which was formed to stress joint planning between the private and public sectors. Some of the initial policy decisions associated with the alliance were stricter control of public expenses, tax exemptions for export products of firms owned wholly by Mexicans, reduction of taxes on enterprises, and increased prices for basic goods.

López Portillo reversed the Echeverría policies of promoting subsistence agriculture and land reform. Although he did not overturn the 1976 expropriation decree of the former president and believed it politically impossible to return the land to its former owners, he responded to private sector concerns by providing just compensation for the land. The Echeverría initiatives on regulating foreign capital were also drasti-

cally altered by López Portillo, who achieved a more harmonious relationship between foreign investors and the Mexican government by interpreting the strict legislation on foreign investment more loosely. Another policy area in which favoritism toward the private sector was obvious was that of wages and prices. López Portillo was reluctant to control prices, yet wages were held down. He incurred the wrath of the private sector only during his last year in office, when he shocked the economic elite with currency devaluations, bank nationalizations, and exchange control.

This summary of the qualitative differences among the last eight Mexican administrations provides some justification for believing that policy shifts between successive terms occur in a predictable fashion. The only exception is the administration of Alemán, who instead of moving to the left after Avila Camacho, actually became more conservative. Since 1952 the policy swings from left to right with each successive presidency seem apparent. The contrasts between the populist Echeverría and the conservative López Portillo appear especially vivid. But one still could argue that these are very superficial evaluations that do not necessarily prove the validity of the theory of the pendulum effect in Mexican presidential politics. The evidence so far simply outlines the plausibility of the hypothesis. For a more rigorous test, I will examine certain quantitative indicators (particularly expenditure data) relevant to the hypothesized policy shifts.

Certainly the definitions of what constitutes "leftist" and "rightist" presidencies are complex and debatable. For the purposes of this quantitative analysis, the concepts of left and right will be operationally defined, that is, they will be distinguished by empirical differentiations. Hence a left-leaning president will produce higher government expenditures in general and will stress in particular outlays on education, health, and public assistance. In terms of investment, a leftist sexenio will favor public investment over private and social investment over industrial, and the growth rate of accumulated foreign investment will decrease. Finally, the volume of land being redistributed as well as the number of beneficiaries of agrarian reform will greatly increase under a leftist administration. A president from the ideological right will produce the opposite results for each indicator.

In order to compare sexenios, mean values for all indicators have been calculated for each presidency from Cárdenas to López Portillo. The specific measures are: total federal expenditures (in constant pesos); public education expenditures (as a percentage of total expenditures); public health and assistance expenditures (as a percentage of total expenditures); annual rates of growth for total public investment, total private investment, public industrial investment, public social benefit investment, and total foreign investment; and the number of

TABLE 3 *Average Expenditure Levels of Successive Administrations*

<i>Administration</i>	<i>Federal Public Expenditures</i>					
	<i>Total</i> <i>(1929 mn pesos)</i>		<i>Education</i> <i>(% of total)</i>		<i>Health/Assistance</i> <i>(% of total)</i>	
	<i>mean</i>	<i>difference</i>	<i>mean</i>	<i>difference</i>	<i>mean</i>	<i>difference</i>
Cárdenas (1935–1940)	437		12.5		4.8	
Avila Camacho (1941–1946)	613	176*	10.2	–2.3*	5.3	0.7
Alemán (1947–1952)	1022	409*	8.4	–1.8	3.6	–1.7
Ruiz Cortines (1953–1958)	1545	523*	9.0	0.6	3.0	–0.6
López Mateos (1959–1964)	2720	1175*	11.8	2.8*	3.6	–0.6*
Díaz Ordaz (1965–1970)	4889	2169*	13.6	1.8	3.2	–0.4
Echeverría (1971–1976)	9721	4832*	15.5	1.9*	2.9	–0.3
López Portillo (1977–1982)	21283	11562*	15.5	0.0	2.3	–0.6*

Note: Difference refers to increases or decreases in spending of a given administration when compared with the previous administration. The differences were subjected to tests of statistical significance, and those that are significant are designated by an asterisk.

beneficiaries and the volume of land affected by agrarian reform. In each case, a difference of means test is utilized to determine the statistical significance of all comparisons.

The results reported in table 3 indicate that each successive administration significantly changes the total spending level by increasing outlays (even when expressed in constant pesos). The increases in expenditures are also growing larger across time. This budgetary expansion confirms the impact that changing presidential leadership has on spending policies, but it does not substantiate the hypothesized pendulum effect. The supposedly more conservative presidents contribute as much to escalating budgets as do the allegedly leftist presidents. Nor does differentiating according to budgetary categories produce a consistent left-right distinction among sexenios. For the variables of education and health assistance, only five of the differences between sexenios (out of the total of fourteen) are significant, and only one presidential transi-

TABLE 4 Average Annual Growth Rates of Public and Private Investment

Administration	Total Public		Total Private	
	mean (%)	difference (%)	mean (%)	difference (%)
Cárdenas (1935–1940)				
Avila Camacho (1941–1946)	6.4		11.5	
Alemán (1947–1952)	9.4	3.0	1.1	– 10.4
Ruiz Cortines (1953–1958)	8.0	– 1.4	10.8	9.7
López Mateos (1959–1964)	19.1	11.1	9.8	– 1.0
Díaz Ordaz (1965–1970)	11.4	– 7.7	14.5	4.7
Echeverría (1971–1976)	18.1	6.7	9.8	– 4.4
López Portillo (1977–1982)	14.6	– 3.5	9.6	– 0.2

Note: Difference refers to increases or decreases in spending of a given administration when compared with the previous administration. The differences were subjected to tests of statistical significance, and those that are significant are designated by an asterisk.

tion shows a significant distinction in the hypothesized direction for all three expenditure variables: the “leftist” López Mateos significantly increased total spending as well as relative outlays on the social welfare categories over the “rightist” Ruiz Cortines. But none of the other presidential successions provide consistent confirmation of the pendulum theory regarding federal budgets.

Data have also been collected on a variety of measures of public and private investment (partially analogous to the 1978 Gordon data reported above), and overall differences of means between successive administrations are tested for statistical significance (table 4). The absolute means suggest that leftist presidents emphasized public investment and slower growth in foreign investment while the rightist presidents promoted national private investment and foreign investment, but the differences in means are significant in only one instance—the slowdown in foreign investment between Díaz Ordaz and Echeverría.

<i>Public Industrial</i>		<i>Public Social Benefit</i>		<i>Foreign Private</i>	
<i>mean (%)</i>	<i>difference (%)</i>	<i>mean (%)</i>	<i>difference (%)</i>	<i>mean (%)</i>	<i>difference (%)</i>
				3.8	
25.1		-1.7		4.9	1.1
26.1	1.0	17.1	18.8	4.0	-0.9
18.0	-8.1	21.7	4.6	8.3	4.3
17.8	-0.2	47.1	25.4	5.0	-3.3
11.2	-6.6	24.8	-22.3	10.1	5.1
22.6	11.4	14.0	-10.8	3.4	-6.7*
9.4	-13.2	17.4	3.4	26.6	23.2

The comparisons on public industrial and social benefit investment—in addition to not being significant—show no trends in absolute differences. So the statistical analysis of the investment data provides little evidence for the pendulum effect.

As a final test of the pendulum hypothesis, agrarian reform indicators (the amount of land redistributed and the number of individual beneficiaries) are compared across sexenios (table 5). As with the investment data, these variables provide no indication of successive short-term swings in agrarian reform policies between presidents. In the first place, most of the differences between administrations are not significant. Second, the only pattern of left-right shifts appears over the long term, which corresponds to Needler's assertion that changes occur over a period of two sexenios. Following the extensive accomplishments of Cárdenas in this area, Avila Camacho and Alemán both deemphasized land reform. The presidency of Ruiz Cortines began the

transition to a renewed focus on land redistribution, and the upswing continued through López Mateos and Díaz Ordaz. Finally, the presidencies of Echeverría and López Portillo marked another downturn in agrarian reform activity.

POLICY CYCLES WITHIN SEXENIOS

The previous analysis comparing various policies across presidential terms provided little evidence for the hypothesized pendulum effect. But the data on policy innovation did suggest that presidents tend to introduce changes in budgetary decisions early in their terms. These findings also lend some credence to another common hypothesis regarding a predictable spending cycle that exists within, rather than between, each six-year term. One author even labels this idea as the "conventional wisdom of Mexican government economists."⁷ Briefly stated, this hypothesis asserts that the first year's budget is already determined by the previous government, the second year "push" will produce most of the new programs, expenditures will stabilize or decline over the next three years, and the last year will be characterized by a rush to finish all projects and to insure the historical prominence of the outgoing president. Thus spending will increase between the first and second year and again between the fifth and sixth year, while the interim years will produce little or no new growth in expenditures. If a line is plotted from spending in year one to that in year six, years two and three should be above the line and years four and five below the line (figure 1). From the data collected for this research, total federal government expenditures for each sexenio from 1935 through 1976 have been plotted in this fashion. Table 6 summarizes how many years fit the predicted pattern (years two and three above the line and years four and five below). Out of the thirty-two years, only ten are "errors" that contradict the hypothesized cycle. Using chi-squares as the appropriate test of significance, the test statistic is 4.57 with one degree of freedom. At the 95 percent confidence level, the null hypothesis that the observations are distributed randomly is rejected, and the hypothetical policy cycle in figure 1 is accepted. Thus while the pendulum theory of right-left swings between successive sexenios is not confirmed by most of the budgetary data, a pattern of expenditure decisions within each sexenio is substantiated. Specifically, the data suggest that Mexican presidents tend to concentrate their spending increases in the second and sixth years of their terms.

TABLE 5 *Agrarian Reform Accomplished by Successive Administrations*

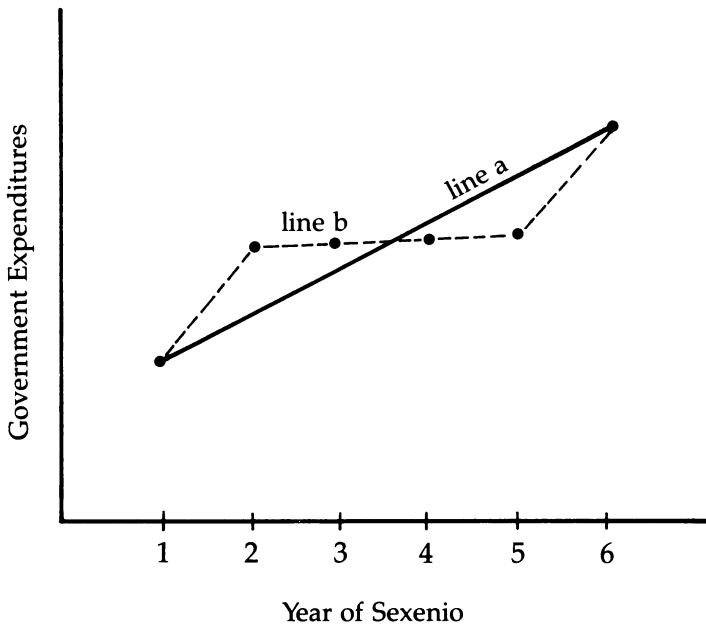
<i>Administration</i>	<i>Land Redistributed (1000 hectares)</i>		<i>Total Number of Beneficiaries</i>	
	<i>mean</i>	<i>difference</i>	<i>mean</i>	<i>difference</i>
Cárdenas (1935–1940)	3356		127435	
Avila Camacho (1941–1946)	995	– 2361*	20474	– 106961*
Alemán (1947–1952)	907	– 88	18104	– 2370
Ruiz Cortines (1953–1958)	962	55	37715	19611*
López Mateos (1959–1964)	1504	542	46704	8989
Díaz Ordaz (1965–1970)	3843	2339*	62253	15549
Echeverría (1971–1976)	2341	– 1502	45753	– 16500
López Portillo (1977–1982)	1363	– 978	40747	– 5006

Note: The differences were subjected to tests of statistical significance, and those that are significant are designated by an asterisk.

SUMMARY AND CONCLUSION

This article has sought to initiate a process of testing three potentially powerful hypotheses of policy cycles in Mexican presidential politics: policy changes between presidents that are concentrated in the early stages of a new administration, the pendulum effect of successive ideological swings, and a predictable pattern of expenditures within each six-year term. The suggestions of policy innovation (or honeymoon period) and of policy cycles within sexenios are generally substantiated, at least by the comparisons of budgetary data. In terms of total federal expenditures, new presidents do seem to make a difference as they significantly deviate from the spending pattern established by their predecessor (usually in the direction of increasing total government outlays). Also, the hypothesized intraterm cycle of the large increases in expenditures being concentrated in the second and sixth years of a sexenio is shown to be fairly accurate by the plots across time of spending by Mexican presidents from Cárdenas to López Portillo.

FIGURE 1 Hypothesized Policy Cycle within Sexenios



Solid line a represents the annual increase in government expenditures assuming a constant rate of change during each year of the sexenio.

Broken line b represents the predicted rate of increase according to the hypothesized policy cycle.

TABLE 6 Summary of Comparisons to the Hypothesized Policy Cycle

	Above the Line	Below the Line
Years 2 & 3	12	4
Years 4 & 5	6	10

Chi squared = 4.57 N = 32

The concept of a "final flourish" or "big push" to accomplish a great deal in the final year in office seems especially valid, as has been evidenced by the actions of a few recent presidents. For example, López Portillo's final twelve months in office produced two substantial devaluations of the peso, the first-ever exchange controls, and the nationalization of the remaining banks held by the Mexican private sector. Six years before, outgoing President Echeverría enacted extensive devaluations and a highly controversial expropriation of rich farmland in northwestern Mexico. The latter act occurred only eleven days before the inauguration of López Portillo. Also, six months before he left office in 1970, Díaz Ordaz approved the only nationalist act of his administration, the Mexicanization decree that required a majority of Mexican capital in steel, cement, glass, fertilizer, cellulose, and aluminum. The apparent pattern is that by the end of a particular sexenio, the president's policies have alienated many former supporters and the outgoing leader seeks some grand gesture to restore popular support and guarantee a place in history.

The hypothesis of a pendulum effect with predictable ideological swings between successive administrations is essentially disconfirmed by the data. Although the qualitative comparisons of policies at least since the sexenio of Ruiz Cortines provide some justification for believing that ideological shifts are related to presidential changes, the quantitative analysis does not substantiate the pendulum hypothesis. The findings from the quantitative analysis do suggest that presidential transitions have contributed to changes in budgetary policies, but these have not paralleled the expectations of the pendulum effect. Rather, the trend has been toward real increases in expenditures with each new president. With most other policy indicators, the differences between sexenios were not statistically significant and usually were not in the hypothesized direction. Only the agrarian reform measures provided any evidence of ideological shifts, but these shifts occurred over a span of two or three sexenios rather than with each new president.

Certainly, the quantitative data here do not provide the only means for examining policy changes. Other indicators of public policy might be examined in future research. More significantly, some shifts in policy may not be detected by analyzing quantitative information because some aspects of policy are essentially qualitative and not amenable to statistical analysis. In addition, the perception of a president as "leftist" (such as Echeverría and López Mateos) or "rightist" (such as López Portillo and Díaz Ordaz) may be as important as actual accomplishments.

The onset of the presidency of Miguel de la Madrid in December 1982 provides a current and relevant laboratory in which to test further the results of this research. Even in a qualitative sense, the current

information on the de la Madrid government contradicts the expectations of the pendulum hypothesis. The new president is certainly not the “radical” new leader predicted by *Business Week* in 1981. When he took office, de la Madrid was widely considered to be fiscally conservative and probusiness, and in reaction to the deep economic crisis of 1982–83, he produced what may be the most austere budget in Mexican history.

The results of this analysis as well as considerations of the most recent presidential transition do not totally reject the correlation of policy change with presidential politics. Mexican presidents generally are found to innovate in their budgetary decisions early in their terms and to produce a flurry of activities, including substantial increases in expenditures, in their final year. The notion of striking a political balance by swinging from one side of the ideological spectrum to the other may be accurate; but the data certainly demonstrate that such swings in the pendulum seldom match presidential terms. To cite one final example, López Portillo has been described as a “conservative” president for his first five years in office, but he moved suddenly to the left in his last year with the bank nationalization and exchange controls. Within the context of his own presidency and affected by a number of exogenous factors, López Portillo chose to shift public policy to the left before the presidential transition. Thus the ideological swings appear to be influenced by more complex and unpredictable factors, such as domestic and international events, rather than by a simple change in presidential administrations.

NOTES

1. Other works also refer to policy changes linked to political successions. Nagle (1977, 1) connects system changes (including policy form) with turnover in political elites; Hibbs (1977) and Cameron (1978) discuss how realignments in party dominance lead to different policy priorities; and Weller (1983) tests the behavior of certain macroeconomic indicators in election years and in years of presidential changes.
2. These factors are discussed in Grayson (1976), Grindle (1977a and 1977b), and Smith (1979).
3. See Wilkie (1970), Skidmore and Smith (1970), Boni and Seligson (1973), and Coleman and Wanat (1975). On expenditure policies in a comparative setting, see Bunce (1981).
4. On the question of the validity of disaggregated measures of federal expenditures, see Coleman and Wanat (1975).
5. Stanley Ross refers to the pendulum effect as the ability of the Mexican political system to “define new objectives and change directions if necessary,” but he does not necessarily link this to change in presidential administrations (1982, 14). See also Domínguez (1982, 211–14) and Segovia (1982, 32).
6. For a summary and generally positive interpretation of Echeverría’s spending policies, see Tello Macías (1979). Clement and Green (1978) contend that Echeverría was only trying to rectify structural weaknesses in the domestic economy.
7. See Koehler (1972, 14–18). Also see FitzGerald (1978a, 266).

APPENDIX

Note: This appendix lists the data sources consulted for each area and time period indicated in the preparation of this article.

FEDERAL GOVERNMENT EXPENDITURES: TOTAL, EDUCATION, AND HEALTH AND PUBLIC ASSISTANCE

- 1934–1978 Nacional Financiera. 1981. *La Economía Mexicana en Cifras*.
 1979–1982 Presidencia de la República. 1982. *Sexto informe de Gobierno, Anexo del sector político económico*. Secretaría de Hacienda y Crédito Público. *Cuenta Pública*.

NATIONAL INVESTMENT: TOTAL, PUBLIC, AND PRIVATE

- 1934–1938 Not available.
 1939–1963 Nacional Financiera. 1965. *La Economía Mexicana en Cifras*.
 1964–1979 Dirección General de Estadística. Secretaría de Programación y Presupuesto. *Anuario Estadístico*.
 1980–1982 Banco de México. *Informe Anual*.

FEDERAL PUBLIC INVESTMENT: TOTAL, INDUSTRIAL, AND SOCIAL BENEFITS

- 1934–1978 Nacional Financiera. 1981. *La Economía Mexicana en Cifras*.
 1979–1982 Presidencia de la República. 1982. *Sexto informe de gobierno, Anexo del sector político económico and Anexo del sector gobierno*.

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AGRARIAN REFORM: LAND DISTRIBUTED AND NUMBER OF BENEFICIARIES

- 1934–1979 Nacional Financiera. 1981. *La Economía Mexicana en Cifras*.
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