

Democratization and the Economy in Mexico: Equilibrium (PRI) Hegemony and its Demise

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1. Introduction

In this paper, we address the following fundamental question: Why do citizens acquiesce in regimes of which they obviously disapprove? Around the world, regimes survive despite rampant corruption, an absence of fundamental rights, harsh taxation, restrictive economic regulation, and the general failure to foster economic growth. This question represents a major puzzle for comparative politics. The survival of hegemonic, single or dominant party regimes in the developing world, as well as those of the socialist regimes raises the same question.

One answer is that hegemonic (single or dominant) party and socialist regimes rely on power, coercion, and repression. As important and ubiquitous these tools are for authoritarians, it is also clear that the exclusive reliance on force is insufficient to explain why authoritarian regimes, particularly those that are not short-lived military juntas, survive. The literature on

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economic performance, for example, demonstrates that authoritarian regimes that suffer poor economic performance are much less likely to survive (see, e.g., Geddes 1999, Haggard and Kaufman 1995, Przeworski and Limongi 1997, Remmer, 1993). If force were the sole means of authoritarian survival, why would economic performance matter at all? Moreover, if economic performance is critical to authoritarian survival, the mechanisms linking performance and survival remain unclear.

To address our fundamental question, we investigate the long-standing hegemonic dominance of Mexican politics by the PRI. The model exhibits what we believe is a general mechanism underlying the resiliency of single-party authoritarian regimes.¹ The model shows why citizens not only acquiesce in a system they do not like, but often play an active role in helping support the regime.

For six decades following 1930, the *Partido Revolucionario Institucional* (PRI) dominated Mexican politics. We suggest that PRI maintained its hegemonic position in part by creating a complex set of institutions that gave citizens incentives to support -- and, indeed, aid -- the PRI. In what follows, we first consider the period of PRI hegemony and then turn to the question of how this broke down in the 1990s.

Our account suggests that the PRI system is at once tragic and brilliant: Tragic in that it forces citizens to accept massive corruption, low levels of government service, and highly

Fearon, Antonio Rangel and Roger Noll.

¹ See Geddes (1999) and Huntington (1991, ch 3) who distinguish three types of authoritarian regimes, personal dictators, military regimes, and single-party systems. Geddes demonstrates the resiliency of single-party regimes.

inefficient policies; brilliant in that it forces citizens not only to accept these features, but to play their role in maintaining the system.

The main idea of the model is fourfold. The first game considers voters in a locality (e.g., a municipality) who prefer the opposition to the PRI. Voters face the choice of whom to elect as their local leader, the local PRI candidate or the opposition candidate. The national PRI, in control of the federal government, then decides whether to reward or punish the locality through the provision or withdrawal of budgetary funds. We show that, in the equilibrium, citizens are induced to support the PRI. The reason is that if voters elect the opposition, the PRI-controlled central government punishes the locality by withholding funds. If the locality elects the PRI to local office, the PRI-controlled central government rewards the locality by giving it funds. Although, *ceteris paribus*, voters in the locality prefer the opposition. The PRI's credible threat to punish implies that all is not equal: voters instead face the choice between an opposition without funds and the local PRI with funds.

The national PRI's political control of the central government's fiscal resources drives a wedge between the local PRI and opposition candidate. In equilibrium, the PRI maintains its monopoly, but not because people prefer it. Rather, the PRI's dominance of the center allows it to use the fiscal system to affect local elections.

The first model abstracts from the problem of multiple localities. Because it takes the PRI's hold on the national government as given, it cannot explain why citizens stand for massive corruption and inefficiency. To address the question of national power, we consider voters in the national election districts.

Our second model explains how the PRI system sustains itself by drawing on the insights of Fiorina and Noll (1978). Although we assume voters in a majority of electoral districts prefer to be governed by a more efficient opposition, the system works against them. In the face of the PRI's credible punishment, no locality wants to be the first to defect to the opposition. Without a mechanism to coordinate with a majority of localities, voters in each locality have an incentive to acquiesce and accept the PRI. The reason is that voters in one district alone cannot affect the system. The only direct leverage voters in a given district have is to decide whether to support the PRI or the opposition. Supporting the opposition yields no effect on the system, but induces the PRI to punish it. So voters in each electoral district have an incentive to go along with the system, and support the PRI.

Only if voters across a majority of electoral districts coordinate to elect the opposition to national office can they affect the national system. Yet coordination is difficult because localities face a common pool problem. Although a majority prefers to support the opposition, none wants to move first and bear the costs of organizing a national opposition party. The system thus contains a critical incentive compatibility aspect: citizens do not like the system's corruption and inefficiency; and yet they willingly play their role in preserving the system. Although the system may take more from most citizens than it gives in return, obtaining that return requires active support of the PRI.²

² Our approach shares some insights with recent work on state building in Russia. For accounts of this process, see Solnick (1997), Treisman (2000), and Tsalik (2000).

To explain the PRI's loss of its hegemonic position in the 1990s, we turn to two analyses paralleling the two parts of our equilibrium hegemony argument. Our third component derives comparative statics results from the first model to show a set of conditions under which voters in a locality vote for the opposition for local leaders, despite the PRI's punishment.

The logic draws on the changes in Mexican economy and politics. We point to three critical changes that slowly but significantly altered the PRI's ability to maintain its system. First, the economic collapse of the 1980s lowered the resources available to the PRI to reward supporters. Second, growing opportunities in the international market, particularly for many localities seeking to integrate with the United States economy, raised the opportunity costs of remaining under the PRI system. Third, economic liberalization and greater openness allowed many localities to exploit international opportunities. For many localities, the opportunity costs of the traditional PRI system grew every year.

We argue that, at some point during the 1980s, a critical juncture occurred in which these economic changes caused a switch in the preferences of a small number of localities. The value of providing local public goods and services complementary to markets grew sufficiently large that these few localities were willing to support the opposition despite the PRI's punishment. The underlying economic changes affecting many localities over time allowed an opposition party to gain a series of local strongholds, making it increasingly competitive. In this account, economic changes underlie the growing political competition and democratization, at least in the more modern, outward looking portions of Mexico. Moreover, democratization starts "from below," That is, democratization in Mexico has begun among individual localities that defect from the PRI

system. This contrasts with the literature on democratization, which tends to focus on elite bargaining. The final component of our approach returns to the national election game. The opposition-preferring but PRI-supporting majority of districts face a tipping game. During the classic hegemony era, voters in each district had striking incentives to support the PRI. The economic crisis and subsequent policy change signaled the end of this era. The beginning of the end occurred in the 1980s, as a few localities defected to the opposition, despite punishment. The unilateral defection of some localities, in turn, altered the incentives of other localities. If voters in one district believe that voters in other districts will also defect, they too have an incentive to defect. The initial unilateral defections thus in part facilitate tipping. We believe a tipping mechanism underlies the defeat of the PRI in the 1997 midterm elections.

In short, this view holds the PRI held its hegemonic position by virtue of a complex incentive compatible system that not only induced citizens to acquiesce, but to play their role in supporting the PRI. In this context, critical factors accounting for the PRI's success were the control of national fiscal resources by the party, the ability of its leaders and bureaucrats to target them selectively to localities, and the lack of outside options for the local jurisdictions. The tragic brilliance of the PRI system implied that opposition-preferring voters throughout Mexico nonetheless voted, again and again, for the PRI. Defecting only made them worse off.

We provide a range of empirical evidence to support the model's principal assertions and predictions. First, we draw on two separate empirical analyses to demonstrate the PRI punishes localities that defect to the opposition. The first investigates federal funds to the states for investment in public works. We show that states with a greater proportion of municipalities that

defect to the opposition receive systematically fewer funds. The second analysis takes the municipality as the unit of analysis. We analyze the discretionary allocation of revenue sharing funds provided by the states to the municipalities. Although federal revenue sharing to the states has, since 1980, been governed by formula, revenue sharing by the states to the municipalities is highly discretionary. We show that, holding constant for a variety of socio-economic indicators, opposition municipalities receive systematically fewer funds.

Both of these empirical analyses also support the model's conclusion that the PRI conditions its reward and punishment on whether voters elect the PRI or the opposition, not on the percentage of support for the PRI.

Second, we provide evidence in support our comparative statics results, namely, that the municipalities mostly likely to defect to the opposition are those that experience the greatest economic opportunity costs of remaining under the traditional, inefficient PRI system. Using logit analyses, we show that, per our predictions, the municipalities that defect to the PAN are more internationally oriented (i.e., greater trade). They are also more market oriented in that they have higher incomes and experience higher economic growth rates.

Third, we provide evidence for our tipping model. Tipping models predict a discontinuous political change from one equilibrium (nearly all localities supporting the opposition) to another (a majority supporting the opposition). Using evidence from federal congressional district elections, we show that defections to the opposition do not grow in a continuous manner. Prior to the 1997 mid-term elections, only a handful of districts went to the opposition. In 1997, however, opposition parties captured a majority of seats in the lower chamber.

Our approach affords a new account of Mexican political economy and democratization. On the political economy side, the model helps explain why, during the period of hegemony, the richer areas could not develop, why the poor stayed poor, and why the country wasted a large portion of its resources, allocating much of the social surplus for pure political reasons. The PRI system raised revenue to provide funds to help win elections. Studies of the determinants of the allocation of federal funds for specific programs reveal that the standard measures associated with the policy (for example, poverty rates in the case of a poverty fund) had little statistical effect on allocation. Instead, funds were allocated to help the PRI win elections (Diaz-Cayeros, 1997; Morgenstern, 1997; and Weldon and Molinar, 1994).

On the democratization side, the model helps explain why the PRI organized elections in which there appeared to be no choice. This phenomenon is especially puzzling when we understand how much effort and resources the PRI devotes to winning elections. Our approach suggests that elections were the lynchpin the system by which the PRI rewarded and punished localities, thus giving voters incentives to acquiesce and support the system.

Democratization began at first as a few localities had an incentive to defect despite the costs of punishment. By the mid-to late 1990s, a tipping point had occurred, as the PRI reward and punishment system broke down. An analogous mechanism might be relevant to explain democratization in other contexts, such as in the cases of Taiwan or Korea.

Finally, the model provides an important insight into why poor areas remained poor and why the PRI system hindered richer ones from growing. First, the rural poor constitute the core PRI constituency. Modernization tends to undermine this support. Second, because the PRI

historically had a harder time maintain support in the economically advanced area, it had no incentive to foster the growth, power, and migratory draw of these regions. Instead, we show that potentially high growth areas were precisely those most likely to be punished under the PRI system. Third, because of the critical importance of winning elections, the PRI devoted much of national policymaking to aiding short-term electoral goals rather than to long-term goals, such as economic development. Put simply, economic development conflicted with the PRI's long-term goal of maintaining power in Mexico.

We develop our argument as follows. Section 2 develops the basic model of the PRI's credible threat to punish localities electing the opposition. Section 3 extends this model to cover many localities. Section 4 studies the breakdown of the PRI's hegemony and with it the rise of democracy in Mexico. Section 5 discusses the tipping model, explaining how the PRI's hegemonic equilibrium broke down. Section 6 provides some evidence supporting our approach. Our conclusions follow.

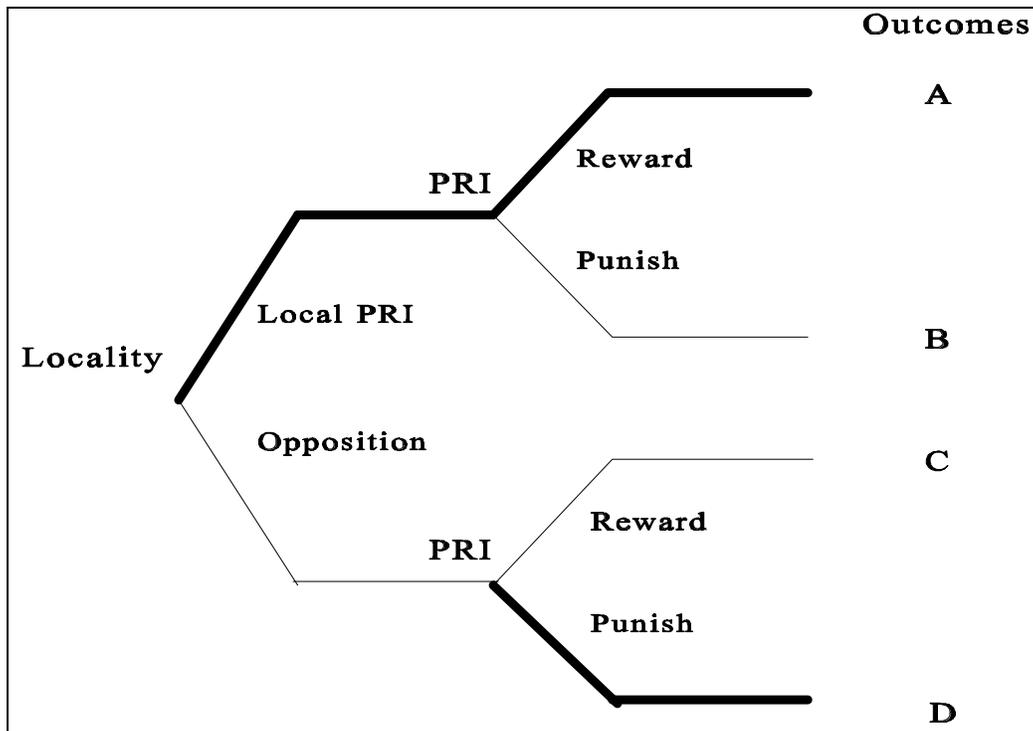
2. Equilibrium Hegemony I

In this section, we describe a simple game suggesting how the PRI maintains its hegemony (monopoly hold on power). Throughout, we will use the convention that the PRI refers to the national party organization, holding power in the central government; and the local PRI as the PRI's representatives in the particular locality under study. Although accounts of Mexican politics often emphasize the president and his cabinet, rather than the PRI, as the prime political players in the system, one should recall that the president was the leader of the party, and all the cabinet members pursued their careers as party members.³ At the local level, governors and municipal presidents reproduced the national system, since they also led the local party organizations. In short, the historic power of the president is intimately related to the PRI's ability to maintain its hegemonic control of Mexican politics.⁴

In this game, voters in the locality move first (see figure 1). We assume that voters are identical within a locality, although they might be heterogeneous across localities. Alternatively, we can view the voter as the pivotal in each locality. Voters may elect the local PRI to govern locally, or they may elect the opposition. The PRI moves second and may reward or punish the locality. For simplicity, we will think of the reward and punishment in terms of whether the

3 On the Mexican political system, see, among many others, Smith (1979); Camp (1995); the articles in the edited volume by Cornelius, Gentleman and Smith (1989); Weldon (); and González Casanova (1965).

4 For early accounts stressing the role of state and municipal politics, see Scott, 1959; and Brandenburg, 1955 and 1964.



federal government provides or withholds funds for the locality to run the government. We assume that, given the centralization of tax authority in the hands of the national government, local sources of funds are more expensive to collect than federal handouts, so withheld federal funds cannot be fully substituted with own sources, such as local taxation. Prior to the opposition gaining control of many localities, most localities received the lion's share of their revenue from higher governments rather than their own sources. Although the dependence on transfers remains very large, opposition governments make efforts to collect more revenue of their own (Rodriguez and Ward, 1995, 1998; Diaz-Cayeros, 1999).

The various choices result in four possible outcomes, which we label A - D. We assume that either party, when elected, uses the funds in part for partisan purposes to reward local party constituents and help solidify their support for the party at the national level. Of course, the parties may well provide constituency benefits in different ways.

The following table gives the preference orders for the two players. Explaining hegemony in a place where the PRI is preferred by voters is not puzzling. The issue is problematic, however, when we consider voters who dislike the PRI, preferring the opposition, but who also want to receive federal funding.

Consider the preferences of local voters who, *ceteris paribus*, prefer to be led by the opposition. These voters most prefer to be governed by the opposition and to be provided funds by the PRI (C) – see table 1. Second they prefer to be governed by the local PRI with the funds (A). Third, they next prefer to be governed by the opposition without funds (D). Finally, they least prefer to be governed by the local PRI without funds (B). This preference ordering implies that an opposition government without funds is not as valuable as a PRI government with funds. In a sense, funds are preferred over partisanship.⁵

5 . An alternative way to construct this payoff would be to explicitly state the tradeoff between partisanship and funds, where voters are weakly partisan. There exists a certain threshold of funds that can make voters forego their partisan preferences. Only if partisanship becomes more salient, or funds are below that threshold, would voters prefer to vote for the opposition regardless of the funds allocated.

Table 1: Preferences in the hegemonic game.

PRI's preferences	Locality's preferences
A	C
B	A
D	D
C	B

The PRI, in contrast, first prefers that the locality be governed by the local PRI with funds X the local PRI uses the funds to help the national party (A). It next prefers that the local PRI govern without funds (B). Third, it prefers the opposition to govern without funds (D). And last on the PRI's list is that the opposition govern the locality with funds, which it uses against the PRI (C).

We solve the game by working backward through the tree.⁶ To begin, suppose the PRI finds itself facing a locality that has elected the local PRI. Then because it prefers A to B, it will choose to reward the locality by funding the PRI, yielding outcome A. We represent this optimal choice as the heavy line from the upper right node. If the PRI faces a locality that has elected the opposition, it will punish the locality because it prefers D to C, yielding outcome D.

⁶The equilibrium concept is subgame perfection. We suppress the details of this concept in part for purposes of exposition and in part because the game is so simple.

Working back a step and taking the subsequent PRI's behavior as known and given, we have the locality's choice. If it chooses to elect the local PRI, the PRI rewards it, so it obtains outcome A. If instead the locality elects the opposition, the PRI punishes it, so it obtains outcome D. Because it prefers A to D, it will choose to elect the local PRI. We represent the equilibrium by the heavy line from the first node on the center left: The locality chooses to elect the local PRI representatives and the center rewards it with funds.

The model shows that the hegemon's credible threat of punishment makes it too costly for the locality to elect the opposition. *Ceteris paribus*, the locality prefers to be led by the opposition. But all else is not equal. Because in equilibrium the PRI punishes localities by withdrawing funds, it forces the locality to choose between electing the opposition without funds and the local PRI with funds. Given this choice, the locality prefers the local PRI.

Four factors contribute to this result: First, the PRI successfully deters voters from choosing the opposition because its credible threat to withhold funds; that is, it is costless for the PRI to withhold funds from an opposition locality. Second, the PRI is advantaged by moving last.⁷ Third, the information requirements for the PRI are straightforward. The focus on defecting implies that the PRI has full information about how local voters have chosen when it decides its allocation of funds. Fourth, partisan preferences are not intense enough among local voters so as to ignore the benefits of federal transfers.

⁷ Moving last also allows the PRI to eliminate a non-credible Nash equilibrium, where the opposition governs the locality and the PRI withholds funds. This equilibrium is Nash (but not subgame perfect) because D is better than C for the PRI, and D is also better than B for the locality.

3. Equilibrium Hegemony II

The model developed in section 2 explains the effect of the PRI's credible threat to withhold funds from localities that elect the opposition. This threat is a powerful deterrent. It fails to explain, however, three larger aspects of equilibrium hegemony: how the PRI retains power at the national level; why citizens accept, or at least acquiesce in, massive corruption, poor governance, and inefficiency; and under what conditions will deterrence become ineffective. The limits of our first model arise because it considers a single locality in isolation. If this one locality determined who controlled national power, then electing the opposition would remove the PRI from power and hence remove the PRI's threat of withholding resources. Under these circumstances, the PRI could not survive in the face of an opposition dedicated to good governance.

We now draw on Fiorina and Noll's (1978) insights in the American context to explain how the PRI maintains its system despite corruption and inefficiency. We generalize our first model to allow a large number of localities to make their decision simultaneously.

Consider a set of N districts, each of which must decide whether to support the opposition or the PRI for national office. We let national power determined by a decisive number, d , of districts. Although Mexico elects the president directly, and Congress is elected through a mixed system including a Chamber of Deputies with 300 single member districts and 5 proportional representation ones, the model applies so long as the decisive element to win control of national fund allocation is to win the majority of the districts. Since the Chamber of Deputies alone must

approve federal budget allocations to states and municipalities, such assumption is not far fetched. Let the number of districts choosing to favor a PRI candidate to the Chamber of Deputies be m_p , and the number favoring the opposition, m_o . For simplicity, we will let N be odd and let d be a simple majority of localities, that is, $d = (N+1)/2$. Thus, if $m_p > d$, the PRI candidate wins control of the national government; if $m_o > d$, then the opposition candidate wins control. For now, we ignore the critical problem of multiple opposition groups. National elections thus determine whether the PRI holds power to exercise its threat over localities.

We will also assume that initially the PRI holds power at the national level, having gained it through a pact in 1929, ending the on-going hostilities, factional disputes, and political instability following the Mexican Revolution. We do not address the question of how that pact fell into place. Our concern is how the PRI, having established its power at the national government, has retained it successfully deterring the opposition, notwithstanding an erosion of its electoral support. The model suggests the mechanism at work in supporting hegemony is more than simple force and fraud.

The model

We extend the model in section 2 in a natural way. First, the N localities, representing electoral districts, make their decisions simultaneously. Second, the aggregate decisions of these districts determine whether the PRI or the opposition controls the national government. An important difference in the district's problem from the previous model is that its decision focuses

on whether to support the PRI or the opposition at the national level, not which party shall represent the voters in the district in local office.

We represent the game tree in figure 3, which begins with the decision of a representative district i . Each of the N districts makes their decision simultaneously and independently. In particular, nothing assures that they will coordinate on their decision.

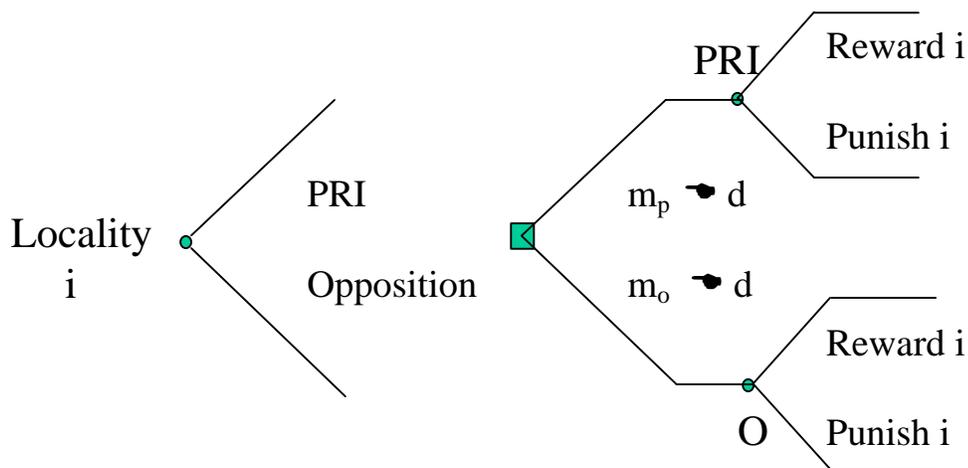


Figure 3: Locality I's Decision in a National Context

The box at the second node represents the aggregate decisions of the N districts. If the number of districts supporting the PRI exceeds d , $m_p > d$, the PRI wins control of the national government; if $m_o > d$, then the opposition wins control. Once the aggregate decisions of the localities determine which party holds national office, that party determines which localities to reward and punish -- that is, how to distribute the funds across localities.

The payoffs in this game parallel those in the earlier model, with some differences. The PRI's preferences over the outcomes are separable across the districts: it seeks to maintain its support in all districts, and thus orders the four possible outcomes as in table 1 from section 2. The Opposition's preferences over outcomes are the mirror image of the PRI's. It most prefers that each district support the opposition, and then reward it. It next prefers that each district support the opposition, but withhold the reward. Third, it prefers the district support the PRI, with no reward. And last, it prefers the district support the PRI with a reward.

We divide the districts into two types. The first type parallels the locality in section 2: *ceteris paribus* it prefers to be led by the opposition, and thus orders the four outcomes as in table 1. The second type of district prefers to be led by the PRI. The preferences of the PRI-preferring districts are: to be governed by the PRI and be rewarded. If the PRI is not to reward them (i.e., the national PRI does not hold up its part of the PRI exchange), it prefers to be governed by the opposition and be rewarded. If it is not to be rewarded, it prefers the PRI over the opposition. Notice also that we have assumed that each district's preferences coincide for local and national leaders.

The challenge for explaining hegemony is to examine the game when that the number opposition-preferring localities, g , exceeds the number of the PRI-preferring localities, $N-g$. Thus, a majority of localities are of the first type, that is, $g > (N+1)/2 > N - g$.

We now turn to the equilibrium behavior. Given their preferences, both parties if elected to national power will reward their friends and punish their opponents. We therefore concentrate on the incentives of the individual districts.

In the abstract, if this game were initialized without a history, the natural equilibrium is for the opposition type districts to support the opposition. If they all do so, then, regardless of the behavior of the PRI-preferring districts, the opposition will be elected and will reward their supporters.

This behavior is an equilibrium. To see this, consider the decision of a typical districts, j . Taking all the other district's decisions as given, we have at least $g-1$ localities supporting the opposition. If $g - 1 > (N+1)/2$, then the opposition is elected to national office regardless of district j 's decision. The district can get its first best by supporting the opposition. The same logic holds if $g = (N+1)/2 > g-1$. In this case, district j is decisive and can win the election for the opposition with its support. It too can get its first best by supporting for the opposition.⁸

This argument shows that each opposition-preferring districts will support the Opposition when all others do. The PRI-preferring districts face a problem as to whether to support the PRI and risk being punished by the Opposition. Given the behavior of the Opposition-preferring districts, the PRI-preferring districts cannot affect the election outcome. This is not the only equilibrium, however. Another equilibrium emphasizes the coordination aspect facing the districts. Suppose all the PRI-preferring support the PRI and that all other opposition-preferring districts do as well. What will district j do? In this case, district j cannot achieve its first best because there is no hope of electing the Opposition. All the district can do is determine whether the

⁸Notice that if, contra assumption, $g < (N+1)/2$, then the PRI districts elect the PRI and there is no problem understanding how the PRI survives.

PRI reward or punish it. Following an analysis that parallels that examined in section 2, district j will support the PRI under these circumstances.

If this game is played without any history, then the most natural equilibrium seems to be that the opposition districts support the opposition, which obtains national office. Nonetheless, we argue that this is not the most natural equilibrium for Mexico. The reason is that we must begin with history, with the establishment of the PRI by pact, creating an umbrella organization for sharing power among elites in the context of on-going violence. Prior to the creation of the PRI, disputes among the leaders were often settled through political murder.

A different question, therefore, asks whether it is possible for the opposition to succeed given an initial PRI hold on the central government? We argue that, under these circumstances, the most natural equilibrium is the second equilibrium in which the districts preferring the opposition fail to coordinate against the PRI.

The opposition is likely to fail to coordinate for the following reason. Recall that the PRI holds a large number, although not a majority, of districts by virtue of preference. This implies that, for the opposition to succeed, most of its districts must vote for support it. In particular, success requires that at least $p = [(N+1)/2]/g$ opposition districts vote for the opposition. For example, if the number of opposition-preferring districts g is 60 percent, then the proportion of opposition districts needed to win a national majority is more than 83 percent.

Mounting a national opposition campaign requires coordination and time, and the PRI's threat hinders this process. If the opposition fails, then places that supported the opposition will be punished. This works against coordination. Unless enough opposition districts (a proportion of p

or more) coordinate on a popular opposition candidate, they are likely to fail. National campaigns in large, complex countries are multi-year undertakings. Barring national emergencies, they rarely happen over night. The most natural way for an opposition to emerge and capture power in on-going democracies is that the opposition first captures a few strongholds. It then uses this political base to launch a larger, national campaign.

Yet the PRI-controlled national government works against this strategy. It requires localities to support the opposition despite the fact that they will be punished. They may do so in the hope that others will then follow, but this is not assured. In other words, these localities must provide a collective good for all opposition localities without any clear notion of success. Unless the opposition can be assured of capturing a large portion of localities quickly, it is doomed to failure: If the national campaign will not succeed, then all opposition localities prefer to support the PRI.

4. Democratization: The Political Effects of the Dynamic Mexican Economy.

We now discuss how this long-standing system fell apart, and in relatively short order. If we rely on an equilibrium story to model the PRI's hegemony from 1930 through the early 1980s, then we turn to a comparative statics argument to discuss the breakdown of this equilibrium to another, more competitive one.

Political implications of economic integration with the United States

We begin with two dynamic aspects of Mexico. First, a major feature of modern Mexico is the growing integration of its economy with the United States, particularly along the northern tier. A host of localities in northern Mexico now have vibrant economies with deep connections with the U.S. Over time, the economic incentives pushing toward integration have grown.

Second, governments provide necessary inputs to economic growth (Barro 1997, Knack and Keefer 1995, North 1981, others). The PRI's approach to policymaking at best can be described as a lack of attention to market-fostering public goods, services, and policies. These include: its highly interventionist, anti-market policies, no better illustrated than in the wildly inefficient state owned oil company, PEMEX; its pervasive corruption; the centralization of taxation and expenditure policy in a remote national government without knowledge of the variance of local conditions where so much of the money is spent; and its taxation and redistribution for political purposes, such as rewarding constituents and winning elections rather than spending to address problems.

In local communities throughout Mexico, the PRI's system too often implied hugely inefficient production of local goods and services. PRI officials at all levels had little incentive to be concerned with critical features for economic development, such as whether electricity service was reliable. Pervasive corruption implied that many local officials used their position to extract resources from firms rather than provides services. Complementary infrastructure was hard to

provide, in part because financing it depended on obtaining funds from a remote national government that distributed these funds according to electoral criteria rather than their productivity.⁹

All these policies place significant limits on economic development. Put simply, the traditional PRI system – both national and local policies – failed to provide a range of public goods and services complementary to economic development. The PRI therefore hindered economic growth of the regions seeking economic integration with the United States. Businesses geared to take advantage of cheap labor are strongly constrained when the local government

⁹The best statistical analysis of major national funding programs show two results. First, typically there is no relationship between various indicators associated with the program's goals and spending. The distribution of funds for education, for example, seem unrelated to measures of education need or potential. Second, regardless of the program's nominal purpose, the PRI allocates these funds for political purposes, such as helping it win elections in marginal districts. See, e.g., Diaz-Cayeros (1999) on education, Morgenstern (1997) on federal public investment, and Weldon and Molinar (1994) on solidarity funds.

cannot deliver reliable electric, water, sewer, and police services; or finance local infrastructure, such as roads and street lights.

Although the PRI could control much of Mexico's politics and a significant portion of its economy, it could not control everything. In particular, it could not control the evolving economic relationship between the northern tier of states and the United States.

These two factors interact and have two direct implications. First, for many of the communities along the northern Mexican border, the rising economic value of integrating with the United States economy implied a corresponding rise in the opportunity costs of living under the traditional PRI-dominated system. Although the change opportunity cost of the PRI system was by no means uniform, it did grow over time.

Second, as the opportunity cost of living under the existing system grew, the difference between living under the PRI system and opting out diminished. At some point a "critical juncture" occurred, to use Collier and Collier's (1991) term, where the preference ranking for some localities in northern Mexico actually switched. It became in the interests of the locality to elect the opposition even if the PRI would cut off the flow of funds to the locality.

In turn, two factors contributed to this critical juncture reflecting a preference switch. First, as noted, the direct opportunity costs of the inadequate public goods and services grew. Second, as the local economy grew – if constrained by the lack of complementary public services a second change occurred. Economists argue that an important ingredient of paying taxes is the concept of "willingness to pay". Put simply, people's willingness to pay taxes and user fees vary directly with their valuation of the services provided. When taxes go to an amorphous and corrupt system that

produces private benefits and low levels of public goods, business and citizen willingness to pay is low. But when the government offers valuable and reliable services, they are often willing to pay considerable amounts. This is especially true when valued goods and services are provided on a fee for service basis. Real service implies businesses and citizens pay fees.

The implied comparative statics in the model

We model this process with a simple modification of the set from the previous section. As we noted in section 2, this model is too simple to capture the entire process. And yet we believe it captures a central feature of the breakdown of the PRI's hegemonic position.

The economic effects noted above imply that the locality's preferences evolve over time. Three separate effects work together. First, as the opportunity costs of the PRI's system rise, the value of A relative to D to the locality declines. Second, as the value of complementary government public goods and services rises, the value of D rises. Third, as the local government provides valued goods and services, citizens' willingness to pay increases, generating more local revenue. This, in turn, also raises the value of D.

We model these changes in a simple way. We will let the value of D to the locality rise relative to A. To do this, we write D as a function as an exogenous shift parameter, $D(\alpha)$, where α represents the underlying economic shifts. As α rises, so too does the locality's value of D relative to A. During the years of PRI hegemony, $\alpha = \alpha_0$ was low so that, as in section 2, the locality

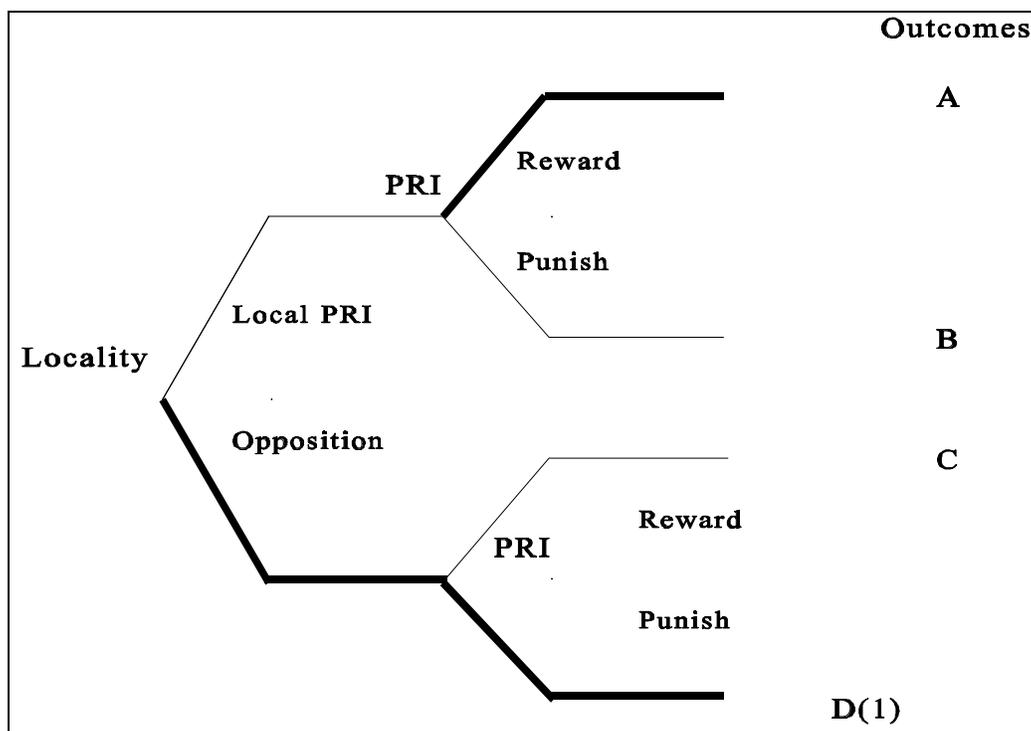
preferred A to $D(\alpha_0)$. As α grew, the locality's relative value of D rose. Eventually, α became large enough so that, at $\alpha = \alpha_1$, the locality valued $D(\alpha_1)$ above A.

The locality's expanded preference order is given in table 2. As before, the locality prefers A to $D(\alpha_0)$, but with α sufficiently large, the locality prefers $D(\alpha_1)$ to A. Notice also that changing α affects the PRI's preference order. The reason is that it does not want a successful local opposition anywhere. Although it has no control over α , the PRI prefers $D(\alpha_0)$ to $D(\alpha_1)$.

Table 2: The Locality's Evolving Preferences.

PRI's preferences	Locality's preferences
A	C
B	$D(\alpha_1)$
$D(\alpha_0)$	A
$D(\alpha_1)$	$D(\alpha_0)$
C	B

The locality's change in preferences imply a change in its behavior in the game. Although the PRI's behavior remains unchanged, the locality now prefers $D(\alpha_1)$ to A. It thus will choose to elect the opposition and bear the consequences of the PRI's punishment instead of electing the local PRI. The new equilibrium is given in figure 2. As before, if the locality chooses to elect the local PRI, the national PRI rewards the locality with funds. Yet the locality does not choose this path, but instead chooses the opposition. The PRI then punishes by withholding funds



The advantage of electing the opposition is that the locality frees itself of some of the local PRI's policies, including corruption. Further, because this is not simply an opposition seeking to capture political rents and corruption opportunities, but an opposition dedicated to providing valued public goods and services, citizen willingness to pay implies that this type of opposition can raise more local revenue to replace some or all of the funds withheld by the PRI.

5. Breakdown in the PRI's Hegemony: the tipping game

The models in sections 2 and 3 show that the PRI's hegemony depend on the equilibrium expectations prevailing in the N separate electoral districts. Unless voters in a majority of opposition-leaning districts believe that they will all support the opposition, each has an incentive to support the PRI to avoid being punished.

As we discussed, the game in section 3 has multiple equilibria. We now observe that it is a form of tipping game. This implies that the equilibrium can switch rapidly from the PRI-hegemony to one in which a very large group of districts support the opposition so that the PRI's threat of punishment no longer restrains opposition-leaning districts. The key to the tipping mechanism is that something must suddenly alter voter expectations.

In our view, two elements contributed to the tipping phenomenon. First, we argued in section 4 that a series of changes exogenous to the model led a several localities to defect unilaterally to the opposition, despite the PRI's punishment. The series of unilateral defections altered expectations in other localities, demonstrating to voters in all districts that a growing group of localities that could withstand the PRI. The PRI's punishment was no longer sufficient to deter defection.

Second, the Peso crisis of 1994 had two closely related effects. First, the disastrous financial effects of the crisis implied more economic pain for Mexicans. Second, the crisis again limited the central government's ability to reward supporters.

In combination, the unilateral defections and the peso crisis led voters in many districts to vote for the opposition, so that the PRI lost its majority in the lower chamber. As predicted by

tipping models, the switch occurred virtually overnight from PRI dominance of the national government, with only a few opposition members of Congress, to the opposition holding a majority in one chamber.

A complete analysis of the tipping model awaits the next version of this paper. For now, we simply sketch how the two elements above affected the PRI-hegemony equilibrium in the model in section 3. First, the unilateral defection of many localities to the opposition divided the g potential opposition districts into two groups: unilateral defectors, numbering g_u ; and potential swing opposition districts, g_s (where $g_u + g_s = g$).

The peso crisis affected many districts by altering the value of the PRI system. Economic bad times combined with fiscal austerity to lower the value of the PRI. In terms of the model in section 4, this lowered the value of the alternative, A . Given that the PRI's punishment of withdrawal of funds was fixed, these effects implied more districts switching from the swing group to the unilateral defects. It also provided the occasion for mass defection among the swing group to the PRI.

6. Evidence

We provide empirical evidence for the three major implications of our model. First, we show that the PRI punishes defecting localities by withdrawing funds. This provides the most critical piece of evidence for our approach. According to our model, the PRI's hegemony becomes self-enforcing for citizens because they face the credible off-the-path punishment if they defect to the opposition. The model predicts that the PRI withdraws funds from localities that defect to the opposition.

Second, the model predicts that defecting localities do so because they possess a higher level of α . That is, localities that vote for the opposition should have a higher opportunity cost of living under the economically inefficient PRI-controlled spoils system. Defecting localities, therefore, should disproportionately be among the richer localities that are increasingly integrated with the U.S. and other international markets. This holds because these localities possess more credible exit options and can better afford being excluded from the PRI's spoils system.

Third, we provide evidence of "tipping point." The model predicts that, once a certain degree of defections have occurred, large numbers of other localities will defect too. The PRI's punishment regime does not breakdown in a continuous fashion. In other words, when localities leave, they tend to do so *en masse*.

A. Background to political change in Mexico

Before turning to our empirical tests, we provide in table 1 some background information

about the PRI's loss of hegemony and the rise of the opposition parties, organized by state and region. All data come from local election results. The first two columns provide the percentage PRI vote in the 1970-73 election cycle; and the 1995-97 election cycle. The first column represents the ex ante strength of the PRI in that state. In the 1970s, the PRI as a hegemonic party, enjoyed vote shares of above eighty percent in the overwhelming majority of states.¹⁰ Although not shown in the table, such support meant that the PRI controlled virtually all elective offices in the country, with the exception of a handful of municipalities.¹¹ For each state, the differences in the two columns represent the PRI's

¹⁰ Some comment is necessary on the quality of this data, given the usual objection raised in Mexico, concerning the reliability of electoral results under the presence of electoral fraud. We believe our exercise is meaningful because vote counts were a central concern for the PRI. Electoral fraud was neither universal, nor indiscriminate; and the opposition parties always worked to defend their votes. It is worth quoting at some length Juan Molinar (1991), perhaps the most insightful analyst of electoral politics in Mexico during the time of PRI hegemony, concerning using official vote tallies:

The Mexican electoral system is not only characterized by non-competitive conditions [i.e. using public funds for vote buying]. There is also fraud, and this does prevent the researcher from knowing how many votes were effectively obtained by each candidate. However, some considerations allow using official statistics for academic purposes.

Fraud operates in two senses: adding votes to the PRI and taking away votes from the opposition. The former is achieved in many ways, ranging from the manipulation of the registration lists to facilitate PRI maneuvering, the unilateral stuffing of ballot boxes, the installation of "phantom" booths, all the way to the use of mobile voter brigades, and the use of the "taco" –several votes simultaneously introduced into de ballot box by one single voter– and other less elegant, but nevertheless effective methods. The later, subtracting votes to the opposition, is achieved through the annulment of ballots, theft of ballot boxes, threats to the voters, tampering with the electoral packages, and so on. The degree of difficulty in one or the other procedure is very different. In general, it is easier to add votes to the PRI than to subtract votes from the opposition [...].

Hence, a first methodological rule for reading official electoral data: statistics on opposition votes are more reliable than statistics for the PRI.

Second, the starting position must be that fraud is a generalized practice in the Mexican electoral system, but it is neither universal, nor homogeneous. It is more common and intense in rural, little communicated, areas, and more limited in urban, well communicated ones. This is not just because the PRI is better able to use its patronage mechanisms of electoral mobilization, than modern campaign techniques; but also because the opposition, with few exceptions, only reaches to where the pavement ends. Where the opposition is incapable of fielding candidates, it cannot have representatives in the polling booths to defend its vote *in situ* or to provide evidence for courts.

Thus, a second rule to read electoral results: statistics concerning elections in urban areas are more reliable than those in rural ones. (Molinar, 1991:8-9).

We fully concur with his view. For analyses of mechanisms subsequently devised to control electoral fraud in Mexico see, among others, Eisenstadt (1999) and Schedler (2000).

¹¹ Lujambio (199*), shows, for instance, that the PAN won official recognition of its triumphs in 12 municipalities between 1962 and 1967. These included two capital cities, Mérida and Hermosillo, in 1967. Unfortunately, we do not possess systematic data on the number of municipalities controlled by the opposition before the 1980s. In terms of governorships, the PAN claims to have been stripped of triumphs in Baja California (1959), Sonora (1967), Yucatán

loss in strength from the 1970-73 election cycle to the 1995-97 cycle.

The third column provides the date at which the PRI vote fell below a majority (if ever). The next three columns provide the number (and percentage) of municipalities in the state governed by the three major parties, PAN, PRI, and PRD, respectively. The seventh column indicates which party governs the capital city, while the eighth column reports the strongest opposition party in that state. Finally, the last column reports whether, and in what year, which opposition party won the state governorship.

[Table 1 about here]

The table provides a rather static picture of political change, in part because data about municipal elections is difficult to assemble. However, some aspects of the dynamics of change can be inferred, the most important being that the demise of the hegemonic PRI at the state-level comes until 1995. Only in a handful of states (Baja California, Guanajuato Chihuahua, and Michoacan), did the PRI's vote share fell below 50% before 1995. The PAN won relatively early the governorship in three of these states: Baja California (1989), Guanajuato (1989) and Chihuahua (1992)¹². In the rest of the country, the major transformation came after the 1994 Peso Crisis. Note from column 3 that the PRI's vote share falls below 50% in virtually all states between 1994 and 1999. The sharp decline of the party's vote taking place after the Peso crisis translated into a significant loss of state-level executive

(1969); and Nuevo León (1985); while the PPS claimed to have won Sonora (1949) and Nayarit (1975). The first official recognition of a state governor race lost by the PRI was in 1989.

¹² In Chihuahua, the PAN actually claims to have won the governorship in 1986, but the PRI stole the election from

paces that is made explicit in the rest of the table. The PRI has lost the governorship in close to a third of the states; it no longer governs two-thirds (20 of the 31) of the capital cities, most of these losses occurring after 1994; it has lost a very significant proportion of municipalities to the opposition; and finally, it lost the majority of seats in the Lower Chamber of Deputies in the 1997 elections.

B. Punishment and Withdrawal of funds

Testing the withdrawal of funds as a response to exit during the time of PRI hegemony is not straightforward. The reason is that, according to the model, in the hegemonic equilibrium, neither exit nor the withdrawal of funds should occur. Because the PRI's punishment strategy is credible, punishment should be observed only under extraordinary circumstances. Indeed, during the period of PRI hegemony prior to 1980, only a handful of the 2400 municipalities defected to the opposition. Once the hegemony starts to break down in the 1980s, however, we should observe the withdrawal of funds by the PRI as a response to defecting localities.

To test these assertions, we investigate the government's use of discretionary funds, that is, those most easily withdrawn from defecting localities. Among the various financial funds transferred by the federal government to the Mexican localities, the most subject to executive discretion is federal public investment. Decisions for the location of investment are highly centralized; and state and municipal governments contribute very few resources to these projects. We also investigate the political use of another prominent source of local funds. Given the centralization of taxation, the revenue sharing funds allocated to states and municipalities are a critical source of funds for these

them. The facts appear to favor the PAN's claim (see Molinar, 1987).

subnational governments. We test the predictions of the model with both types of funds.

Table 2 presents an estimation for the determinants of the allocation of federal public investment (IPF) across the 31 states in 1997.¹³ The dependent variable is the per capita allocation of IPF each state (in logs, *lipf97*). Per capita IPF averaged \$1180 pesos, ranging from \$254 pesos in Jalisco, a state governed by the PAN, to a staggering \$9472 pesos in the oil producing state of Campeche. We seek to determine whether the federal government conditions its allocation of funds based on the political preference of the localities in each state.

Our deterrence account implies that, to be effective, punishment should occur when a locality defects to the opposition. There are several alternative means to measuring defection. One approach uses the percentage of votes received by the opposition in each state. Another approach bases defection on whether the state government belongs to the opposition or to the PRI. The third alternative for modeling political preference relies on the percentage of municipalities in each state controlled by the opposition. The second and third alternatives are preferable to the first.

Our model predicts that the PRI does not condition on vote share. Instead, the PRI uses a simple zero-one condition based on an answer to the following question: did the locality elect the PRI or the opposition? Our theory says that, ex post, electing the PRI is rewarded and elected the opposition is punished. Hence, vote shares would not capture this underlying political logic of resource allocation. The vote percentage should only matter for the PRI in as much it indicates “marginal” districts, namely those that are won or lost at the margin.

¹³ As documented in Diaz-Cayeros (1997), the regional distribution of IPF exhibits enormous variations across presidential terms, but during the presidential term of Ernesto Zedillo, it shows a relatively stable distribution. The correlation between the natural log of IPF in 1997 and that corresponding to 1996 and 1995 was .97 and .90

In our first estimation, we indicate whether the locality went to the PRI or the opposition by the percentage of municipalities controlled by the parties instead of a dummy variable for states controlled by the opposition. The reason we use municipalities instead of states is that most federal funds seem to be allocated to political jurisdictions smaller than states. Moreover, a state can be controlled by an opposition governor but be composed of several municipalities still controlled by the PRI. In this case, and if our model is correct, the PRI should not seek to withdraw from its spoils system those municipalities – punishing them would not only be irrational but suicidal.

Thus we measure political preferences in each state with the percentage of municipalities controlled by each political party in 1997: *mnpan97* for the PAN, *mnprd97* for the PRD, and *mnpri97* for the PRI.¹⁴ We expect that, for each state, the greater the proportion of its localities controlled by the opposition, the fewer funds it should receive. We also employ several socioeconomic controls that are likely to affect public investment. These are the natural logarithm of the per capita state GDP in US dollars for 1996 (*lpib96*); an index of percentage coverage of public goods, such as water, electricity and sewage in the state (*services*); and a dummy variable for the oil producing states of Campeche and Tabasco, where much of the investment is concentrated (*dummoil*). We also control for the size of each state, as reflected by its population according to the latest count in 1995. This variable is important since we use as a dependent variable the percentage of municipalities controlled by the parties. Because more sparsely populated states tend to have fewer municipalities, we do not want to

respectively.

¹⁴ We tested the other alternatives to account for local political preferences. The vote shares of each party were significant, but only at the 90% confidence level. A dummy variable for opposition governors performed quite well. Due to lack of degrees of freedom and the strong correlation among the variables, we could not test whether municipalities or opposition governorship or a combination of both performs better. Our results for revenue sharing below suggest, however, that municipality is a relevant unit of analysis. For further iterations of the models, we will test if the relevant

bias our results due to an omitted variable for size. We report OLS estimates with heteroskedastic consistent errors.

[Insert table 2 about here]

The results support our model. Localities with a higher percentage of PAN municipalities endure a statistically significant punishment. We tested the other alternatives for measuring the political independent variable. The vote shares of each party were significant, but only at the 90% confidence level. A dummy variable for opposition governors performed quite well. Due to lack of degrees of freedom and the strong correlation among the variables, we could not test whether municipalities or opposition governorship or a combination of both performs better. Our results for revenue sharing below suggest, however, that municipality is the relevant unit of analysis.

The magnitude of the punishment endured by opposition localities is by no means trivial: all else equal, a 10 percent increase in the proportion of municipalities controlled by the opposition implies 128 pesos per capita less going to the state. To have a clearer idea of the magnitude of effects take Baja California and Baja California Sur. In 1997, the PAN controlled 50 percent of the municipalities in Baja California and the PRI 100 percent of them in Baja California Sur. The model predicts that Baja California would get 639 pesos per capita less than Baja California Sur. Relative to the average per capita funds to the states in 1997 of 1180 pesos, the PRI's punishment represents a significant loss. In the case of the percentage of municipalities governed by the PRD, the coefficient is

jurisdictions are states, municipalities, or a combination.

also negative, but fails to reach statistical significance.

The control variables all yield reasonable results. These suggest that the allocation of public investment to the states is positively related to income, but that it is relatively inelastic, which implies a bias toward poorer states. Places with a better supply of services receive less public investment; and oil-producing states receive disproportionate investment. Finally, given that the dependent variable is in per capita terms, the results suggest that there are some fixed costs in investment projects which make the per capita allocations higher in smaller places, although population is not statistically significant..

We also investigate the political use of another prominent source of local funds: revenue sharing funds to municipalities in 1995. Revenue sharing from the federal to the state level follows relatively strict formulas. States, in contrast, use various devices to allocate these funds to the municipalities under their jurisdictions. Therefore, states exercise great discretion in the allocation of funds to their municipalities. Revenue sharing funds received by municipalities are thus particularly attractive for testing our model.

Table 3 reports the estimates of the determinants of the allocation of revenue shares among almost 2000 municipalities in Mexico. The analysis excludes almost 500 municipalities in Oaxaca. Most municipalities in this state elect their governments without political parties, selecting representative for the municipalities following traditional method of community norms (“usos y costumbres”) Revenue sharing is measured in per capita terms as the natural logarithm, in order to obtain a better fit of the model. As in the estimates for federal public investment, we expect the political variables to determine allocations favoring the PRI and withholding funds from the

opposition. Given that we use the municipal unit of analysis, we can assess whether the PRI at the national and state level condition their assignment of resources to the municipality depending on which party won in the jurisdiction. Moreover, given the level of disaggregation in the data, we can also test whether the PRI cares about margins of victory. Our expectation is that the party will punish the opposition and reward supporters, but further fine-tune according to its margin of victory. In particular, we expect the PRI to devote most of its resources to municipalities won by a small margin, treating “safe” municipalities as a form of second-class supporters.

[Table 3 about here]

As independent variables, we use dummy variables for whether the municipality is governed by the PAN (gopan), the PRD (goprd) or the PRI (gopri). We also construct a variable to assess the flow of resources into marginal races, which are the margin of victory according to who won the race, namely, the PAN (panmarg), the PRD (prdmarg) and the PRI (primarg). We expect revenue sharing allocations to be less where the PAN or the PRD govern, and more where the PRI does. Controlling for such effects, we expect the margin variables to have a negative sign: the greater the margin, the less resources would be allocated to the municipality. This holds because the PRI will rationally allocate funds to those municipalities where they have the greatest leverage. On average, the PRI is likely to be confident of winning municipalities won by a high margin; and on average, the greater the opposition’s margin, the more likely it is hopelessly lost to the PRI.

As before, we control with socioeconomic variables, reflecting the state income as measured by

the natural logarithm of per capita gdp in dollars in 1995 (lpib95); the percentage illiterate population over 15 years old in each municipality in 1995 according to the latest vote count (analfa); and the rurality of the municipality, as measured by the percentage population living in localities of less than 2,500 inhabitants. It should be noted that including lpib95 is similar to a state fixed effects variable, since, lacking municipal level indicators, it takes the same value in all the municipalities in a given state. We report OLS estimates with heteroskedastic consistent errors.

The results support our model. Municipalities governed by the opposition receive less revenue sharing. Both gopan and goprdr are negative and statistically significant, with the PRD being slightly more punished than the PAN. Municipalities controlled by the PRI receive more resources, as reflected in the statistically significant positive sign of gopri.

How much fewer resources do these estimates imply for a municipality that defects to the PAN or the PRD? On average, municipalities choosing the PRI received \$169.30 pesos in per capita terms. Municipalities electing the PAN or the PRD received on average \$139.80 pesos and \$134.20 pesos per capita, respective, a difference on the order of twenty percent. Hence the difference can be quite substantive, particularly if the municipality in question is a medium or large city with huge demands on its government for public service provision.

The findings also support the notion that the PRI fine-tunes its strategy depending on its chances of winning. The greater its margin of victory in the municipalities it controls, the less resources it devotes there. The effect is not too strong, but it is highly significant from a statistical standpoint. On the one hand, the greater the margin in places where the PAN and the PRD won, we estimate a greater a flow of resources, but this relationship was not statistically significant.

C. Opposition Localities possess a different a

Our model posits that, during the era of PRI hegemony, localities support the PRI because of the PRI's credible threat to punish defectors. The model also suggests how several factors exogenous to this process altered both the PRI's ability to punish and various localities' willingness to defect. The exogenous changes altered the cost-benefit calculations of some localities of living within the PRI spoils-system. The exogenous changes occurred in the 1980s with three events, Mexico's economic collapse; growing economic opportunities due to the globalization of markets; and Mexico's change in development strategy from ISI to structural adjustment and trade liberalization (Magaloni, 1997). Economic collapse and structural adjustment meant fewer resources for patronage. With mounting pressures on the Mexican government to service its accumulated debt and adjust its fiscal account by significantly cutting expenditures, the PRI's spoils system began to crumble.

We hypothesize that localities are more likely to opt for the opposition despite the risks when they possess credible "exit" options, either because they are richer or, more significantly, because their economies are more highly integrated with the U.S. and international markets. Once Mexico began to liberalize trade, a process of economic decentralization necessarily ensued, allowing some dynamic local economies to integrate with global markets.

We argue that these economic changes also altered the preference parameter (α) for many localities, making it less attractive for them to support the PRI's centralized spoils system. These changes lead them to prefer to elect politicians who promise to govern on the basis of local needs and

by providing market-enhancing public goods.

To test these hypotheses, we estimate the determinants of the party governing in the Mexican municipalities in 1995. We seek to show that municipalities where the PRI loses share specific features related to the opportunity cost those localities have when withstanding a punishment by the center. There are, however, important differences between the two main opposition alternatives, which should be reflected in the socio-economic determinants of which of those opposition parties is chosen by the electorate, once it is willing to reject the PRI.

We carry out the analysis through a multinomial logit estimation, reported in table 4. The dependent variable takes three values, depending on whether a municipality is governed by the PRI (base category), the PAN, or the PRD. (A few municipalities governed by other parties were excluded from the analysis, as well as those electing authorities through traditional community norms or “usos y costumbres”). The independent variables account for the level of development, modernization, and the extent to which the new model of development based on open international markets has become a central feature of the local economy. We employed the following specific variables: the natural log of the dollar per capita GDP in the state where the municipality belongs in 1995 ($\ln \text{pib95}$); the percentage illiterate among those over 15 years old (analf); the degree of rurality, as measured by the percentage of municipal population living in localities with less than 2,500 inhabitants; the size of the municipality, as reflected by its population (pop); the growth rate of the state after the peso crisis (cre); the degree of internationalization of the state, as measured by the share of imports plus exports in state GDP (trade); and a dummy variable for municipalities in border states (border).

The critical test of our theory of defection from the PRI concerns those localities with the

highest opportunity costs of remaining under the PRI system, namely those seeking to integrate into international markets and to foster market development generally. We predict that the international trade variable should be positively associated with defections to the PAN, as should the variable North representing the border states close to the U.S. Similarly, we expect that those municipalities seeking to foster markets are more likely to reject the PRI, hence *lpib95* and *cre* should have a positive effect on rejecting the PRI. In contrast, because the PRI's primary constituency base is with the poorer rural areas (Molinar, 1991; Ames, 1970; and Klesner, 1996), we expect rurality and illiteracy to be negatively related to rejecting the PRI. For this reason, larger municipalities containing urban areas should lean towards the opposition.

[Table 4 about here]

The results support our interpretation of the parameter α in the model and are novel in various respects. As with the classic modernization-type empirical accounts (Ames, Molinar, Klesner), we show that the PRI performs better in rural, more sparsely populated areas, and the opposition in urban municipalities. However, we further show that integration of the local economy to international markets and higher growth rates significantly shape the likelihood of defecting to the opposition. Moreover, we identify significant differences among opposition supporters..

Although both the PAN and the PRD are more likely to win in urban, internationally integrated, growing states, they are also quite different in terms of some other variables. The PAN is more likely to win a municipality with greater literacy and population, in a rich state; while the PRD

shows exactly the opposite effects, with greater chances of winning the more illiterate, smaller municipalities, and in the poorer states.

Once we control for these variables, municipalities in the border are no longer more likely to vote for the opposition, or the PAN in particular. In fact, the negative and statistically significant sign of the border dummy variable suggests that the PAN is more likely to win municipal races away from the border states. This means that if the PAN wins in Northern municipalities it is because they are rich, global, literate, urban and large, not because they are in the border – and actually, just in sheer numbers, the PAN is stronger in other regions, especially in el Bajío.

To obtain a sense of the effects implied by the estimated coefficients, we compute in table 5 the predicted probabilities for the PAN and PRD, calculated at the average value of the independent variables. We estimate that for an “average” municipality, where all the variables take their average values, the PAN has a 9% chance of winning, while the PRD has a smaller probability at 5.9%. Those probabilities are modified, depending on whether a municipality is more or less characterized by the different features measured by the independent variables. The table reports what happens with the baseline probabilities when there is one standard deviation increase in each variable. The first column for each party reports the total probability, while the second column reports the marginal change with respect to the baseline.

[Table 5 about here]

In the case of the PAN, the table suggests that the most powerful positive effects are the

income of a state and its internationalization. Both of these variables increase the probability of the PAN winning by 4.2 percent with a standard deviation greater value over the mean. In the case of the PRD, the most powerful positive effect is reflected by growth, followed by internationalization. In what regards variables that decrease the chance of winning, leaving aside the North dummy, which is not exactly comparable, we estimate that the PAN has a nearly zero probability of winning in the vast number of poor, rural municipalities where illiteracy is widespread. The PRD, on the other hand, is less likely to be successful in rich states and large, predominantly urban municipalities. The results show why the PAN has done so well in capital cities. Capital cities are predominantly urban, more prosperous places.

Specific examples of the predictive power of the model are provided in table 6. Overall, the model correctly predicts the holders 24 of 30 state capitals, or 80 percent. The table shows the predicted probabilities of winning, for each party, calculated with the actual values of the independent variables in several capital cities. The first three columns provide the probabilities of winning for the PRI, the PAN and the PRD. The final column shows which party was in office in 1995, the time of our dataset. The probabilities reveal that capital cities are basically contests between the PRI and the PAN. Since the PRD tends to win rural, poor municipalities, it is only predicted to have substantive probabilities of winning in relatively backward capital cities, such as Tlaxcala in the center of the country, Tuxtla Gutiérrez in Chiapas, and Zacatecas, the capital of the poorest state in the North. The PRD has, in fact, captured the governorships of Tlaxcala and Zacatecas in the last elections. The model predicts most of the other, relatively poor municipalities, to be controlled by the PRI, as in the case of Chilpancingo, the capital of Guerrero, a poor politically explosive state in the South where

guerilla movements have thrived. Some examples of PAN victories predicted by the model are Mexicali, the capital of the dynamic Northern state of Baja California, Puebla, a rich traditionally conservative city in the center; Aguascalientes and Querétaro, capital cities of two of the states attracting most foreign direct investment in the last years.¹⁵ In 1995 Querétaro city was not governed by the PAN, but that party subsequently won the governorship. Close races between the PRI and the PAN are observed many states, for example Chihuahua, next to the US border, Mérida in the Yucatán peninsula, and Culiacán, the capital of a rich primarily export-oriented agricultural state in the North.

Table 6. Predicted Probabilities of Victory in Selected Capital Cities.

State	City	PRI probability	PAN probability	PRD probability	Party in office in 1995
Aguascalientes	Aguascalientes	39.3%	60.4%	0.0%	PAN
Baja California	Mexicali	47.2%	52.5%	0.0%	PAN
Chiapas	Tuxtla Gutiérrez	61.7%	23.5%	14.0%	PRI
Chihuahua	Chihuahua	57.5%	42.3%	0.0%	PRI
Guerrero	Chilpancingo	78.3%	14.7%	6.0%	PRI
Puebla	Puebla	39.3%	60.7%	0.0%	PAN
Querétaro	Querétaro	34.3%	65.4%	0.0%	PRI
Sinaloa	Culiacán	56.4%	43.0%	0.0%	PAN
Tlaxcala	Tlaxcala	57.8%	24.7%	17.0%	PRD
Yucatán	Mérida	58.4%	41.2%	0.0%	PRI
Zacatecas	Zacatecas	57.8%	26.0%	16.0%	PRI

D. The pace of political change

The last piece of evidence we provide is for a “tipping point”. We argue that the PRI’s punishment regime does not break down in a continuous fashion. When localities leave, they tend to

¹⁵ The model also predicts victories, unreported in the table, in Campeche, Guadalajara and La Paz.

do so *en masse*.

Political change in Mexico has come in two-waves, as made explicit in Magaloni (1997). In the first-wave, the overwhelming majority of localities supported the PRI. Only a few better-off urban localities, particularly situated in the North, dared to vote for the PAN (Magar, 1995). This wave started in the late seventies and early eighties and by the end of the decade had produced the PAN's victory in three gubernatorial races. In the second-wave after the Peso crisis of 1994, an important proportion of localities went to the opposition camp, as we showed in table 1. In this second wave, not only better-off urban localities, but also less well-off rural ones, exited to the opposition. The results in table 4 demonstrate that today even small municipalities disproportionately coming from poorer states have defected, mainly to the PRD.

Magaloni (1997) empirically shows that there has been "convergence" in political change in Mexico, with the poorer more rural states that were highly PRI hegemonic in the eighties, catching up with the richer more urban competitive ones. Most elective offices are now won or lost by a small margin. Modernization theory alone cannot account for this sequence of events. Modernization theory would have wrongly predicted an increase in political polarization emerging in Mexico, with the PRI remaining solidly hegemonic in the poor states, and the opposition increasingly conquering richer localities. What changed?

One possible explanation is simply the 1994 Peso crisis. Most localities defected *en masse* to the opposition, acting as "gods of vengeance" in face of severe economic hardship (V.O. Key, 196*). Although retrospective voting seems to be part of the story, it leaves a big puzzle: why did not

Mexican voters employ this tool before? The debt crisis of the 1980s, after all, was also severe; yet only few localities then defected from the PRI.

Our model provides an account for this puzzle. The punishment regime keeps localities reelecting the PRI even when they would rather elect the opposition. However, when this regime unravels, it does so rapidly. The idea behind the pace of change is a “tipping point” in a classic coordination game: it is reached when the overwhelming majority of localities can coordinate, such that more localities join in to vote the party out.

Figure 1 provides evidence of the “tipping point” using district level election data for the Lower Chamber of Deputies. Unfortunately, we do not have a similar time series for municipalities. Mexico elects the Lower Chamber under a mixed plurality-proportional system, with 300 seats elected from single-member plurality races and 200 from 5 regional districts. The rule for the translation of votes into seats disproportionately rewards parties that can win single-member races.

Single-member district assembly elections imply a clear *geographic* jurisdiction particularly suitable for our model. As with gubernatorial and municipal elections, assembly single-member plurality elections give the PRI similar information with respect to the identity of the local jurisdiction. It can hence credibly employ the threat of withdrawing funds from those jurisdictions who defect to the opposition. If the electoral rules were different (for example, if Mexican voters elected Congress under a nation-wide large magnitude district), we could not apply our model to assembly elections.

[Figure 1 about here]

The evidence of a tipping-point is striking. Before the 1997 mid-term elections, only a handful of districts went to the opposition. With the exception of a slight jump in 1988, the opposition controlled less than 10 percent of single member districts between 1979 and 1994. In the 1997 elections, however, 45 percent of single member districts went to the opposition parties, which gained majoritarian control of the Lower Chamber.

7. Conclusions

The survival of many authoritarian regimes raises the question of why citizens support a system in which they disapprove. We argue that although coercion is one element in the survival of authoritarian regimes, coercion alone is insufficient to ensure their survival. We investigate this question in the context of how single party regimes retain power. Our analysis focuses on Mexico's hegemonic party, the PRI.

The model studies a critical element in the PRI's success. The party's control over the central government afforded it a credible threat to punish localities that failed to elect local PRI officials. Defecting localities faced the withdrawal of fiscal resources. This instance of PRI's behavior fits with the larger pattern of patronage, rents, and corruption in exchange for political support. For many decades, these techniques deterred localities from defecting.

The model developed in sections 2 and 3 demonstrates the force of this logic. We consider the electoral decisions of a locality that prefers to be led by the opposition. The PRI's credible

threat to punish defecting localities presents citizens with a dilemma: elect the local PRI and obtain funds for local government and local investment projects; or elect the opposition and face limits on much needed funds. For several decades, this system along with several other mechanisms (such as electoral fraud) deterred most localities from electing an opposition party.

Over time, however, several changes beyond the PRI's control affected both the PRI's ability to maintain its system and, at the same time, the interests of many constituencies. The economic collapse of the 1980s dramatically reduced the value of the PRI regime, including the PRI's fiscal capacity reward its supporters. Growing global markets provided many localities with new economic opportunities. And economic reform, replacing many older ISI policies with a more liberal framework, allowed many localities to take advantage of the new opportunities.

In many parts of northern Mexico, the increasingly valuable prospect of economic integration with the United States raised the opportunity costs to citizens and businesses of remaining under the PRI system. The PRI's anti-market development policies, including its pervasive corruption and lack of market-enhancing public goods, hindered economic growth. The costs of these policies were most significant -- and growing the fastest -- in those areas seeking to integrate with the United States.

The economic changes, in turn, raised the value of an opposition party that held the promise of economic reform. As the recent economic literature on economic development suggests, taking advantage of market opportunities requires a complementary set of inputs from government, including an absence of corruption, transparency, and stable economic environment (including taxes and property rights). Those areas most interested in integrating their economies

with that of the United States therefore increasingly valued a party that promised good governance, reductions in corruption, and on providing valued public goods.

At some point during the 1980s, a critical juncture occurred in which the preferences of a few communities in northern Mexico switched. In order to gain local political freedom to reform local politics and policies, they defected to the opposition despite punishment (see Rodriguez and Ward 1995).

Our empirical findings are consistent with a range of predictions of the model. First, we demonstrate that the PRI systematically punishes communities for electing the PAN and PRD opposition. This holds at both the state and municipal levels. Second, we showed that the municipalities most likely to defect to the PAN were the most outward and market oriented (e.g., those with the highest exports, and the highest economic growth). These two findings parallel several case studies in the literature (see, e.g., Rodriguez 1997, Rodriguez and Ward 1995). Third, we showed that the PRI was most likely to provide funds to marginal localities, those close to defecting to the opposition. Finally, we provided evidence of the tipping model. Per tipping models, voting for the national officials reflected a discontinuous jump from virtually no opposition to a majority in the lower chamber in 1997.

Relevance for the literature on transitions to democracy

The model and evidence addresses a gap in the literature on transitions to democracy. As argued by Geddes (1999), the literature tends to focus on elite negotiations or to explore the connection between aggregate economic conditions and regime collapse. That economic

performance shapes political change seems quite well established. The precise mechanisms linking the two are not well understood, however.

We seek to sharpen our understanding of why some authoritarian systems seem to be so resilient to economic change. Geddes (1999) argues that single-party regimes tend to be resilient to change because they are less vulnerable to elite splitting when challenged. She employs a Stag hunt game to model the incentives politicians face to remain united. "Factions form in single-party regimes around policy differences and competition for leadership positions, as they do in other kinds of regimes, but everyone is better off if both factions remain united in office. This is why co-optation rather exclusion is usually the rule in established single-party regimes" (p. 11). The conditions under which the equilibrium unravels are unclear, however.

Our approach builds on Geddes's work. Self-enforcing hegemony crucially depends on the interaction between elites and masses. In the hegemonic equilibrium, opposition-preferring voters nonetheless support the PRI. Acting alone, voters in one locality can only make themselves worse off by defecting to the opposition (Fiorina and Noll 1978). The tipping model implies that, once the opposition becomes a serious challenger, opposition-preferring voters will defect, thus unraveling the hegemonic equilibrium (Cox 1997 and Magaloni, 1997). In this account, hegemony crucially depends on the interaction between elites and citizens: party hegemony requires that citizens choose, if reluctantly, to support the party.

We also address two pivotal questions about single party systems: why do elections matter despite being uncontested; and why do hegemonic parties devote a major portion of social resources to organize frequent elections? We show elections, in combination with control of state

resources, are central to maintaining hegemony. By providing a clear-cut mechanism for screening supporters and opponents, elections allow party officials to threaten those who exit. The credible threat gives each locality an incentive to remain within the system. Despite being uncontested, elections are critical for the hegemonic equilibrium.

We reveal one set of circumstances that facilitates the unraveling of the self-enforcing hegemonic equilibrium -- when the preferences of some localities change. In the Mexican case, three related economic events caused the preferences of some localities to change. The economic collapse of the 1980s meant declining resources for patronage and rewarding supporters, restricting the PRI's ability to hold politicians and voters through the flow of benefits. Second, growing opportunities for global integration raised the opportunity cost for many localities of remaining within the traditional PRI system. Third, trade liberalization made it easier for localities to pursue international options, in turn making their economies less dependent on the national government.

Following Lipset (1957), variables such as income, urbanization, and education are crucial because they empower the population against authoritarian incumbents. In our model these variables reduce the costs of defection by making the locality less dependent upon state patronage. Unlike Lipset (1957), however, we do not believe that democracy follows directly from economic growth. Following Przeworski and Limongi (1997), we argue instead that poor economic performance and related policy changes triggered political change in Mexico.

The economic crisis of the 1980s affected all of Latin America. As Remmer (1993) demonstrates, the recession and consequent adjustment process produced major losses for incumbent parties and military dictators, leading to alternation of political power. This pattern

does not hold for Mexico, however, where it took close to fifteen years following the debt crisis for the party system to become truly competitive.¹⁶

We also account for the slow pace of political change, exploring why single-party regimes are relatively resilient to poor economic conditions. As long as localities calculate that there is a significant probability that the incumbent will retain power, they have strong incentives to refrain from defecting. A tipping point occurs only when the overwhelming majority of opposition-leaning localities can coordinate.

Our approach also accounts for the two-step sequence of political (Magaloni 1997). In the first step, only a few better-off urban localities dared to vote for the right-wing opposition party, the PAN (Magar, 1995). The second step occurred after the Peso crisis of 1994, when not only better-off urban localities, but also less well-off rural ones, defected to the opposition *in masse*.

Suggestions for a new political economy of Mexico

Our model of the PRI's equilibrium hegemony suggests a new approach to Mexican political economy, particularly the role of the Mexican state in hindering economic development. We identify three factors explaining why the Mexican state, qua organ of the PRI, failed to promote development. First, the PRI's political strongholds have always been in the poor, rural

¹⁶ The two other exceptions are Chile, which transited to democracy in 1990, and Cuba, which remains authoritarian.

areas. Growing markets both raise people into the middle class and raise the economic expectations of many others. Because middle class voters are among those most likely to defect to the opposition, modernization undermines the PRI's core support base. As it harms their interests, PRI officials have no incentive to promote growth.

Second, because the PRI has been most likely to lose support in the economically advanced areas, high growth areas are precisely the ones likely to be punished during the transition to democracy. Withdrawal of fiscal resources handicaps state and municipal governments from providing local public goods and services that complement market development (such as reliable electric power).

Third, the PRI harnessed the central government's fiscal system for partisan electoral purposes. The PRI's imperative to retain power implies that expenditures focus on short term electoral goals, down-grading the importance of providing public goods. The PRI's focus on elections also led during the 1980s to significant economic macroeconomic imbalances in order to maintain the flow of funds winning elections (Magaloni 2000). Empirical results above and in the literature support this view (see, e.g., Diaz-Cayeros 1997, Morgenstern, 1997, and Weldon and Molinar 1994).

In short, the PRI's principal goal of party maintenance leads it to harness the resources of the Mexican state for partisan, electoral purposes. Economic development conflicts with this goal: funds targeted to win elections crowd out funds for economic development; and because the PRI draws its greatest strength from poor areas, fostering growth hurts the PRI.

The political economy arguments return full circle to democratization. In contrast to the elite-driven democratization elsewhere, democratization in Mexico is from below: it begins with individual localities defecting to the opposition. We argue that the first unilateral defectors were those localities that had the highest opportunity costs of remaining under the PRI system. Defecting to the PAN allowed many of these localities the political freedom to provide some

public goods to help propel them into global integration. In other words, democratization began as the rising economic costs of the PRI system propelled some to defect to the opposition.

In closing, we return to the meaning of party hegemony. In his typology of party systems, Giovanni Sartori argues that an "hegemonic party neither allows for a formal, nor a de facto competition for power" (1976:230). Sartori stresses coercion in the maintenance of hegemony. In his view, "the implication is that the hegemonic party will remain in power whether it is liked or not" (p.230). Our account stresses, instead, because the opposition could win, at least in some localities, the PRI has been forced to invest a great amounts of resources in elections and in rewarding supporters. The PRI's control of the state allowed the party to reward supporters and to punish defectors. Our view of hegemony, then, accords with Gramsci. Hegemony is not a coercive submission based on force, but the capacity by one class or group to obtain consent, or the passive approval, by the majority of the goals that minority has imprinted into the social and political life of a country (see Przeworski, 1985). In the model, voters in the localities comply with the PRI even if it goes against their preferences; but their decision involves a rational calculation, in the context of a free -- although constrained -- choice.

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Table 1. State-level political indicators, 1970-1999

	% PRI vote 70-73	% PRI vote 95-97	Date PRI vote below 50%	No. Municipalities controlled by each party 95-97 (% population)			State Capital (1997)	Strongest Opposition Party	Opposition Victory Year
				PAN	PRI	PRD			
North West									
Baja California	64	44	89	2 (81%)	2 (19%)	0 (0%)	PAN	PAN	89 and 95
Baja California Sur	92	50	96	0 (0%)	5 (100%)	0 (0%)	PRI	PAN	99 (PRD)
Nayarit	70	52	99	1 (3%)	19 (97%)	0 (0%)	PRI	PAN	99 (PRD-PVEM-PT)
Sinaloa	97	45	95	5 (64%)	12 (36%)	1 (2%)	PAN	PAN	
Durango	98	35	95	12 (23%)	20 (40%)	3 (4%)	PT	PAN-PT	
Sonora	100	42	97	17 (38%)	45 (22%)	9 (40%)	PT	PAN-PRD	
North East									
Coahuila	88	46	96	9 (63%)	28 (37%)	1 (0.6%)	PAN	PAN	
Chihuahua	91	47	83	9 (37%)	56 (63%)	1 (.04%)	PRI	PAN	92*
Nuevo Leon	82	42	94	15 (54%)	34 (45%)	1 (0.68%)	PAN	PAN	97
San Luis Potosi	100	46	97	15 (50%)	35 (35%)	4 (5%)	PAN	PAN	
Tamaulipas	100	50	95	6 (30%)	33 (55%)	3 (12%)	PRI	PAN-PARM	
Bajio									
Aguascalientes	98	38	95	4 (79%)	7 (21%)	0 (0%)	PAN	PAN	98
Colima	98	36	97	4 (43%)	5 (32%)	1 (25%)	PRD	PAN-PRD	
Guanajuato	85	34	89	21 (67%)	18 (21%)	6 (10%)	PAN	PAN	89 and 95
Zacatecas	98	47	95	11 (17%)	42 (79%)	2 (3%)	PRI	PAN	98 (PRD)
Michoacan	92	39	89	14 (36%)	44 (29%)	54 (34%)	PAN	PAN-PRD	
Jalisco	76	37	95	40 (66%)	70 (29%)	11 (4%)	PAN	PAN	95

Table 1. State-level political indicators, 1970-1999 (continued)

	% PRI vote 70-73	% PRI vote 95-97	Date PRI vote below 50%	No. Municipalities controlled by each party 95-97 (% population)			State Capital (1997)	Strongest Opposition Party	Oppositic Victory Governors' Year
				PAN	PRI	PRD			
Center									
Hidalgo	99	56	Not yet	2 (0.92%)	74 (89%)	7 (9%)	PRI	PRD	
Mexico	84	36	96	22 (31%)	73 (49%)	26 (20%)	PRI	PAN-PRD	
Puebla	89	48	95	23 (42%)	186 (56%)	7 (2%)	PAN	PAN	
Queretaro	100	40	97	4 (65%)	14 (35%)	0 (0%)	PAN	PAN	97
Tlaxcala	93	58	98*	3 (9%)	39 (88%)	2 (3%)	PRI	PAN-PRD	98 (PRD-PV PT)
South									
Morelos	95	35	97	2 (25%)	17 (25%)	13 (49%)	PAN	PRD	
Oaxaca	92	55	Not yet	10 (52)	118 (22%)	33 (21)	PAN	PAN-PRD	
Guerrero	100	50	Not yet	1 (3%)	55 (77%)	19 (20%)	PRI	PRD	
Chiapas	99	48	95	5 (14%)	86 (71%)	18 (13%)	PAN	PRD	
South Golf									
Veracruz	88	40	97	39 (25%)	103 (39%)	59 (34)	PAN	PAN-PRD	
Yucatan	91	49	95	12 (49%)	92 (49%)	1 (1%)	PAN	PAN	
Tabasco	100	50	97	0 (0%)	17 (100%)	0 (0%)	PRI	PRD	
Quintana Roo	99	55	Not Yet	0 (0)	9 (100%)	0 (0)	PRI	PAN	
Campeche	100	48	97	0 (0%)	9 (100%)	0 (0%)	PRI	PRD	

Note: columns 1 to 6 are from Mexico Social, 1996-1998. Column 9 is from Diaz-Cayeros and Magaloni (1999). Column one includes municipal or gubernatorial elections in each state between 1970 and 1973 with the exception of Chihuahua (1977), Coahuila (1978), Michoacan (1974), Estado de Mexico (1975), Guerrero (1979) and Tlaxcala (1979). Column 2 includes municipal or gubernatorial elections between 1995 and 1997. Columns 4,5 and 6 report number of municipalities by party in the latest election between 1995 and 1997. Strongest opposition party is defined as party that got *at least* 10% more of the vote than the second opposition party in the state. If the distance between two opposition parties is less than 10%, both are defined as strongest in the state. * The PRI recovered Chihuahua in 1998. We do not include the Federal District (i.e., Mexico City) because until 1997, voters did not choose the local executive and there are not elective municipalities. After 2000, there will be elective "delegados" (administrators in jurisdictions within the city).

Table 2. Total Federal Public Investment in 1997 (robust standard errors)

	Coef.	S.E
mnpan97	-1278.6**	616.7
mnprd97	32.4	782.5
lpib96	0.25**	0.12
services	-12.2*	6.9
dummoil	6386.2***	1026.6
population	.0115	.023
constant	1145.5***	473.1

Adj R 2 = .94
F (6, 24) = 10.3

*** Significant at the 99% level

** Significant at the 95% level

* significant at the 90% level

Table 3. Determinants of Revenue Sharing Allocation Among Municipalities in 1995
Dependent Variable: lparpc (robust standard errors)

	(1) Coef.	Std. Error	(2) Coef.	Std. Error
lpib95	0.99***	0.07	1.00***	0.06
analf	-1.33***	0.18	-1.32***	0.18
rurality	0.68***	0.06	0.69***	0.06
gopan	-0.16**	0.07		
goprd	-0.22**	0.11		
gopri			0.11***	0.04
panmarg	0.11	0.43		
prdmarg	0.63	0.72		
primarg			-0.0017***	0.0004
constant	-2.82***	0.53	-3.02***	0.52
	F(7,1829)= 79.4 R2=0.27		F(7,1829)= 114.3 R2=0.27	

*** Significant at the 99% level

** Significant at the 95% level

* significant at the 90% level

Table 4. Determinants of Municipal Victories
(Multinomial logit, base category is PRI)

	PAN		PRD	
	Coef.	Std. Error	Coef.	Std. Error
Ipib95	1.24***	0.31	-2.22***	0.52
Rurality	-1.27***	0.28	-1.04***	0.30
Analf	-4.55***	1.11	1.22*	0.75
Pop	9.26E-07*	4.92E-07	-3.74E-06*	2.27E-06
Cre	0.09***	0.03	0.28***	0.04
Trade	0.50***	0.15	0.58**	0.25
Border	-2.36***	0.46	-1.09	0.76
constant	-9.82***	2.41	15.82***	3.79

Log likelihood -1053.4

Chi-squared 316.1

Pseudo R2= .1305

*** Significant at the 99% level

** Significant at the 95% level

* significant at the 90% level

Table 5. Probability of Municipal Victory to the Opposition

	PAN		PRD	
	Probability	Marginal	Probability	Marginal
Baseline	9.0%		5.9%	
Lpibd + σ	13.2%	4.2%	2.8%	-3.0%
Rurality + σ	6.0%	-3.0%	4.2%	-1.7%
Analf + σ	5.4%	-3.6%	6.7%	0.9%
Pop + σ	9.9%	0.9%	4.0%	-1.9%
Cre + σ	11.5%	2.5%	13.0%	7.2%
Trade + σ	13.2%	4.2%	9.3%	3.4%
Border = 1	1.3%	-7.7%	2.4%	-3.5%

Opposition victories in single member districts

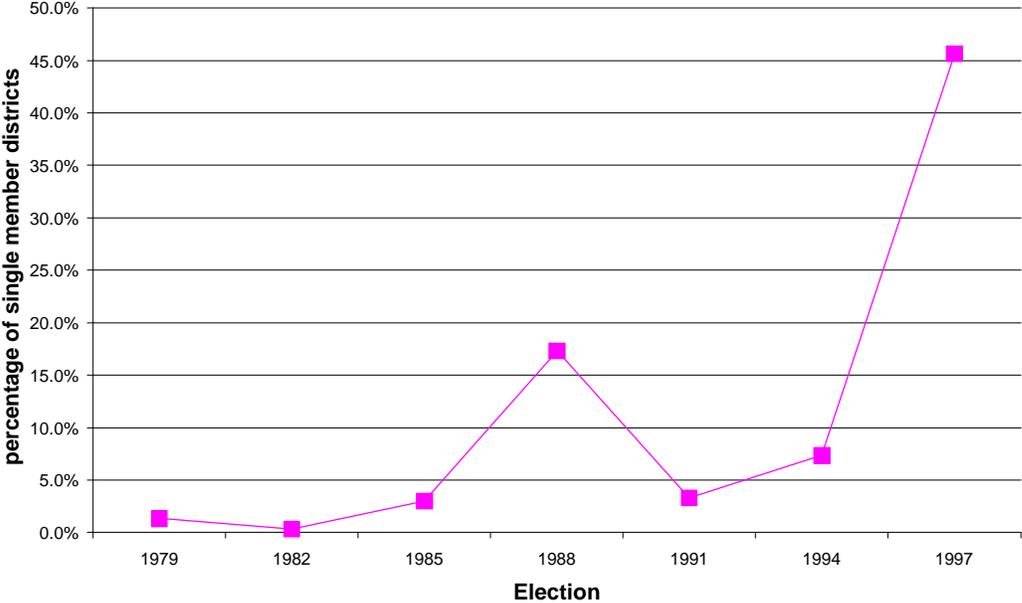


Figure 1