

# **The Recovery Consequences of an Uneven Regime: A Subnational Analysis of Mexico's 1995 Economic Crisis**

## **Abstract**

In an era where development processes seem best characterized by a continuing cycle of macroeconomic crisis and recovery, a critical question for students of the political economy of development concerns identification of the factors that facilitate recovery from economic shock. Recent work on this question has moved beyond a focus on specific macroeconomic policy adjustments toward analysis of the role political institutions play in shaping recovery processes. Applying this research to the experiences of Mexico's 31 states following the country's 1995 economic crisis, I identify significant variations in states' ability to recover from crisis and link those variations in part to the country's uneven electoral transition that coincided with the crisis. With more and more governmental activities increasingly being decentralized to lower levels of government, these findings provide an indication of the important role subnational variations in political environments can play in shaping the broader political and economic outcomes of Latin America's "dual transition."

## **Introduction**

With few exceptions, economic crisis has been perhaps the most prominent feature of the many developing countries pursuing market-based economic development strategies over the past 20 years. Efforts to recover from the “lost decade” of the 1980s have been continually marred by economic crises of various colors that, in the words of Naim, have “wrought havoc in the countries’ financial systems, bankrupted their banks, set back some of the economic gains they had accumulated through years of painstaking reforms and, in some cases, unleashed severe political turmoil” (2000, 94). Latin American countries have been especially prone to sudden economic downturns, experiencing more than 40 instances since 1980 where GDP per capita declined 4 percent or more over a one-year period (Lustig 2000, 3).

Research on the causes and consequences of this pattern of “crisis-based development” have intensified among development scholars in recent years. In terms of preventing such crises from occurring, the focus of research has generally centered on controlling the volatility of capital markets and finding ways to slow the “electronic herd” in an effort to curtail some of the contagion effects that have come to characterize neoliberal development patterns (Naim 2000; Rodrik 1999; Strange 1997). Findings from research on the consequences of sudden macroeconomic downturns, as might be expected, have been bleak. Since the IMF-aided climb out of economic crisis generally involves a tightening of both monetary and fiscal policy, the poorer sectors of developing country societies tend to suffer the most severe side effects from these heavy doses of market-based medicine (Bouillon, et. al. 1998; Chiu 1998; Lustig 2000). A recent World Bank study of poverty in Latin America found that “on average, a one percent decrease in per capita GDP leads to an estimated two percent decrease in targeted public spending per poor person” (Wodon 2000, 90). The more general conclusion from this report and others like it is that the recurrence of crises throughout the past twenty years in Latin America and other

developing regions has been a principal culprit in the stagnation or decline of a wide array of human development indicators.

A point underemphasized in this research, however, is the potential for a very uneven distribution of the consequences of crisis within a country based on pre-existing development divides, both economic and political. The following pages offer an analysis of the relationship between such intra-national development gaps and variations in crisis recovery rates across subnational units in a single country. More specifically, I focus on the impact that Mexico's uneven subnational political transition had on a state's ability to recover from the severe economic shock of 1995. In modeling the determinants of state-level recovery rates across Mexico's 31 states, I offer support for the proposition that a state's ability to recover from economic crisis is in part a function of its electoral institutions and the role they play in providing a stable, peaceful, and predictable political environment that is conducive to a more rapid and sustained recovery process.

At the time of Mexico's worst economic crisis since the 1930s, the country's political system was undergoing a lengthy, decidedly uneven transition from a one-party dominant system to a multiparty, competitive democracy. By 1995, some regions of Mexico had largely come to accept competitive elections as the new game in town while in others the one-party dominance of Mexico's ruling party continued. In still other areas the transition was underway but unresolved, resulting oftentimes in violent conflict between those pushing for the new regime and those clinging to the old. Analysis of the recovery efforts of the country's 31 states then offers a unique opportunity to identify the role distinct subnational electoral environments play in either facilitating or impeding economic growth. More importantly, through such an analysis we may begin to understand how such subnational development divides shape what heretofore have largely been treated as national-level processes of economic and political change during the neoliberal era.

## **Growth, Governance, and Institutions**

Recent research on the political economy of growth has focused on two issues related to the role institutions play in facilitating economic progress. The first concerns the impact a country's political institutions have on the investment decisions of economic agents. As North argues, "Institutions provide the incentive structure of an economy; as that structure evolves, it shapes the direction of economic change towards growth, stagnation, or decline" (1991, 97). *Ceteris paribus*, political institutions that are transparent and able to provide firm commitments to property rights and other macroeconomic policies will provide investors lower transaction costs and greater confidence in making long-term investment decisions, both of which are crucial to sustained economic growth (Brautigam 1997; Comeau 2003; Knack and Keefer 1995; MacIntyre 2001; North 1989; North and Weingast 1989; Pastor and Sung 1995).

A related finding is that democratic regimes tend to offer a more secure and stable investment environment than authoritarian regimes precisely because of the lack of certainty investors may have with respect to issues of when and how power is transferred and the relative degree of transparency and policy commitments under the latter regime type (Bhagwati 1995; Helliwell 1994; Olson 1993). While authoritarian regimes have been viewed at times as being more capable of controlling societal demands on government and making more economically productive investment decisions than democratic polities, recent work on this question tends to emphasize the greater long-term economic benefits of democracies (e.g., Lohmann 1999; Rodrik 1999; Scully 1997).<sup>1</sup>

A growing number of scholars have moved from the question of how institutions affect transaction costs and investment decisions directly to the indirect impact on economic growth of political system stability and the ability of political institutions to peacefully resolve the inevitable conflict that arises from an economic downturn (Brown and Hunter 1999; Quinn and Wooley 2001;

Rodrik 1999). Here again democracies emerge superior to authoritarian regimes due primarily to the institutionalized mechanisms of voice (e.g., elections) available to society that allow for a peaceful outlet of discontent, a stable and predictable means of replacing political leaders, a more inclusive policymaking process that generates greater societal consensus around potentially difficult policy choices, and greater accountability among policymakers that leads to more beneficial policy outcomes (Careaga and Weingast 2003; Comeau 2003; Przeworski 1995). All of these byproducts of democracy are seen as critical in creating an environment that capital, labor, and government all find conducive to economic activity, particularly following a severe economic shock.

In contrast, an unstable polity with institutions that create rather than resolve conflict theoretically will diminish the prospects for a robust economic recovery in several ways. First, instability and societal conflict increase the risks associated with investment, thus diminishing the flow of capital into those areas affected by the crisis and increasing the chances of greater capital flight (Comeau 2003). Second, the inability of a system's institutions to peacefully manage societal discontent and conflict will tend to heighten the use of repression as a means of "conflict resolution." Workers, when faced with this combination of increased economic uncertainty and a more repressive political system, may be more inclined to exercise their "exit" option than those living under a system with institutions that provide a viable "voice" option (Hirschman 1972). Further, many of those that choose to exit will likely be the skilled workers that a recovering economy can least afford to lose (Comeau 2003, 484). Finally, government officials operating in an unstable institutional context where the rules of the game are in question will be more likely to base economic and social policy decisions – policies that in the midst of a crisis become a critical first step in the recovery process – on political rather than economic criteria. In addition to diminishing the effectiveness of the policies, the overt use of political criteria in the policymaking process may then become potential fodder for greater societal conflict,

exacerbating an already bad situation (Careaga and Weingast 2003). At the subnational level within a single country, these differences in political environments can potentially be critical determinants of where economic agents, foreign and domestic, choose to do business.

Recent work by Haber, et. al. (2003) on economic growth in Mexico before, during, and after that country's revolution offers a challenge to the instability-low economic growth thesis. While economic activity did decline significantly during the height of revolutionary violence (1914-1917), the authors find that during the subsequent years of political instability (1920s) economic activity experienced a sustained recovery despite the absence of effective national political institutions. Lacking such institutions, the authors posit the development of what they term vertical political integration between economic and political elites in certain sectors of the economy that allowed for the construction of credible, sector-specific, policy commitments that proved essential to the resumption of economic growth. These findings add an important component to understandings of the political economy of growth by pointing scholars to look beyond aggregate characterizations of a country's political system as stable or unstable in order to better identify the specific mechanisms that either help or hinder economic activity.

In a similar vein, an analysis of within-country variations across institutions posited to have an impact on economic activity also offers an opportunity to better understand the institution-growth nexus. The various propositions regarding the impact unstable, ineffective political institutions may have on the growth prospects of an economy can arguably be tested equally, if not more, effectively at the subnational level in a developing world where the "third wave of democratization" has covered up tremendous intra-national variations in the capacity of institutions to effectively create an environment that helps, rather than hinders, economic recovery. These disparate subnational institutional environments have become all the more significant as the decentralization of government activities has

become an increasingly common element in the second wave of developing country political and economic reforms (Cornelius 1999; Cornelius, et. al. 1999; Fox 1994; Remick 2002; Rodríguez 1997; Snyder 2001a; 2001b; Ward and Rodríguez 1999; World Bank 2000). With this widespread decentralization of power, the potential impact state and local-level institutions may have on a country's ability to recover from economic crisis takes on a new light and suggests that research on the political economy of crisis should incorporate subnational patterns of social conflict and institutional development to fully understand a country's ability to recover from macroeconomic shock. Through analysis of a country where distinct institutional environments sit side-by-side, then, we can better isolate their relative impact on such processes as economic growth.

I therefore apply the cross-national insights discussed above to the subnational dynamics of economic recovery in Mexico. This country epitomizes the "crisis-based" development pattern of the neoliberal model, the recent move toward a decentralization of government responsibilities, and the tendency among developing countries to have dramatic subnational variations across a wide range of socio-economic and political indicators (Cornelius 1999; Dietz and Meyers 2002; Flores-Quiroga 2001; Fox 1996; 1994; Fox and Aranda 1996; Lawson 2000). In examining the recovery patterns of Mexico's 31 states following that country's 1995 economic crisis, a period during which Mexico's political transition arguably was at its most uneven, I am able to take an initial step in understanding how these different subnational institutional environments affect economic development.

### **Uneven Regime Change**

By 1995, parts of Mexico were well on the way to enjoying largely free and fair multiparty electoral competition while in other areas citizens still lived under a one-party system where elections were rarely free, fair, or competitive. It is this uneven nature of Mexico's subnational regime change that serves as the point of analytical leverage for this analysis. First, though, a brief review of the transition is

necessary in order to understand how such dramatically different electoral environments came to exist within one nation.

Signs of a subnational electoral transition began to emerge in the early 1980s in some states, but only became a clear pattern in the latter part of the decade. In Michoacán, for example, opposition parties controlled none of the state's municipalities during the 1986 electoral cycle, but captured close to 50 percent of the state's 124 municipalities in 1989. Other states, however, remained firmly under the grip of the PRI throughout the 1990s. In the state of Quintana Roo the PRI had a monopoly over municipal government throughout the decade, winning all municipal elections held during that period with an average vote of well over 70 percent.<sup>2</sup>

Furthermore, the paths followed by the two principal opposition parties in the early years of Mexico's long transition were quite distinct, with the PRD's marred by conflict with the PRI, and the PAN's characterized by cooperation with the ruling party (Bruhn 1996; Bruhn and Yanner 1995; Guillén López 1995; Lujambio 2001). The very distinct relations between these two opposition parties and the PRI in turn resulted in markedly different transition experiences across Mexico's 31 states, depending on the dominant opposition force in a state. In PRD-opposition states, the transition was one where town-hall takeovers, protests in the streets, election boycotts, and violent clashes between PRI and PRD supporters followed electoral outcomes that rarely went uncontested by one side or the other. These disputes often lingered long past election day and in many ways undermined the governing legitimacy of whichever party that ultimately gained office. In PAN-leaning states, conversely, acceptance of electoral outcomes and alternation in power at the state and local level relatively quickly and painlessly became the norm.

These distinct paths taken by the two major opposition parties were a product of both internal party strategies concerning relations with the ruling party and a conscious effort on the part of the PRI to



target what it viewed as its biggest threat, the PRD. As Valle remarked, “there can be little doubt that this ‘selective democracy’ [was] the result of the ruling party’s calculated generosity toward the PAN, a strategy designed to undermine the threat from the Left” (1999, 78). Alcocer (1994) summarizes the very different approaches to the PAN and PRD pursued by the PRI in the early 1990s:

The government has followed a two-pronged approach in dealing with its opponents. With the PAN it has maintained cordial relations (even open alliance), and it has either recognized the PAN’s legitimate victories or taken drastic actions to remedy grievances, as in the cases of Guanajuato and San Luis Potosi. With the PRD the government’s position has been one of aggression: slander campaigns orchestrated by the president’s press office; tolerance of continued fraud against the PRD; indifference toward the physical abuse and murder perpetrated by regional caciques. The litany of injuries is long (152-53).

The consequences of this “two-pronged” approach were dramatic in terms of the nature of the electoral transition across Mexico’s 31 states. Those areas where the PRI chose not to challenge or resist the emergence of competition enjoyed a relatively smooth transition toward multi-party elections. In those areas where the PRI felt directly challenged by the emerging opposition, it attempted to respond through fraud or coercion often leading to protests, town hall takeovers, and other extra-legal activities by opposition groups.

By 1995, then, Mexican states could be placed along a “transition continuum” based in large part on the PRI’s response to emerging electoral competition. The capacity of state and local-level electoral institutions to provide a viable voice for society, serve as the foundation for a stable, predictable investment environment, and motivate elected officials to respond to society with effective policy rather than repression or the selective provision of private goods (Careaga and Weingast 2003) varied

dramatically based on what stage the advance of electoral competition had reached in a particular state by the mid-1990s. Figure 1 offers a depiction of this transition continuum and the theoretical expectations regarding the impact a state's position on the continuum will have on its economic recovery chances. **[Figure 1 here]**

On one end were those states where the PRI had surrendered the idea of one-party rule and accepted free and fair multiparty competition. The August, 1995 gubernatorial election in Baja California typifies this stage of Mexico's subnational electoral transition. According to election observers, one "remarkable aspect" of the election, won by the National Action Party (PAN) candidate, was "the lack of post-electoral conflict among the various parties . . . due in part to a 'civility agreement' reached before the election by the executive committees of the [Institutional Revolutionary Party] PRI and PAN to hold a peaceful and transparent vote" (SourceMex 1995, 9). Such agreements, informal as well as formal, came to characterize many of the electoral contests that occurred in the latter half of the 1990s in many of the northern and central-western states.

These states where free and fair elections had become the norm by the time the crisis hit were likely better equipped to handle the social consequences of the economic crisis than those states where the PRI was still clinging to the hope of continuing, through whatever means necessary, its sixty-year, one-party dominance. States at this point of the transition also likely provided a more stable, predictable investment environment relative to their neighbors and increased the incentives for political elites to be more responsive to society and reliant on effective policy as a means of maintaining electoral support for their respective political party than elites in states that were in earlier stages of the electoral transition.

On the other end of the continuum were those states where the PRI still maintained its one-party dominance well into the 1990s. These PRI-dominant states also were perhaps better able to handle the social conflict that arose out of the 1995 economic crisis than those states where the PRI chose to

forcefully and fraudulently contest the emerging new rules of the electoral game. While not providing the posited benefits of fully democratic electoral institutions, PRI-dominant states at least were absent the additional societal tensions, conflict, and instability present in states where the PRI was threatened but still refused to accept free and fair electoral competition as the norm.

Finally, it is those states that had moved beyond the one-party dominance of the PRI but had yet to reach societal consensus on a new set of more democratic rules of the game that raise the proposition of a non-linear relationship between Mexico's subnational electoral transition and state-level recovery rates. States in transition at the time of the crisis, particularly those where the PRD was the dominant opposition party, were arguably least equipped to respond to the crisis. A report on elections in the state of Guerrero by the U.S. Institute of Peace highlights the differences in electoral environments between those areas where free and fair elections had come to be largely accepted and those where they were emphatically rejected, "Contested elections, violent confrontations between partisans of the PRD and the PRI, and military occupation and action to ensure the seating of PRI mayors have marked the state since 1988, while much of the rest of Mexico moved toward a multiparty democracy" (Foley 1999, 10). In these states, characterized by political instability and continual challenges to the governing legitimacy of elected officials, heightened investor uncertainty, labor unrest and perhaps emigration, and overt forms of political manipulation of government funds should all be greater than at either endpoint of the continuum. The economic consequences of defective political institutions should then reveal themselves most clearly in these transition states. While all states experienced some form of recovery in the four years following the crisis, the extent of that recovery varied dramatically. I argue that those variations are in part a function of Mexico's uneven political transition.

## **Crisis and the Determinants of State-Level Recovery**

The economic crisis that hit Mexico in 1995 now stands as the worst among the many crises the country has suffered since the 1930s. Sparked by President Ernesto Zedillo's dramatic currency devaluation in late 1994 that exacerbated already increasing levels of capital flight, Mexico's economy during 1995 contracted over 6 percent, while hundreds of thousands of Mexicans lost their jobs, their businesses, or both (Handleman 1997).

The severity of the crisis seems not to have been confined to one particular region of the country. In fact, the two states on the extremes of the "crisis continuum" are Zacatecas, that experienced a change in its Gross State Product (GSP) between 1994 and 1995 of 1 percent, and its eastern neighbor, San Luis Potosi, that suffered an 11 percent decline in economic activity during that period (INEGI 2002). As Figure 2 reveals, while there does appear to be a concentration of states that experienced economic contractions of negative 8 percent or worse around the Mexico City area (Hidalgo, Puebla, Morelos, and Mexico), the crisis clearly touched all corners of the country. The critical question, though, is whether the post-1995 recovery rates of Mexico's states exhibit the same pattern of dispersion across the country, or whether it is in the area of economic recovery that the underlying development gaps that exist in Mexico will reveal their effects? **[Figure 2 here]**

Gross state product growth rates for the period 1995-1999 ranged from 5 to 39 percent (INEGI 2002). Conventional wisdom has it that those states with a sizable manufacturing sector and links to the US economy were better positioned to recover from the 1995 crisis because of the prospering US economy in the latter part of the 1990s and the increased competitiveness of Mexico's export sector following the 1995 devaluation. Figure 3 offers a bivariate scatterplot of state-level recovery rates and the percentage of a state's workforce employed in the manufacturing sector, and demonstrates the leverage this one characteristic of a state's economy provides in explaining variations in recovery rates.

Many of those states with larger manufacturing sectors also were better positioned to stage stronger recoveries relative to more agricultural states due to their comparative advantages in education, health care, access to foreign capital, and economic infrastructure. Simply put, among those factors often cited by political economy scholars as critical to economic growth, those states with better educated, predominantly urban populations, well-established channels of foreign investment, and commercial links to the international market should be expected to have stronger than average recoveries compared to their less developed neighbors.<sup>3</sup> **[Figure 3 here]**

These likely determinants of state recovery rates do not bode well for Mexico's least developed states. First, they have predominantly agricultural-based economies and relatively low levels of foreign investment. Second, they have a highly underdeveloped economic infrastructure. Third, they have significant deficiencies in their levels of human capital, particularly in the area of education and health care. Fourth, the states have long been characterized by extreme levels of income and land inequality, serving to exacerbate already existing social, economic, and political tensions in the region. Finally, it was within at least some of these states where a PRD-led challenge to the PRI's one-party rule had begun and thus where the state and local-level PRI officials were fighting most vigorously the emergence of electoral competition.

This confluence of characteristics leads to the strong expectation of a weak recovery in these states but also makes any effort to untangle the causal effects of each factor more difficult. Paying close attention to the difficulties posed by this covariation of economic and political variables, the subsequent analysis offers a first step in assessing the impact Mexico's subnational electoral transition had on states' efforts to take steps forward in a world of crisis-based development.

The data for the analysis are drawn primarily from Mexico's national census bureau (INEGI 2003; 2002; 2001; 1998; 1996; 1992), the Federal Electoral Institute (IFE), the National Population

Council (CONAPO 1993), and the Center for Research and Development ([www.cidac.org](http://www.cidac.org)), a Mexico City think tank that has made available on its web site a municipal election data base for most of Mexico's 2,400 municipalities. All data for the ensuing analysis are at the state level, with the dependent variable specified as the percentage change in a state's gross product between 1995 and 1999 (INEGI 2002).<sup>4</sup>

In modeling the impact of Mexico's uneven subnational political environments on state recovery rates, the first challenge is to at once control for all other relevant variables while keeping to a minimum the number of independent variables due to the limited number of cases in the analysis. Thus, I employ a series of control variables that cover as wide a range of determinants of economic growth as possible in order to have sufficient degrees of freedom with which to test the principal hypotheses of the analysis.

The first such control is the extent of the initial economic shock suffered by a state. Assuming some type of economic equilibrium exists for each state, it is plausible that those states with the most significant economic decline in 1995 will have higher recovery rates. Thus I use the change in a state's gross state product between 1994 and 1995 as a measure of the magnitude of the initial economic crisis.

Next I include the percentage of a state's workforce employed in the manufacturing sector as an indicator of the structure of a state's economy. This measure also is strongly correlated with a state's overall level of socioeconomic development,<sup>5</sup> and thus will provide some control for the impact these more general state characteristics had on the recovery process. Also incorporated in the model is a state's level of foreign direct investment (per capita) in the year immediately prior to the crisis in order to account for state-level variations in access to this important source of capital.<sup>6</sup> I use the percentage of a state's GSP generated by restaurants and hotels in order to control for the impact that Mexico's burgeoning tourism industry during the latter half of the 1990s had on state-level economic recovery rates.<sup>7</sup> The last socioeconomic variable included in the model is the percentage of a state's population

living in metropolitan areas of over 100,000 people as a general measure of a state's level of urban development.<sup>8</sup>

Moving to the variables of central interest for this analysis, I include one measure designed to control for the amount of societal conflict brought about by the economic crisis and another set of measures intended to test the proposition that recovery from economic crisis is in part a function of how well a society's political institutions perform in providing a predictable and stable set of "rules of the game" and a viable and peaceful outlet for societal discontent generated by the crisis. It is these institutional byproducts that should contribute to an economic climate far more conducive to economic recovery than one beset by uncertainty and conflict.

Both of these concepts, societal discontent and the effectiveness of a state's institutions in promoting a stable, predictable, peaceful political environment clearly present considerable measurement challenges. The former manifests itself in myriad ways and the latter encompasses a wide range of institutions that offer no clear indicator of their performance or of their effect on the political-economic climate of the state. Making the best of available data, I proceed with a set of measures that arguably taps the basic underlying elements of these concepts.

The societal consequences of Mexico's economic crisis likely included a range of behaviors, from organized protest and dissent to individual-level forms of behavior that reflected, directly or indirectly, a response to the destabilizing uncertainty and tension associated with a severe economic shock. Absent any reliable state-level data on overt political conflicts for the period under question, I opt for an admittedly rough measure of this concept, the percent change in a state's robbery rate (number of individuals convicted per capita) between 1994 and 1996.<sup>9</sup> Those states experiencing a sharp increase in robberies following the first year of the crisis can be at least theoretically categorized as states suffering one form of societal response to the effects of the economic crisis. The robbery rate during this two-year

period rose in all but one of Mexico's 31 states (Campeche), with most ranging between ten to thirty percent increases in robbery arrests. Several states, however, suffered increases of over 100 percent compared to the 1994 levels, suggesting a potentially significant obstacle in their efforts to recover from the economic crisis. The expectation then is that those states with the more overt societal manifestations of the economic crisis will have lower recovery rates than those states where such discontent was less evident.

Of more concern for this analysis though are the political determinants of economic recovery. As discussed in the previous section, the particular stage of Mexico's electoral transition a state found itself in at the time of the crisis, and consequently the role elections played in either exacerbating or diffusing societal conflict, stabilizing or destabilizing a state's sociopolitical environment, and making a state's investment climate more or less predictable, seems a potentially critical element in a state's prospects for recovery relative to its neighbors. I take two approaches to measuring this concept.

The first model simply employs the average PRI vote in a state's local elections immediately prior to the 1995 crisis. I use local elections because it was in this arena where the most contentious battles were being fought and where opposition parties were making the most significant advances in the early years of the transition. Also, as local elections are held every three years, these constitute a highly visible manifestation of the stage of electoral transition a state found itself in during the crisis and recovery period. By using the average vote shares across a state's local elections, then, we have a general measure of the statewide strength of the PRI and, more importantly, an indicator of how far along the electoral transition had advanced in the state circa 1995. The range of this measure goes from a 46 percent average vote share for the PRI in the municipal elections of Baja California Norte to 84 percent in the one-party state of Quintana Roo. To capture the posited nonlinear aspect of the



relationship between electoral transition and economic recovery, I use a quadratic term in the regression model,  $((b_1 * PRI_{avg.}) + (b_2 * PRI_{avg.}^2))$ .

A second means of assessing the particular stage of electoral transition a state found itself in at the time of the crisis incorporates the reported differences in how the PRI viewed and responded to the two opposition parties. As discussed above, the PRI was far more inclined to accept the electoral advances made by the center-right PAN than it was advances made by its center-left opposition, the PRD. If this were the case, we should expect the ability of a state's electoral institutions to create an environment conducive to economic recovery to be more a function of the level of competition between the PRI and PRD, rather than simply the PRI's overall vote share. Consequently, I use in a separate model the PRI's margin over the PRD across a state's local elections between 1992 and 1995 (average PRI vote-average PRD vote) along with the square of the margin to again capture the potential nonlinear nature of the relationship to economic recovery. I also examine a model with the PRI's average margin over the PAN in order to provide a comparative basis with which to evaluate the impact on recovery rates the posited differences in relations between the ruling party and the two opposition parties may have.

Before moving on to the results, the issue of multicollinearity among certain independent variables merits attention. It is clear from Figure 3 that the percentage of a state's workforce in the manufacturing sector is strongly correlated with a state's economic recovery rate. If the size of a state's manufacturing sector is then also correlated with the two political variables included in the model, average PRI vote share in local elections and average PRI margin over the PRD, it becomes difficult to untangle the precise causal effects of either on economic recovery. The statistical implications of high levels of multicollinearity are inflated standard errors that lead to a "Type II" error where the null hypothesis is falsely accepted. Arguably more important, though, is the problems multicollinearity poses

for the substantive concerns of this analysis, namely identifying the impact a state's electoral transition had on its economic recovery rates. For both reasons then it is important to know the extent to which a state's economic characteristics were associated with its stage of electoral transition at the time of the 1995 crisis.

Somewhat surprisingly, a bivariate correlation analysis and visual check of the scatterplots for the size of a state's manufacturing sector and the average PRI vote share ( $-.14$ ;  $p < .46$ ) and margin over the PRD ( $.31$ ;  $p < .09$ ) reveal a relatively weak relationship. For those eleven states with less than 20 percent of the workforce employed in manufacturing, the PRI's average vote share in local elections was between 50 and 60 percent in five states, 60.1 and 70 percent in four, and above 70 percent in the final two, offering a fairly even distribution of this political measure across states with similarly structured economies. In the eleven states with the largest manufacturing sectors (between 28 and 37 percent) the PRI's vote share was at or below 60 percent in four, between 60.1 and 65 percent in four, and above 65 percent in three. Once again, then, there exists a fairly even distribution of the political variable across states with relatively large manufacturing sectors.

With respect to the second political variable, the PRI's average margin over the PRD, there does exist a more problematic relationship with the structure of a state's economy. The problem rests largely on the fact that there were no PRD-opposition states in 1995 with large manufacturing sectors. In fact, the five states with the lowest average PRI margin over the PRD all had manufacturing sectors that employed less than 20 percent of the state's workforce. While there were states with similarly structured economies where the PRD did not have a significant presence (e.g., Campeche and Sinaloa), and the overall correlation between the size of a state's manufacturing sector and the PRI-PRD margin is only of moderate size and significance ( $.31$ ;  $p < .09$ ), we still must proceed with caution in this analysis due to the absence of industrialized PRD states that would allow for greater leverage in isolating the effect of the

political variable on recovery rates. Nonetheless, if both measures of a state's electoral transition reveal similar effects on economic growth following the 1995 crisis, we have at least some measure of confidence that Mexico's uneven electoral transition did in fact affect state-level recovery rates.

## **Results**

Table 1 displays the results of the regression models outlined above. Model 1 offers for comparative purposes the regression results with both political variables excluded. Model 2 includes the PRI vote share measure of a state's electoral transition and immediately apparent is its contribution to the amount of explained variance in state recovery rates. Accepting that high adjusted  $R^2$ s are common when working with a limited number of cases, the addition of the PRI-margin quadratic nonetheless produces a substantial increase, moving the adjusted  $R^2$  from .63 to .75. In a similar vein, and even more striking, is the contribution of the PRI-PRD margin variable to the model's performance (Model 4), moving the adjusted  $R^2$  to .77. The fact that both political measures exhibit similar effects on the models provides a strong indication of the political elements behind subnational recovery rates in Mexico. Conversely, the insignificant contribution of the PRI-PAN margin variable to the model's performance (Model 3) offers more evidence that it was indeed the conflict-laden electoral environments where the PRD was the principal opposition party that in part determined the extent of a state's economic recovery. Before examining these results in more detail I will briefly discuss the contributions of the control variables to the model's performance. **[Table 1 here]**

Beginning with the variable designed to account for the depth of the initial crisis, the consistently negative coefficients in Table 1 suggest that those states that went relatively unscathed during the crisis year of 1995 were also those with the lowest recovery rates in the ensuing four years. This is not surprising, but justifies its use as a control in assessing the impact of the other more substantively important variables in the model.

As expected the percentage of a state's workforce in the manufacturing sector provides significant leverage in explaining a state's post-1995 recovery rate. Those states that had, by 1995, managed to create a sizable manufacturing sector capable of competing in Mexico's new free trade environment were clearly better positioned to stage a fairly rapid and significant recovery than their more agricultural-based neighbors. Once again, this finding only reinforces the notion that in the neoliberal world of the 1990s, an understanding of the subnational development divides that run through many developing countries is essential for a more comprehensive accounting of the impact market-based reforms and the many crises associated with them have had on the developing world. Further evidence of this emerges from the foreign direct investment variable coefficient that is also significant across all four models. Those states that had relatively well-established channels of foreign investment prior to the crisis again appear to have been better positioned to stage a significant recovery following the crisis when compared to states that had less to offer foreign investors. For our purposes, though, the strength of these coefficients confirms their appropriateness as control variables, and makes all the more striking the additional contributions of the two measures of a state's electoral transition to its subsequent recovery rate.

The measure of societal conflict, the change in a state's robbery rate between 1994 and 1996, provides little help in explaining variations in state recovery rates. As already mentioned, this measure is coarse and carries with it quite a bit of noise, and it is perhaps due to these measurement issues that there appears to be little impact on economic recovery. It may also be simply that there is little if any effect of this type of societal conflict on broader patterns of economic recovery and a measure tapping more organized forms of discontent would be more appropriate. Absent those data, however, I leave this question for future research and turn to the impact of electoral conflict on economic recovery.

The coefficients that clearly stand out in Models 2 and 4 are the quadratic terms of the PRI vote share and the PRI-PRD margin. Both sets of coefficients are highly significant and in the expected direction. Interpretation of these coefficients is perhaps easiest through a graphing of their contribution to the estimated economic recovery rates across the 31 cases while holding all other variables constant.<sup>10</sup> The estimates for Model 2 are displayed in Figure 4 and reveal the posited U-shaped relationship between Mexico's subnational electoral transition and state-level recovery rates. We see that those states with an average PRI vote share of around 60 percent were those with the lowest estimated rates of recovery from the 1995 crisis, while those at the fore of the country's electoral transition were those estimated to have the highest rate of recovery. Finally, those states still operating under the old, one-party rules of the game lagged behind their neighbors at the opposite end of the electoral transition continuum but were better positioned to recover from the crisis than those states stuck in the transitional stage. **[Figure 4 here]**

Given that the minimum and maximum values for the PRI vote across the 31 states were 46 percent in Baja California and 84 percent in Quintana Roo, the regression results as mapped in Figure 3 are not only statistically significant, but make intuitive sense as well. The value for the low point of the U-curve, 60 percent, suggests a range where the PRI by 1995 had neither retained its one-party electoral dominance of the past nor accepted competitive politics as the new rules of the game. It is precisely this range, then, where we should expect to find the most politically unstable environment and the most overt forms of electoral fraud and post-election conflict. If we accept that one role of elections is to provide a relatively peaceful outlet for societal discontent and a predictable, stable means of transferring power, the results displayed in Table 1 and Figure 4 suggest the economic consequences when such outlets do not exist.

With Model 4, a similar effect emerges for the PRI-PRD margin coefficient, but merits a closer look. On the surface, it appears that the economic recovery impact of the competition between the PRI and the PRD works in the same fashion as the PRI vote share measure. The more pitched the PRI-PRD battle was circa 1995 the lower a state's recovery rate was in the subsequent years up until a certain point where it once again appears the PRI finally ceded to the emerging electoral strength of the PRD. With that surrender to the inevitable, or perhaps simply the "normalization" of electoral competition between the two parties, the conflict that accompanied this competition appears to have diminished as well, allowing states and their citizens to focus their energies on economic recovery.

In reality, though, Michoacán, the home state of PRD-leader Cárdenas, was the only state that came even close to this stage of free and fair competition between the PRI and the PRD by 1995, and even there conflicts between the two parties continued well into the latter half of the 1990s. An inspection of the economic recovery rates of states where the PRD was strong reveals that it is the case of Michoacán, with a strong 22 percent recovery, that is driving the non-linear relationship evident in Model 4. Once this state is removed from the analysis the non-linear specification of the PRI-PRD variable becomes insignificant. When the PRI-PRD margin variable is specified in a linear fashion, the coefficient once again is highly significant. Simply put, except for Michoacán, the more contested the battle between the PRI and the PRD, the lower the recovery rate was for a state.<sup>11</sup> Thus while still theoretically plausible, the posited non-linear relationship between a state's electoral transition and economic recovery is tenuous at best when the electoral transition is measured by the level of competition between the PRI and PRD because few if any PRD-leaning states had moved beyond the conflict stage by 1995.

Notwithstanding this slight modification of the PRI-PRD conflict model, the above results strongly suggest that an economic-based model of state-level recovery rates will miss a large part of the

story. Taking the states of Tabasco and Hidalgo, for example, we can see how far off a purely economic story of state-level recovery rates can be. At first glance, Tabasco would seem better positioned to recover from the 1995 crisis than Hidalgo. While both states have the same general economic structure, with roughly 20 percent of the workforce in each employed in the manufacturing sector, Hidalgo in 1995 was less developed,<sup>12</sup> had a lower percentage of people with a post-primary school education, and received slightly less foreign direct investment per capita during the recovery years than Tabasco. In Hidalgo, however, the PRI's average vote share in the years leading up to the crisis was 76 percent, while its margin over the PRD during that period was 66 percent. These numbers suggest a state still very much in the early stages of its electoral transition. In Tabasco, the PRI's vote share had dropped to 57 percent by 1995, and its margin over the PRD was 19 percent. Thus despite being better off in economic terms than Hidalgo, Tabasco found itself in the midst of a heated electoral transition at the time of the economic crisis while Hidalgo's electoral transition had barely begun. The dramatic difference in economic recovery rates for the two states between 1995 and 1999—5 percent for Tabasco and 29 percent for Hidalgo—though clearly a product of many factors suggests the potential role of a state's electoral institutions in the recovery process.

## **Discussion**

From the preceding analysis it is clear that economic recovery from the all-too-common economic crises occurring across the developing world may not be distributed equally within the borders of a country. Given the tremendous inequalities that exist across much of the developing world, both in economic terms and with respect to the political institutions and depth of social cleavages that exist, I have argued that the effects of economic crises will manifest themselves differently depending in large part on the nature of those intra-national inequalities. Drawing from the theoretical contributions of development scholars who have identified various ways in which national-level political institutions can

affect a country's growth prospects, I have attempted to tease out the economic recovery consequences of Mexico's uneven electoral transition that coincided with that country's worst economic crisis in over 50 years. The results strongly point to an important role played by a subnational unit's political institutions in its recovery from crisis.

With the continuing emphasis within the development community on the decentralization of more and more economic responsibilities, the findings presented here carry with them potentially dramatic implications for a developing world that seems unable to extricate itself from what may be termed a "crisis-based" model of development. For with the increasing empowerment of subnational units of government comes an increased risk of defective subnational political institutions slowing the economic recovery prospects of certain regions within a country. The fact that in many cases those defective political institutions are often found in the same regions of developing countries that confront other socioeconomic obstacles to economic growth only makes the focus of this research all the more critical for understanding the political economy of prosperity in an era of crisis-based development.

From another perspective though, the finding that a state's chances of crisis recovery depend in part on its particular political characteristics suggests that perhaps the growing chasms of inequality occurring under the neoliberal model may not be inevitable, but rather in part a product of institutional deficiencies. What emerges from the curvilinear relationship found between Mexico's electoral transition and state-level recovery rates is the possibility that at least one state-level obstacle to a more robust economic recovery was open to change, with the PRI ultimately deciding to accept electoral competition as the norm, rather than cling to its rapidly decaying institutional past. This analysis merely offers a first step in exploring the subnational dynamics of economic recovery, but the strength of the results suggest it is a step worth taking



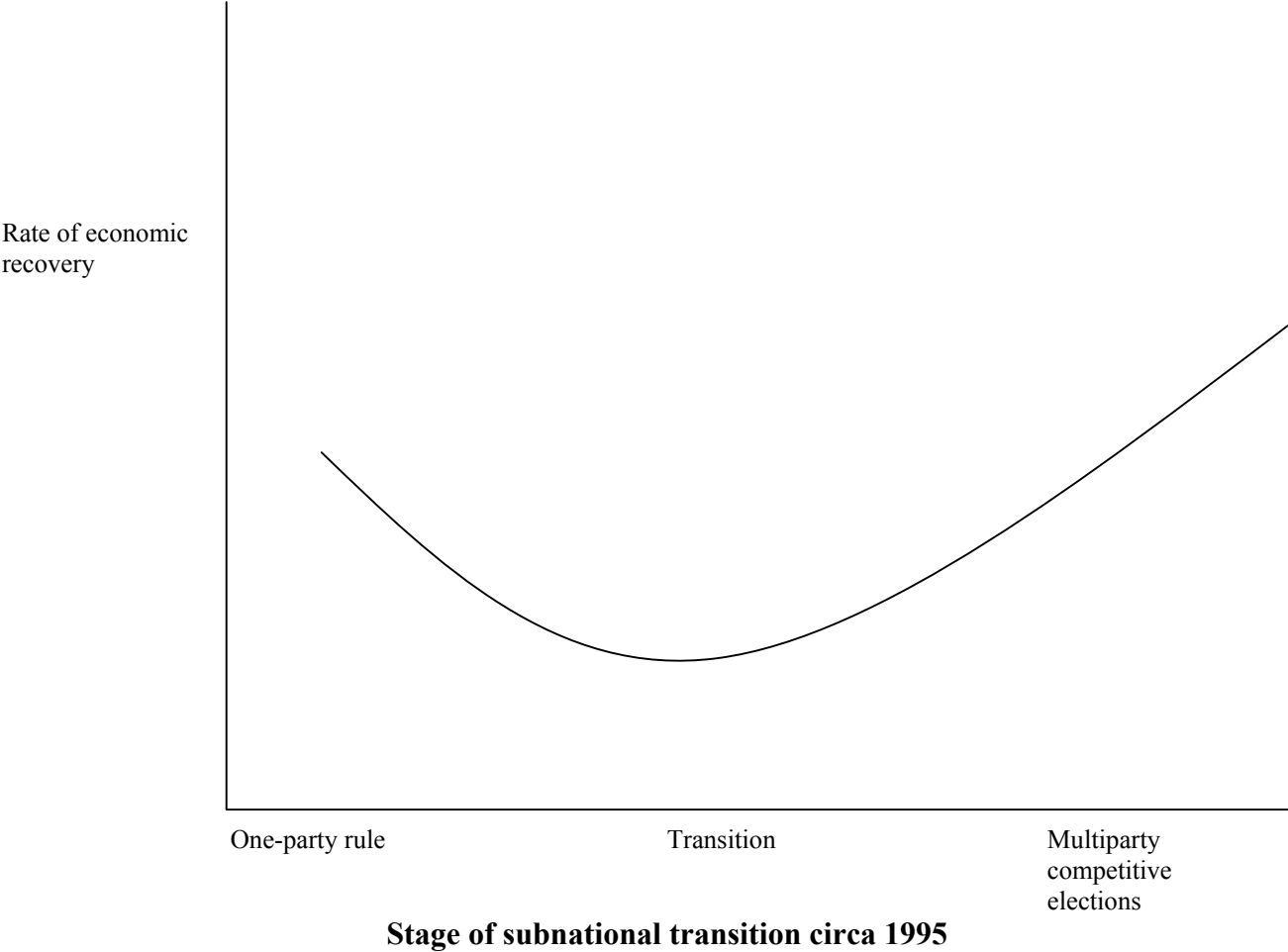
Finally, with the ongoing “dual transition” taking place across much of the developing world, where democratization and market-based reforms are both proceeding in fits and starts, recognition of the subnational interactions between the two provides an important first step in considering the scope and focus of government policies designed to ameliorate the social consequences of economic crisis. On this note, it is encouraging to find the continuing progress even the most PRI-dominant states appear to be making toward an acceptance of free and fair electoral competition as the new rule of the game in Mexican politics. While conflict still remains an element in the subnational political environments of some areas, as evidenced by the burning of ballot boxes by Zapatista supporters in Chiapas during the 2003 federal elections, the widespread electoral violence of the 1990s seems to have diminished as Mexico’s regime transition continues to “even out” across all regions of the country.

**Table 1. Modeling Mexican State Recovery Rates**

	Model 1	Model 2	Model 3	Model 4
Constant	-.08 (.05)	.90 (.40)	-.08 (.07)	.12 (.07)
Change in GSP, 1994-95	-.51 (.34)	-.48 (.29)	-.33 (.34)	-.79** (.29)
Percent of workforce in manufacturing, 1990	.01*** (.002)	.01*** (.002)	.01*** (.002)	.01*** (.002)
Tourism as share of state GSP (%)	.004** (.002)	-.00004 (.002)	.002 (.002)	.001 (.002)
FDI per capita, 1994	.0003* (.0001)	.0003** (.0001)	.0004** (.0002)	.0003** (.0001)
Share of state pop. living in metropolitan areas (>100,000)	-.001** (.001)	-.001* (.001)	-.001* (.001)	-.001** (.0005)
Change in number of robbery convictions, 1994-1996 (%)	.01 (.02)	-.003 (.02)	-.00003 (.02)	-.008 (.02)
Average PRI vote in local elections, 1992-1995	-	-.03** (.01)	-	-
(Average PRI vote) <sup>2</sup>	-	.0002*** (.00009)	-	-
Average PRI vote – Average PAN vote	-		-.16 (.17)	-
(Average PRI vote – Average PAN vote) <sup>2</sup>	-		.35 (.23)	-
Average PRI vote – Average PRD vote	-		-	-.91*** (.30)
(Average PRI vote – Average PRD vote) <sup>2</sup>	-		-	1.1*** (.31)
Adjusted R <sup>2</sup>	.63	.75	.66	.77

Sources: INEGI 2003; 2002; 2001; 1998; 1996; 1991; CIDAC 2003. N=31. \*\*\* = p<.01; \*\*=p<.05; \*=p<.1. Cells include unstandardized coefficients with standard errors in parentheses.

**Figure 1. Posited Relationship Between Electoral Transition and Economic Recovery**



**Figure 2. Mexico's 1995 Crisis**

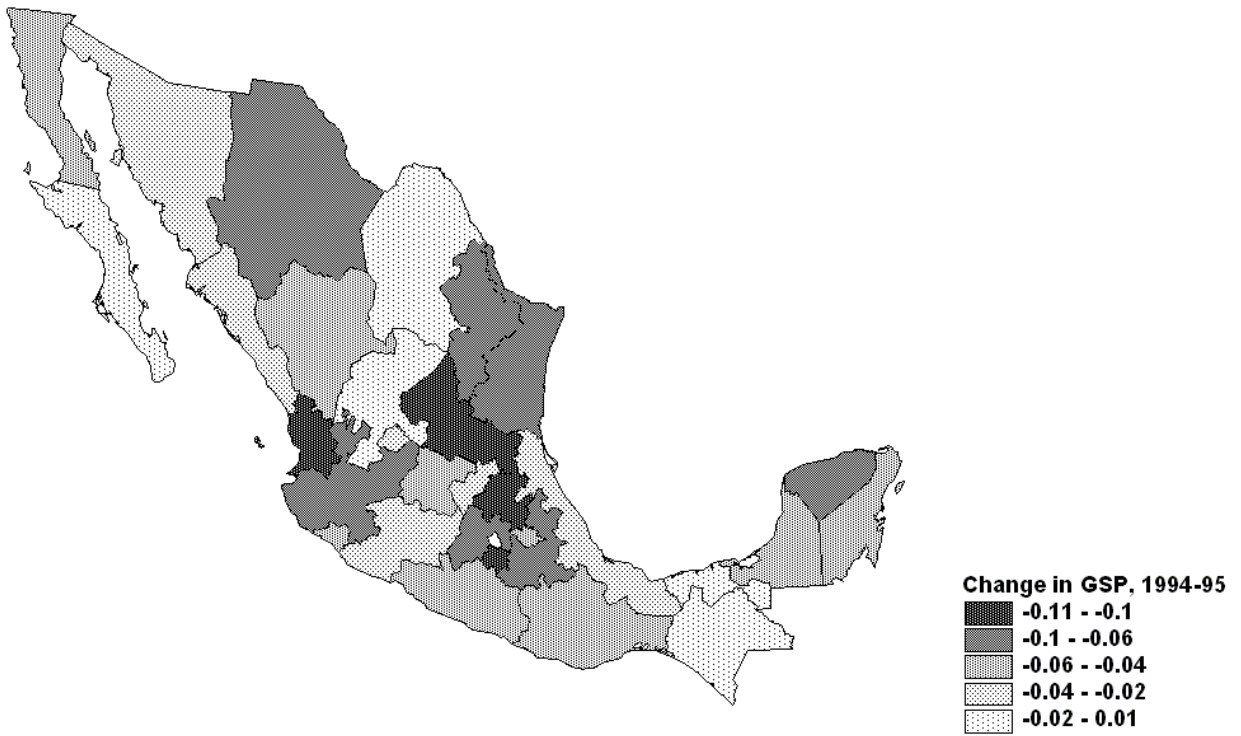
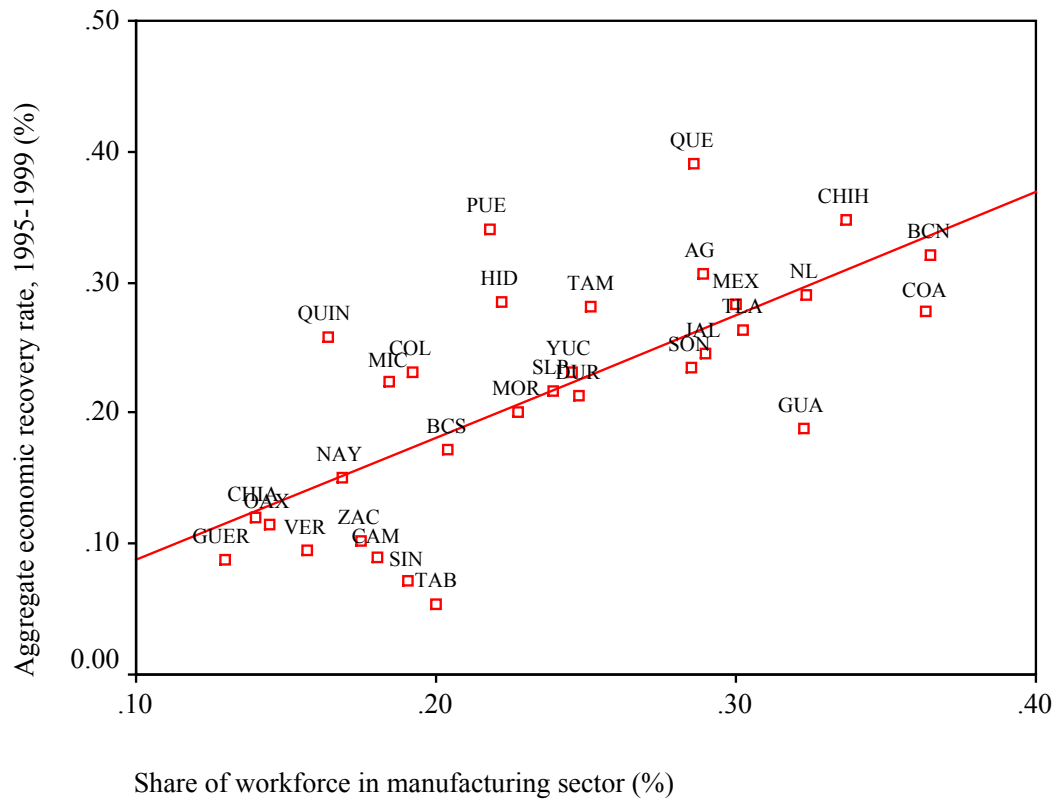
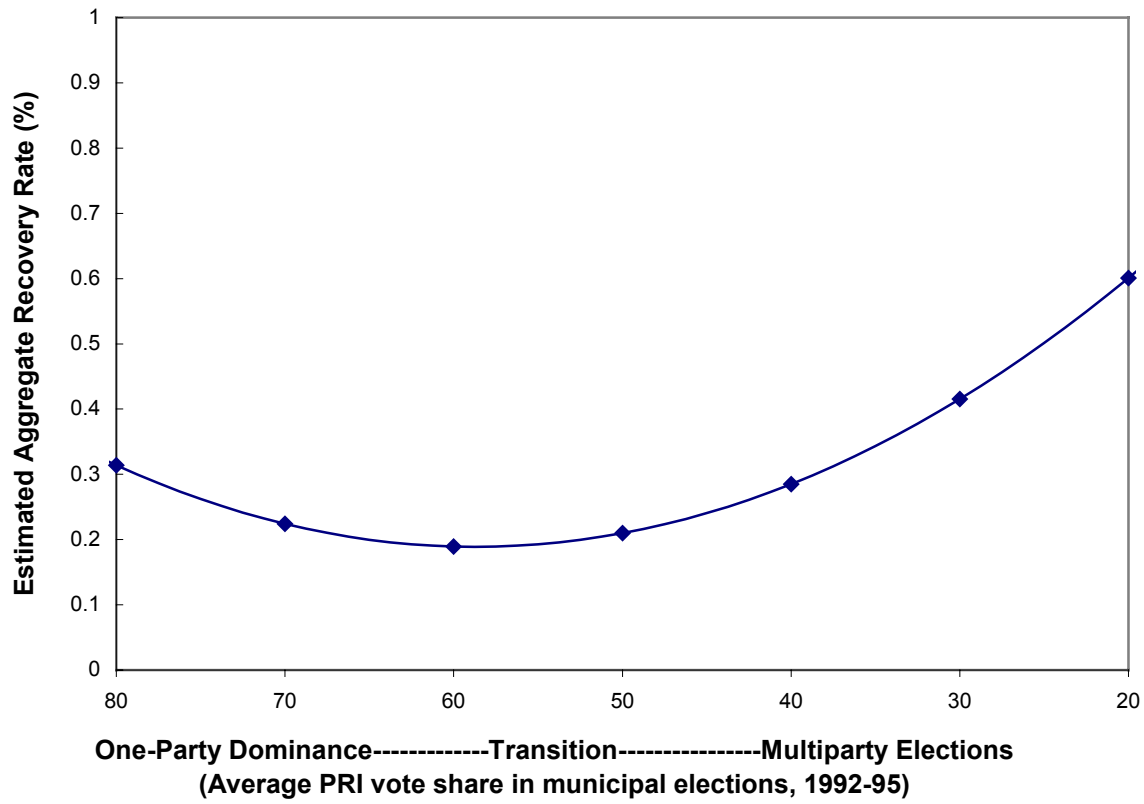


Figure 3. State Recovery Rates, 1995-1999



**Figure 4. Estimated State Economic Recovery Rates, 1995-99**



## **Bibliography**

- Alcocer, Jorge V. 1994. "Party System and Political Transition in Mexico: A Pragmatic Approach." In Cook, et. al., *The Politics of Economic Restructuring: State-Society Relations and Regime Change in Mexico*, pp. 149-57.
- Bhagwati, Jagdish. 1995. "The New Thinking on Development." *Journal of Democracy*, 6(4): 50-64.
- Birdsall, Nancy, Carol Graham, and Richard H. Sabot, eds. 1998. *Beyond Trade-Offs: Market Reform and Equitable Growth in Latin America*. Washington, D.C.: Brookings Institution Press.
- Bouillon, Cesar, Ariana Legovini, and Nora Lustig. 1998. "Rising Inequality in Mexico: Returns to Household Characteristics and the "Chiapas Effect." Working Paper, Inter-American Development Bank.
- Brautigam, Deborah. 1997. "Institutions, Economic Reform, and Democratic Consolidation in Mauritius." *Comparative Politics* 30(1): 45-62.
- Brown, David S. and Wendy Hunter. 1999. "Democracy and Social Spending in Latin America, 1980-92." *American Political Science Review*, 93(4): 779-90.
- Bruhn, Kathleen. 1996. *Taking on Goliath: The Emergence of a New Left Party and the Struggle for Democracy in Mexico*. University Park: Penn State University Press.
- Bruhn, Kathleen and Keith Yanner. 1995. "Governing Under the Enemy: The PRD in Michoacán." In Victoria E. Rodríguez and Peter M. Ward, eds., *Opposition Government in Mexico*, pp. 113-134. Albuquerque: University of New Mexico Press.

- Careaga, Maite and Barry R. Weingast. 2003. "Fiscal Federalism, Good Governance, and Economic Growth in Mexico." In Dani Rodrik, ed., *In Search of Prosperity: Analytic Narratives on Economic Growth*. Princeton: Princeton University Press.
- Centro de Investigación para el Desarrollo, A. C. (CIDAC). 2003. "Base de datos de elecciones locales, 1980-2002." Accessed at [http://www.cidac.org/espaniol\\_base\\_datos.htm](http://www.cidac.org/espaniol_base_datos.htm).
- Chiu, Henry. 1998. "Income Inequality, Human Capital Accumulation and Economic Performance." *The Economic Journal*, 108: 44-59.
- Comeau, Ludovic Jr. 2003. "The Political Economy of Growth in Latin America and East Asia: Some Empirical Evidence." *Contemporary Economic Policy* 21(4): 476-489.
- Consejo Nacional de Población (CONAPO). 2000. "Indicadores Sociodemograficos." <http://www.conapo.gob.mx/indicaso/indices.htm#zip>.
- CONAPO. 1993. *Indicadores Socioeconomicos e Indice de Marginacion Social 1990*. Mexico: Consejo Nacional de Población.
- Cornelius, Wayne A. 1999. "Subnational Politics and Democratization: Tensions between Center and Periphery in the Mexican Political System." In Cornelius, et. al., *Subnational Politics and Democratization in Mexico*, pp. 3-16.
- Cornelius, Wayne A., Todd A. Eisenstadt, and Jane Hindley. 1999. *Subnational Politics and Democratization in Mexico*. La Jolla: Center for U.S. - Mexican Studies, University of California, San Diego.
- De Remes, Alain. 2000. *Municipal Electoral Processes in Latin America and Mexico*. Mexico City: Centro de Investigación y Docencia Económicas.



- Dietz, Henry and David Meyers, eds. 2002. *Municipal Government and Democratization in Latin America*. Boulder: Lynne Rienner Press.
- Eisenstadt, Todd A. 1999. "Instituciones judiciales en un régimen en vías de democratización: solución legal frente a solución extralegal de los conflictos poselectorales en México." *Foro Internacional*, 39(2-3): 295-326.
- Flores-Quiroga, Aldo R. 2001. "Economic Crisis and the Mexican State: Toward a New Institutional Interpretation." *Mexican Studies*, 17(1): 1-17 .
- Foley, Michael W. 1999. "Southern Mexico: Counterinsurgency and Electoral Politics." Special Report 1/99. Washington, D. C.: U. S. Institute for Peace. (accessed July, 2003 at <http://www.usip.org/pubs/specialreports/sr990127.html>).
- Fox, Jonathan. 1996. "National Electoral Choices in Rural Mexico," in Laura Randall, ed., *The Reform of the Mexican Agrarian Reform*, Armonk: M.E. Sharpe.
- Fox, Jonathan and Josefina Aranda. 1996. *Decentralization and Rural Development in Mexico*. La Jolla: Center for U.S.-Mexican Studies, University of California, San Diego.
- Fox, Jonathan. 1994. "Latin America's Emerging Local Politics." *Journal of Democracy*, 5(2): 105-16.
- Guillén Lopéz, Tonatiuh. 1995. "The 1992 Elections and the Democratic Transition in Baja California." In Victoria E. Rodríguez and Peter M. Ward, eds., *Opposition Government in Mexico*, pp. 51-63 Albuquerque: University of New Mexico Press.
- Haber, Stephen, Noel Maurer, and Armando Razo. 2003. *The Politics of Property Rights: Political Instability, Credible Commitments, and Economic Growth in Mexico, 1876-1929*. Cambridge: Cambridge University Press.

- Handleman, Howard. 1997. *Mexican Politics: The Dynamics of Change*. New York: St. Martin's Press.
- Helliwell, John. 1994. "Empirical Linkages Between Democracy and Economic Growth." *British Journal of Political Science*, 24: 225-48.
- Hirschman, Albert O. 1972. *Exit, Voice, and Loyalty: Responses to Declines in Firms, Organizations, and States*. Boston: Harvard University Press.
- Instituto Nacional de Estadística, Geografía e Informática (INEGI). 2003. "Finanzas Publicas," accessed at (<http://ver.inegi.gob.mx/difusion/espanol/bvinegi/aef/finpub.pdf>).
- INEGI. 2002. "Indicadores Estatales." Accessed at <http://dgcnesyp.inegi.gob.mx/pubcoy/estatal/pib/pibcon.html>.
- INEGI. 2001. "XII Censo General de Población y Vivienda: Tabulados básicos y síntesis de resultados por entidad federativa." Data accessed at (<http://www.inegi.gob.mx>).
- INEGI. 1998. *Cuaderno de estadísticas judiciales, 5*. Aguascalientes: INEGI.
- INEGI. 1996. *Conteo de Población y Vivienda 1995*. Aguascalientes: INEGI.
- INEGI. 1992. *XI Censo General de Población y Vivienda, 1990*. Aguascalientes: INEGI.
- INEGI. 1983. *X Censo General de Población y Vivienda, 1980*. Aguascalientes: INEGI.
- Knack, Stephen and Phillip Keefer. 1995. "Institutions and Economic Performance: Cross Country Tests Using Alternative Institutional Measures." *Economics and Politics* 7: 207-227.
- Lawson, Chappell. 2000. "Mexico's Unfinished Transition: Democratization and Authoritarian Enclaves in Mexico." *Mexican Studies*, 16(2): 267-287.
- Lohmann, Susanne. 1999. "What Price Accountability? The Lucas Island Model and the Politics of Monetary Policy." *American Journal of Political Science* 43:396-430.

- Lujambio, Alonso. 2001. "Democratization through Federalism? The National Action Party Strategy, 1939-2000." In Kevin Middlebrook, ed., *Party Politics and the Struggle for Democracy in Mexico*. La Jolla: Center for U.S.-Mexican Studies, UCSD. 47-94.
- Lustig, Nora. 2000. "Crises and the Poor: Socially Responsible Macroeconomics." Sustainable Development Department Technical Papers Series, POV 108. Washington, D.C.: Inter-American Development Bank.
- MacIntyre, Andrew. 2001. "Institutions and Investors: The Politics of the Economic Crisis in Southeast Asia." *International Organization* 55(1): 81-122.
- Naim, Moises. 2000. "Washington Consensus or Washington Confusion?" *Foreign Policy*, 118(Spring): 86-103.
- Neter, John, William Wasserman, and Michael H. Kutner. 1990. *Applied Linear Statistical Models: Regression, Analysis of Variance, and Experimental Designs, 3<sup>rd</sup> Ed.* Boston: Richard D. Irwin, Inc.
- North, Douglass C. 1991. "Institutions." *Journal of Economic Perspectives* 5(1): 97-112.
- North, Douglass C. 1989. "Institutions and Economic Growth: A Historical Introduction." *World Development* 17: 1319-1332.
- North, Douglass C. and Barry R. Weingast. 1989. "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in 17<sup>th</sup>-Century England." *Journal of Economic History* 49(4): 803-832.
- Olson, Mancur. 1993. "Dictatorship, Democracy, and Development." *American Political Science Review*, 87(3): 567-75.
- Pacific Council on International Policy. 2000. *Mexico Transforming*. Los Angeles: Pacific Council on International Policy.

- Pastor, Manuel and Jae Ho Sung. 1995. "Private Investment and Democracy in the Developing World." *Journal of Economic Issues* 29: 223-243.
- Przeworski, Adam. 1995. *Sustainable Democracy*. Cambridge: Cambridge University Press.
- Przeworski, Adam, Michael E. Alvarez, José Antonio Cheibub, and Fernando Limongi. 2000. *Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990*. Cambridge: Cambridge University Press.
- Przeworski, Adam and Fernando Limongi. 1993. "Political Regimes and Economic Growth." *Journal of Economic Perspectives*, 7(3): 51-69.
- Quinn, Dennis P. and John T. Wooley. 2001. "Democracy and National Economic Performance: The Preference for Stability." *American Journal of Political Science* 45(3): 634-657.
- Remick, Elizabeth J. 2002. "The Significance of Variation in Local States: The Case of Twentieth Century China," *Comparative Politics*, 34 (July): 399-418
- Rodríguez, Victoria E. 1997. *Decentralization in Mexico: From Reforma Municipal to Solidaridad to Nuevo Federalismo*. Boulder: Westview Press.
- Rodríguez, Victoria E. and Peter M. Ward. *Opposition Government in Mexico*. Albuquerque: University of New Mexico Press.
- Rodrik, Dani. 1999. *The New Global Economy and Developing Countries: Making Openness Work*. Washington, D.C.: Overseas Development Council.
- Scully, Gerald W. 1997. "Rule and Public Policy Space and Economic Progress." *Public Choice* 90:311-324.

- SourceMex. 1995. "National Action Party Retains Baja California's Governorship and Wins Mayoral Seats in the State's Two Largest Cities." *Economic News and Analysis on Mexico*, 6(30). Albuquerque: University of New Mexico, Latin American Institute.
- Snyder, Richard. 2001a. *Politics After Neoliberalism: Reregulation in Mexico*. Cambridge: Cambridge University Press.
- Snyder, Richard. 2001b. "Scaling Down: The Subnational Comparative Method," *Studies in Comparative International Development*, 36 (Spring): 93-110.
- Strange, Susan. 1997. "The Erosion of the State." *Current History*, November: 365-69.
- Tamayo-Flores, Rafael. 2001. "Mexico in the Context of the North American Integration: Major Regional Trends and Performance of Backward Regions." *Journal of Latin American Studies*, 33: 377-407.
- Valle, Víctor Alejandro Espinoza. 1999. "Alternation and Political Liberalization: The PAN in Baja California." In Cornelius, et. al., *Subnational Politics and Democratization in Mexico*, pp. 73-84.
- Ward, Peter M. and Victoria E. Rodríguez. 1999. "New Federalism, Inter-Governmental Relations, and Co-governance in Mexico." *Journal of Latin American Studies*, 31(3):673-710.
- World Bank. 2000. *Reforming Public Institutions and Strengthening Governance: A World Bank Strategy*. Washington, D. C.: The International Bank for Reconstruction.
- Wodon, Quentin T. 2000. "Poverty and Policy in Latin America and the Caribbean." Washington, D.C.: World Bank.

## Endnotes

---

<sup>1</sup> For a more comprehensive review of this literature see Przeworski and Limongi (1993) and Przeworski, et. al. (2000).

<sup>2</sup> In addition to the author's own data collection efforts from various state election council offices, local and state-level election data come from de Remes (2000) and CIDAC (2003). All other state-level measures used in this study are based on data from INEGI (INEGI 2003; 2002; 2001; 1998; 1996; 1992), the Federal Electoral Institute (IFE), the National Population Council (CONAPO 1993), and the Center for Research and Development ([www.cidac.org](http://www.cidac.org)). Research for this project was funded in part by a grant from the University of California's Institute on Global Conflict and Cooperation and a University of California at Riverside Academic Senate Research grant.

<sup>3</sup> For one of the most comprehensive treatments of the role human capital development plays in a country's economic growth prospects see Birdsall, et. al. (1998).

<sup>4</sup> Specified as  $((GSP1999-GSP1995)/GSP1995)$ . I do not use a per capita measure of GSP in calculating the percent change during this period due to the endogeneity issues inherent in population changes within states during the period under discussion. That is, a state's net migration rate between 1995 and 1999 was likely related to its economic recovery process and thus will affect the true extent of economic recovery that has taken place within a state if population is included in the measure.

<sup>5</sup> The correlation coefficient for the percent workforce in manufacturing and a marginalization index developed by Mexico's National Population Council (CONAPO 2000) that incorporates a range of state-level socioeconomic indicators is  $-.74$  ( $p < .01$ ). The index includes such items as the percentage of households in a state with dirt floors, percentage of population earning less than one minimum wage, and the percentage of the population over age 15 that has fewer than 6 years of formal schooling. While inclusion of a development measure such as the Marginalization Index would clearly be preferable, the limited degrees of freedom in this analysis forces such decisions as the exclusion of this variable to be made. Additional models were run that included the marginalization index but in no instance did it emerge as significant, nor were there any significant changes in any of the other coefficients. The lack of significance of this measure is likely due in part to its high level of correlation with the other variables in the model.

<sup>6</sup> In a separate model I also included the percent change in foreign direct investment experienced by a state between

---

1994 and 1996 in order to assess the impact of investor reaction to the crisis. The coefficient for this variable was insignificant. I do not include any foreign investment data beyond 1996 to avoid any problems of endogeneity.

<sup>7</sup> I am grateful to an anonymous reviewer for suggesting the inclusion of this variable. I use the average percent of a state's economic activity generated by restaurants and hotels in 1994 as a proxy for the contribution of tourism to a state's economy.

<sup>8</sup> As noted above, due to the limited number of cases in the analysis, the number of independent variables included in any one model is constrained. With this in mind, I tested multiple models using a variety of different control variables in addition to the ones described above. Among those used to tap the socioeconomic characteristics of a state were the marginalization index, literacy rate, and the percent of a state's population receiving the basic services of water, sewerage, and electricity. There were no models where the results differed significantly from those reported.

<sup>9</sup> Eisenstadt (1999) offers one fairly direct measure of this concept in his analysis of post-electoral conflicts during this period. Unfortunately the data only cover a limited number of states, making statistical analysis of these data problematic. In unreported models, I also tried the percent change in number of murder convictions (1994-1996) but opted for the robbery measure as it seems more closely related to the idea of societal discontent related to the economic crisis. Both of these measures were constructed from data available from the national census bureau (INEGI 1998).

<sup>10</sup> The mean values for all the variables in the model were used in this estimation procedure.

<sup>11</sup> The adjusted  $R^2$  for this model was .74, with the PRI-PRD margin coefficient strongly significant ( $p < .01$ ) and most of the remaining variables in the model producing similar coefficients to those reported in Table 1. A model where Michoacán was excluded but the nonlinear specification of the PRI-PRD margin variable was retained resulted in a higher adjusted  $R^2$ , .78 (likely due to the lower number of cases), but the coefficients for the quadratic term were insignificant, again suggesting that it was the case of Michoacán that was driving the significance of the nonlinear specification in the reported model. With the undue influence of Michoacán on the nonlinear specification of the PRI-PRD margin coefficient in mind (and in response to the helpful suggestions of an anonymous reviewer), I calculated the  $dfbetas$  (a statistic that provides a check for any cases that are exerting a strong influence on each of the regression coefficients) for each variable in the models reported in Table 1. Only in three cases does there appear

---

to be an issue of a single case affecting the significance level of the reported coefficients. In the PRI vote share model (Model 2) the standardized dfbeta of Nuevo Leon for the foreign direct investment variable slightly exceeds the absolute value of one (-1.09) that Neter, et.al. (1990, 403) suggest is an indicator of an influential case. After removing the case, the adjusted  $R^2$  increases to .76 and the coefficients for the FDI variable and the PRI vote share quadratic remain strongly significant. The Nuevo Leon case also emerges as influential for the FDI variable coefficient in the PRI-PRD margin model with a standardized Dfbeta of -1.7. Finally, the state of Tabasco appears as an influential case for the PRI-PRD margin variable coefficient with a Dfbeta of 1.04. Once again though, the influence of this case appears to have been in reducing the strength of the posited relationship. Once removed from the analysis, the adjusted  $R^2$  moves to .80 and the contribution of the PRI-PRD quadratic increases considerably, with the coefficients both significant at  $p < .001$ . Thus in all three cases, it appears that the strong influence served to make for an even more stringent test of the posited effect of electoral institutions on a state's economic recovery rates.

<sup>12</sup> This assessment is based on the CONAPO (2000; 1993) marginalization index.