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The organization of fair election requires impartial and independent electoral management bodies. We exploit the longitudinal variation in political competitiveness in Mexico's local and state elections from 1990 to 2004 to analyze its effect on the formation and development of independent electoral management bodies. We posit a simple model where increased political competition in local elections leads to more independent electoral management bodies through various mechanisms at different stages of a democratization process —noting that competition in local, state assembly or gubernatorial elections do not produce the same incentives for electoral reform among all political parties. We develop an original index of the independence of electoral institutions for the Mexican states during the 1990 to 2004 period, and analyze a number of measures of political competition to assess the hypotheses derived from our model. Our results indicate that increased competitiveness in governor and legislative races leads to more independent electoral institutions, whereas competition in municipal races does not. Increased competition from some political parties elicits larger increases in independence than others. We also find that, as the number of effective political parties increase, the pressure for further electoral reform eventually settles down.

Resumen

La organización de elecciones justas requiere órganos de administración electoral imparciales e indepentientes. Este documento explota la variación en la competitividad electoral en contiendas municipales y estatales entre 1990 y 2004 para analizar sus efectos en la formación y desarrollo de órganos estatales electorales independientes. Planteamos un modelo donde mayor competencia política conduce a la creación de órganos electorales más independientes mediante diversos mecanismos a lo largo de un proceso de democratización —enfatizando que la competencia en contiendas locales, legislativas y de gobernadores no producen los mismos incentivos para promover reformas electorales. Con base en un índice original de independencia de los institutos estatales electorales en México, ponemos a prueba algunas implicaciones de nuestro modelo utilizando diferentes medidas de competitividad política. Los resultados indican que a mayor competencia en contiendas legislativas y para gobernador conduce a órganos electorales más independientes, mientras que la de contiendas municipales no tiene tal efecto. El impacto de la fuerza electoral del PAN y PRD es distinto. Finalmente, la presión por reformas electorales disminuye a partir de cierto umbral de número efectivo de partidos.

Introduction

The organization of clean and fair elections is one of the fundamental aspects of both democratic transitions and its consolidation. In general, electoral management bodies (EMBs) organize elections and referendums, enforce electoral law and regulations, and in some cases, resolve electoral controversies. As long as EMBs are able to guarantee impartiality in their decisions, they will be able to generate confidence in electoral results as well as in the functioning of a democratic system itself. Therefore, the institutional design and evolution of EMBs is extremely important both during democratic transitions as well as in democratic consolidation processes, a dynamic which is rather well illustrated by the Mexican experience over recent years.

In Mexico, the 2006 presidential election produced doubts regarding the impartiality of the Federal Electoral Institute (Instituto Federal Electoral, IFE). Moreover, given the closeness in the election race, IFE's institutional design was put in doubt. However, the debate over Mexican electoral institutions is not confined to the federal level but rather the opposite. For instance, in recent state elections in Veracruz (2004), Estado de Mexico (2005), and Chiapas (2006), the impartiality of their respective EMBs has been questioned, either because most of its members were allegedly related to a particular political party, or because of fraudulent practices in the management of local elections.

During the 1990s, Mexico experienced a political liberalization process at the federal and local electoral arenas. Without a doubt, since its creation in 1990, the IFE has made significant progress in both its institutional design and independence. However, as Eisenstadt (1999a, 2004) points out, although minimal democratic conditions have been satisfied at the federal level, the state of affairs at the subnational level is quite different. A dual structure has emerged, one in which each state replicates the electoral design from the federal level but where, given their state autonomy, the particular state legislations can differ considerably —a process that Mozaffar and Schedler (2002) labeled a decentralized model of electoral governance. Thus, a clear understanding of the Mexican democratization process must also include an analysis of state and local politics, which can play out to be either a source or a resistance force to democratization (Cornelius 1999; De Remes 1998, 2000b). Moreover, for obvious reasons, most of the elective position races held in Mexico take place at the local level, which justifies an additional emphasis and motivation to study state level electoral institutions in Mexico.

The main goal of this paper is to find out the determinants of the independence of state level electoral management bodies in Mexico (Institutos Estatales Electorales). As a means of understanding the

democratization process at the subnational level, the sample period ranges from 1990 to 2004, which captures the dynamics before and after the landmark electoral federal reform of 1996, which granted the IFE complete autonomy —and that forced the states to make their own reforms in the same vein.

The central hypothesis of our paper is that increased political competition leads to more independent electoral management bodies. The underlying mechanism is that, as the level of political competition increases, political parties come closer to an even distribution of electoral power (Sartori, 1976). At the same time, this provides them with incentives for setting up more impartial electoral rules that allow them to compete on a level playing field—and key among such reforms is the design of an independent EMB.

In order to assess the impact of political competition on electoral independence, we use panel data from the 31 Mexican states during the 1990-2004 period. The dataset contains a unique and original indicator of formal electoral independence, derived from the analysis of the states' electoral legislation, as well as information of all state and municipal races held during the sample period. To our knowledge, this is the first dataset of its type in Mexico and in the existing literature on electoral governance. The evidence indicates that increased competition in governor and legislative races leads to more independent electoral institutions, whereas competition in municipal races does not. Vote strength from some political parties elicits larger increases in independence than others. We also find that, as the number of effective political parties increase, the pressure for further electoral reform diminishes or settles down.

The paper is organized as follows. The next section reviews the relevant literature. Section II presents a basic model of electoral outcomes and electoral reform, from which we derive our hypotheses. Section III describes the Electoral Independence Index developed for this study. Section IV presents the empirical methodology, and section V discusses in detail our empirical findings. The last section provides conclusions and final remarks.

1. Literature Review

1.1. Electoral Management Bodies (EMBs)

There is a relatively scarce but growing literature on electoral governance in general or electoral management bodies in particular. According to Pastor (1999), the literature on electoral systems has mostly focused on constitutional design issues such as majoritarian vs. proportional representation systems (Cox 1997; Mainwaring and Shugart 1997); the role of political parties (Mainwaring and Scully, 1995), electoral formulas and representation (Taagepera and Shugart 1989; Lijphart 1994; Lijphart and Waisman 1996; Colomer 2005); or electoral regulation issues, such as

campaign finance (Poiré 2005; Poiré and Eisenstadt 2005). In general, despite its importance, electoral governance has been an ignored phenomenon in the comparative studies of elections and democracy (Pastor 1999; Elklit and Reynolds 2000). Therefore, this paper seeks to contribute to this emergent literature on both the determinants of electoral reform, and the evolution of electoral governance.

The existing literature on electoral management bodies identifies two broad topics. On one hand, there are cross-country typologies or classifications of EMBs. In this regard, one of the most important studies is López Pintor's (2000), who classified the election bodies of 148 countries. However, his categorization is not very systematic, which makes it difficult to use in comparative analysis or in case studies. In contrast, Schedler (2004) developed another cross-country index of electoral independence that is more useful for cross-case comparisons but that requires information that is neither easily observable nor amenable to be traced in time.

Regarding the Mexican case, Crespo (1996) mapped and classified the 31 state electoral institutes according to their institutional characteristics, but his study is limited to 1992 and 1995 only. Likewise, Eisenstadt (2004) analyzes electoral institutions in Mexico at the state level in order to disentangle the strategies of post-electoral protest and negotiation used by political parties. Although Eisenstadt does build an autonomy index for Mexican state electoral institutes, his sample is limited to only 14 states over the 1989 to 1998 period. Moreover, his index includes variables that are related to the quality of election management but that are not necessarily related to electoral independence per se—for instance, the allowance of election-day observers, campaigning regulation, restrictions to polls and surveys. Since his index gives the same weight to both sets of factors, his index is conceptually and operationally different than the one we develop and exploit in this paper.

On the other hand, other studies emphasize the role of EMBs for understanding democratic transition processes. For example, Hartlyn et al. (2003) analyze the impact of EMBs in the creation of credible and successful elections in Latin America. They also constructed an additive indicator of formal electoral independence, which includes a classification of the appointment process and tenure length of EMBs members. However, not all of the elements included in Hartlyn's measure are applicable to the particular structure of Mexican EMBs. Moreover, additive indicators impose arbitrary restrictions, such as identical weights over the different dimensions considered. In this paper we will present an original measure of electoral independence, based on categorical principal component analysis, which addresses some of the limitations of the measures used in previous studies. And we will seek to explain the evolution of this measure of electoral independence for the case of the Mexican states over the 1990 to 2004 period.

1.2. Electoral Reform in Mexico

Becerra et al. (2000) and Eisenstadt (1999) analyze every major electoral reform at the federal level in Mexico since 1977, and explore their relationship with the political landscape and increasing electoral competition. They find that almost every major reform was preceded by an increase in electoral competition, like the moment when the PRI lost its majority in Congress, or when a recently elected president lacked legitimacy or broad support among the electorate (i.e. former presidents Carlos Salinas and Ernesto Zedillo). On the other hand, the 1994 election law reform rather seems to be explained by the armed conflict in Chiapas, which pressured political parties and the government to reinforce the viability of elections, instead of insurrection, as an institutional process to sort out conflicting interests. Clearly, the particular circumstances surrounding any major electoral reform vary from case to case —but this does not preclude the fact that many of these conditions correlate in one way or another with political competitiveness measures.

At the subnational level, Crespo (1996) suggests that when a political party other than the Institutional Revolutionary Party (PRI) arrives to the state governorship, it will try to create fairer electoral laws in order to limit or stop a future recovery from the PRI. Moreover, both Crespo (1996) and Eisenstadt (2004) agree that local conflict induced PRI governments to adopt electoral reforms, such as those that grant more independence to EMBs, in order to reach a political settlement with opposition parties. By the same token, PRI governors would take additional steps in the state electoral legislation to prevent further political conflicts or to attain more legitimacy vis à vis the citizenry.

From an empirical point of view, the literature on electoral reform faces important challenges. First of all, it is very difficult to observe, in a systematic way, whether it is incumbent governments, governors or legislatures -versus opposition parties or legislators- who push forward electoral reforms. As in most bargaining situations, we usually observe final outcomes (certain reform or no reform at all), whereas the original preferences, restrictions or quid pro quos between the parties involved are not always directly observable. Second, testing whether it is post-electoral protest or political competition that drives electoral reform is also a difficult task for two reasons: First, the lack of systematic and comparable data for a large enough number of cases over a sufficiently long period. Second, because oftentimes during democratic transitions competitive or increasingly close races are precisely followed by protests. In this regard, we claim that the experiences of the Mexican states over recent years provides an ideal setting for testing some of these challenging hypotheses: what sorts of electoral competition are more likely to precede reforms that result in more independent electoral management bodies?

2. Theoretical Framework

Independent electoral management bodies are part of a larger set of electoral rules, which we consider in what follows. In line with the existing literature, we assume that the electoral competition game is nested within a larger game of maintaining the current election system or changing it via electoral reform (Tsebelis 1990; Schedler 2002). This means that, as long as incumbent and opposition parties accept both the rules as well as the outcomes of voting contests, election law is sustained and no electoral reform is demanded nor initiated. However, this equilibrium is also contingent on the balance of power that results from previous or future elections, so that if parties or candidates perceive (or expect) election procedures or outcomes as unfair, the demand for electoral reform increases.

An implicit assumption of this view is that election outcomes are indicative of bargaining power. Thus, the vote shares obtained in an election are a proxy for the strength of political parties, which can be translated into bargaining power in the in the initiation or passage of electoral reforms, that is to say new rules for the electoral game. This is consistent with Geddes (1991) and Lehoucq (2000), who suggest that reforms are more likely to pass when power (or patronage) is more evenly distributed among major political parties because, when all of them are just as likely to win or lose power, all of them benefit from a level playing field.

Political parties are key players in both arenas: in the contest for elected office as well as in the struggle for election rules and procedures. When a hegemonic party or an authoritarian government calls for open elections, there is a veil of uncertainty (the election outcome) that opposition parties will try to make permanent (Schedler 2002). However, the leverage of incumbent and opposition parties is different in each level of this double game. Opposition parties have a lot to say in the election game because without their participation, elections have no legitimacy. On the other hand, government or incumbent parties have veto power on the electoral reform game (Schedler 2000). Thus, the likelihood of electoral reform depends on two key factors. First, the strategic interaction between government and opposition parties, in which each one exerts influence over the other; and second, the relative strength that each one, especially opposition parties, can obtain in the voting contest given the electoral rules.

With this framework in mind, and borrowing from bargaining models (Miceli 1997), we posit a simple model of voting outcomes and electoral reform. Figure 1 depicts a two-player game in extensive form. The game starts with an election outcome in t_1 . In t_2 , the first mover is the opposition, which right after an election outcome has to decide whether to denounce the election, demanding electoral reform among other things, or not. In the next node (t_3) , the government decides whether or not to concede or initiate this

reform. In the final node of the game (t_4) the opposition chooses to insist in demanding reform (by formal litigation or informal protest), or doing nothing and wait for the next election.

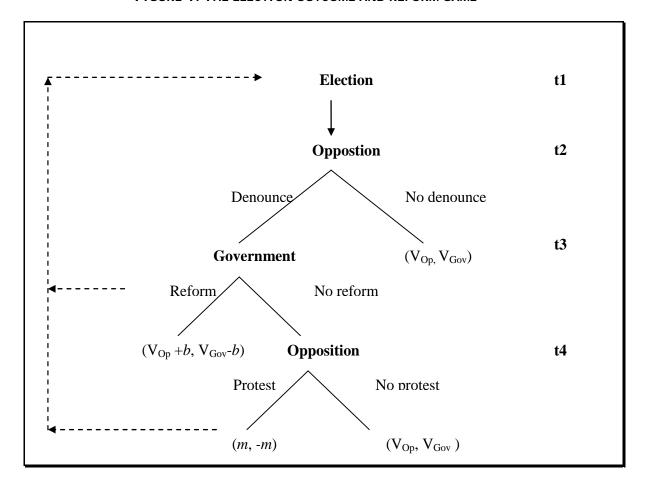


FIGURE 1. THE ELECTION OUTCOME AND REFORM GAME

The decisions of the players at different periods depend on their respective payoffs. First, the decision to denounce depends on the vote share obtained by the opposition party (V_{Op}) relative to the vote share of the government party (V_{Gob}) . If the election is not challenged, the game ends with payoffs (V_{Op}, V_{Gob}) , that is, each party is left with their respective votes shares until the next election comes about. On the other hand, if the opposition denounces, the government has to decide whether or not to concede an electoral reform that reduces political conflict and/or increases government legitimacy. If there is a reform, the government cedes some benefits, b, to the opposition party (this can be regarded as future electoral benefits to the opposition). Therefore, if there is reform the payoffs are

 $(V_{Op}+b, V_{Gob}-b)$, that is, their previous vote shares plus or minus a "benefits transfer" from the government to the opposition.

If the government does not pass reform and negates denunciations, the opposition has to consider whether to insist on its demands, say by costly litigation or protesting, or not. If there is no protest, and assuming that denunciation costs were close to zero for simplicity, the payoffs are similar as those with no denunciation: (V_{Op}, V_{Gob}) . However, if there is further demand for reform or compensation in t_4 , both parties now incur some losses or costs: I_{Op} and I_{Gob} . If the opposition is successful, to minimize or avoid these losses the government will pay a compensation m to the opposition, which can either be a side payment (like office appointments) or the credible promise of a reform sometime in the future. Given this setup, the player's decisions depend to a large extent on the election results (V_{Op}, V_{Gob}) vs. the expected costs or benefits obtained from an electoral reform, $\pm b$, or the compensation after protesting, $\pm m$.

As usual, the strategic game between the opposition and government can be solved by backward induction. Hence, if there was denunciation and no reform, in the final node of the game the opposition will not protest as long as $V_{op} \ge m$. That is to say, the opposition will not protest if its vote share is larger than or equal to what they could get after denouncing and protesting an election.

In the previous node, if there was denunciation, the government has to decide whether to concede a reform or not. If $m > V_{Op}$, the government anticipates that the opposition will protest. Therefore, government will choose to reform if and only if: $V_{Gob} - b \ge -m$, or $m \ge b - V_{Gob}$. So, government adopts reforms when doing so is cost-minimizing, namely, when the costs of reforming are lower than the cost of dealing with further protests, m. Reforms are more likely to occur if expected losses m are high relative to V_{Gob} and b.

The final decision is whether or not the opposition denounces the election to begin with. As before, if $V_{op} \geq m$ there will be no denunciation and no reform. But if $m > V_{op}$, then the opposition will denounce as long as $V_{op} + b \geq m$. Thus, the opposition denounces only when the expected benefits of protesting are ultimately preferred to its initial vote share and, at the same time, the benefits from reform are larger than the expected protest compensation.

To sum up, the electoral reform game interaction between the government and the opposition ends immediately when there is no denunciation in t_2 or when, after denunciation, there is no reform initiative and the opposition does not insist demanding it —both of these scenarios are more likely to occur after the opposition reaches a minimum vote share threshold. Conversely, the government will concede electoral reform when

doing so is less costly than facing the expected costs of protests or legitimacy losses.

With no loss of generality, this simple model can be extended to capture other features of the electoral reform game in a more nuanced way. First, we could consider a third strategy for the government in t_3 , namely, to only offer a partial or gradual reform. A partial reform will not satisfy the opposition completely but it is likely to alleviate further protests, so that in the next election the opposition will still denounce and demand another partial reform, and so on. The game can be repeated a number of times until an integral reform takes place, or up to the point where the accumulation of gradual reforms results in a sustainable electoral regime. Second, another extension of this simple setup is to make both b and m—the key parameters in the denunciation, reform and protest decisions— a function of either the type of elective office being at stake, or the opposition party's ability to exert pressure. This would allow for different types of elections having different stakes in the election reform game, so that we could expect a different impact from the election outcomes of national, legislative, or statewide races, in the demand for (and supply of) electoral reform at different levels of government.

2.1. Hypotheses

The central hypothesis of this paper is that more independent electoral institutions come about as a result of increased electoral competition. Thus, states with higher levels of electoral competitiveness will precede the emergence of more independent electoral institutes than those with lower levels of competition. The logic behind this claim is this: The more competitive elections are, the more bargaining power the opposition has relative to the incumbent party. Hence, the opposition will try to pass electoral reforms that improve the terms of competition. On the other hand, the incumbent party will also have incentives to pass electoral reform in a preventive fashion, in order to avoid further electoral losses and/or conflicts. However, electoral competition has different manifestations: vote shares, margins of victory, effective number of parties in legislative bodies, etc. Starting from a political scenario where election management bodies lack independence, the stylized framework delineated above, allows us to advance the following testable hypotheses:

- 1. Opposition party strength. The higher the opposition vote share is, namely a proxy of its bargaining power, the higher the demand for independent electoral management bodies.
- 2. Competitive elections. The more competitive a given election is, another proxy for relative bargaining power, the more likely it is that both opposition and government will agree on an electoral reform that levels the playing field.

- 3. Effective number of political parties. However, as political parties come closer to an even distribution of electoral power, the demand for electoral reform (which implies a lower b in our model) slows down or diminishes.
- 4. Governor vs. legislative or municipal races. The larger (or more concentrated) the stakes of a given election are, as in the case of a winner-takes-all elective office, the more likely it is that opposition parties will demand independent electoral management bodies.
- 5. Political parties' mobilization technology. As the opposition party's ability to mobilize resources to demand or protest elections increases (which implies a larger m in our model), the more likely it is that an electoral reform will be adopted.

3. Measuring Electoral Independence

3.1. Conceptualization

The extant literature on electoral independence is part of the broader theoretical framework on accountability, a defining feature of democracy. First, it is important to distinguish between vertical and horizontal accountability: the former refers to the means through which voters can reward or punish incumbents, either by voting for or against them in the next election (O'Donnell 1999). Horizontal accountability consists on the existence of state agencies that take action against other agents' illegal acts or omissions (O'Donnell 1999). Among such agencies we find electoral management bodies, anticorruption offices, constitutional courts, transparency commissions, ombudsmen, and central banks, among others.

For accountability agencies to be effective, they require independence from government officials and other interested actors, such as political parties. In the case of EMBs, their independence can be understood in terms of three key features: neutrality, autonomy, and separation. Neutrality implies that the electoral institution is not among the parts involved in a given conflict. Autonomy relates to the fact that the electoral body is only guided and governed by its own set of rules. Finally, separation refers to the removal of electoral governance from the control of governments or incumbent parties. It is important to emphasize the distinction between formal or de jure independence, and informal or de facto independence, which is especially crucial in the case of new and emerging democracies given the frequent a gap between formal institutions and their actual enforcement or lack thereof (Maxfield 1999). In this study, we submit that analyzing formal measures of electoral independence is a key first step before dwelling into more complex measures of de facto independence.

3.2. The Electoral Independence Index

Given the multidimensional character of independent agencies previously hinted at, there is no commonly accepted measure of electoral independence, and different authors have focused on particular aspects in order to measure it (Elklit and Reynolds 2002; Schedler 2004). On one hand, higher levels of electoral independence can be translated into more responsibilities granted to EMBs. Thus, some authors look at the specific tasks that an EMB is in charge of both before and after the election (López-Pintor 2000; Mozaffar 2002). On the other hand, one can also focus on the selection or appointment process of EMB members (Hartlyn et al. 2003; Schedler 2004). Here, the underlying assumption is that the independence of agents is compromised or limited by the incentives of the legislators or the political coalition that appointed them as members of a given EMB. Admittedly, the preferences or guid pro guos among legislators or coalitions are not always observable: for instance, a minimal winning coalition can agree to nominate a more independent agent than a unanimous coalition; but suffice it to say that smaller coalitions are less likely to appoint independent agents. Another alternative is to look not only at the appointment process, but also at the internal composition of the electoral institution and the organizational or design safeguards that guarantee independence beyond and above the appointment process (Crespo 1996).

it was examined before, the existing measures of electoral independence for the Mexican case either have conceptual limitations or consider restricted sample periods, which make them unsuitable for our task at hand. Thus, and considering the existing literature, we posit a new index of the formal independence of state electoral management bodies (institutos estatales electorales) based on year by year examination of election laws from 31 states in the period from 1990 to 2004. First, we identified and coded a number of features that the literature has identified as closely related with electoral independence: the number of non-partisan members (consejeros ciudadanos) of the EMB as well as their appointment or reelection process, the representation of political parties in the EMB, the inclusion or exclusion of state executive or legislative authorities within the EMB, the voting rights of its members, and the existence of a civil service in the institutes. We coded for each state-year in the sample period a total of nine features into either binary indicators or ordinal categories so that larger values indicate higher levels of formal independence (a detailed list of the coding of these features is in Appendix A1).

The next step was to determine if these legal features bear out a strong correlation between them so that we could consider them into a common scale or index. The Cronbach Alpha of these nine categories was 0.71, which justified including all of them in the index. Alternatively, each one of the

categories can be considered separately as a dependent variable, something that we actually do later on as a robustness check of our findings.

We then proceeded to calculate our Electoral Independence Index (EII) based on these legal features of the state EMBs. To do so, we chose to use a categorical principal components analysis (CATPCA) because, in contrast to other traditional methods, this one supports nominal and ordinal data, as in our case. In general, principal components analysis (PCA), along with factor analysis, has been widely used in the elaboration of indicators. The purpose is to find a latent factor, which is not always directly observable, by using its different manifestations in various dimensions (Larrea, 2003). Specifically, PCA assigns different weights to each variable, so that the resulting index maximizes the explained variance of the original variables. CATPCA is a dimension-reduction method, where a group of variables is analyzed in order to summarize its main variance dimensions into single normalized score(s).

In order to know how many and which ones are the relevant dimensions, we analyzed their eigenvalues. These are a measure of the total variance captured by the group of original values considered in each dimension. The highest the value, the greater is the variance each component can explain. To be kept, each dimension must have an eigenvalue greater than one (De Vaus 2002: 188). In the computation of the EII, the first dimension obtained a Cronbach's Alpha of 0.886 and an eigenvalue of 4.715, whereas the second dimension only had a Cronbach Alpha of 0.275 and an eigenvalue of 1.324. Hence, the index was calculated using only the first underlying dimension. To simplify its interpretation, we transformed the index into a 0 to 10 scale where 10 represents the highest level of electoral independence. The resulting score had a mean of 6.9 and a standard deviation of 2.9.

Figures 2 and 3 depict the evolution of the mean electoral independence index from 1990 to 2004 as well as in each of the Mexican 31 states. As the figures illustrate, there was a significant transition period between 1994 and 1997, which surround the landmark federal reform of 1996, the followed by a more steady convergence towards the end of the 90s. Figure 3 emphasizes that, even if most states follow a similar trend, the timing and evolution of each state's independence index varies considerably: some states move in one big jump while others make progress more gradually. And it is precisely this longitudinal variation that we shall seek to explain in the empirical analysis that follows.



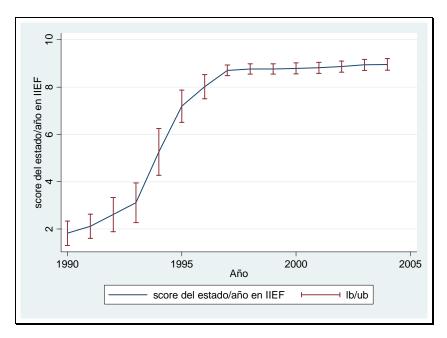
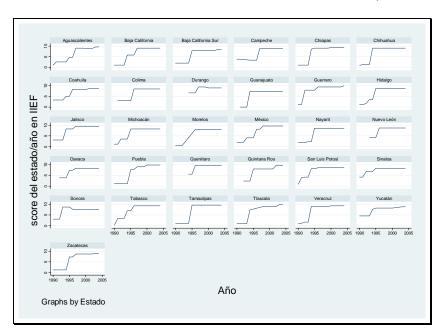


FIGURE 3. EVOLUTION OF ELECTORAL INDEPENDENCE BY STATE (1990-2004)



4. Research Design and Statistical Methods

To assess the effect of electoral competition on the evolution of electoral independence in the Mexican states from 1990 to 2004, we estimate a series of panel OLS regression models of the following form:

ElecIndep_{it} =
$$\alpha + \beta ElectComp_{it-k} + \delta Politics_{it} + \gamma SocioEco_{it} + \mu_i + \nu_t + \varepsilon_{it}$$
, (1)

where i = (1,...,N) refers to the i-th state and t = (1,...,T) refers to a given year t. The dependent variable, ElecIndepit, is measured in two different ways: First, as the Election Independence Index outlined above, in which case we use ordinary least squares regression models. Second, we also use the separate components of the index that were coded as binary or dichotomous variables, in which case we estimate maximum likelihood logit models, of the form:

$$Pr(ElecIndep_{it} = 1 \mid X) = f(\beta ElectComp_{it-k}, \delta Politics_{it}, \gamma SocioEco_{it}, \eta_{it})$$
 (2)

The set of independent variables includes the following. ElectCompit-k, is a vector of variables that measure electoral competition, where k is a lag of three or six years. Since elections are held in Mexico every three or six years, we lag the political competition variables to avoid estimating an inverse effect: that from independence to election competitiveness. Politicsit is a vector of political control variables, including the political party affiliation of the governor, local election years, divided government between state government and state congress, and turnout in gubernatorial races. These variables try to capture features of the political landscape that are not necessarily related with political competition but that may affect electoral independence nonetheless. SocioEcoit is a vector of time-varying economic and demographic control variables, including the log of state GDP in constant 1993 prices, the log of state population, and the literacy rate. These variables try to control the heterogeneity of Mexican states as well as other factors affecting the local election regime.

The specification also includes state fixed effects as well as year effects, μ_i and ν_t , respectively. This is a way of controlling for the heterogeneity between states and any other time invariant idiosyncratic state features, ranging from geographic conditions to other prevailing political or cultural traits. We include time or year effects in order to control for external factors that may affect all of the states in a particular time period. For example, the effects of presidential or midterm election years, a nationwide democratic transition, and the impact of electoral reforms at the federal level, are likely to be captured by the year effects. Moreover, both time and state fixed

effects seek to reduce omitted variable bias and therefore produce more reliable point estimators. Finally, the equation's intercept is α , and ε_{it} is the error term.

When testing the impact of electoral competition on electoral independence, endogeneity may be a concern. Just as close elections may spur demand for electoral reform, more independent EMBs can lead to more competitive elections in the future. We address such concern in two ways. First, we employ lagged values of the political competition variables to reduce the ex-post effect that is likely to exist from independent agencies to election competitiveness; that is to say, we make sure that it is the electoral competition from previous races that is used to explain the levels of electoral independence, instead of that from recent or contemporaneous elections. Second, in a number of regressions we estimate two-stage least squares (2SLS) or instrumental variable methods to get consistent estimates that isolate the effect of lagged electoral competition on electoral independence levels.

5. The Determinants of Electoral Independence

Table 1 presents descriptive statistics of our panel dataset based on information from the 31 Mexican states over the 1990 to 2004 period (465 state-year observations). The summary statistics in the table provide a guick glance of state politics in Mexico. The PRI is the dominant political force in the Mexican states during the sample period, with an average vote share of 57 percent in gubernatorial races. The PAN and PRD are the second and third state level political forces, with average vote shares of 25 and 15 percent, respectively. Clearly these vote shares have changed in recent years: between 2000 and 2004, the average vote shares for the PRI, PAN, and PRD are 45, 33 and 24 per cent. We see a similar pattern when looking at the effective number of parties in state legislatures: the sample period average is 2.6 but it ranges from 1.9 in 1990 to 3.1 in 2004. Three thirds of the state-year observations have a PRI governor, 18 per cent a PAN governor and only 6 percent had a PRD governor. Gubernatorial elections in Mexico were lopsided but increasingly competitive and volatile: the average margin of victory is 31 points, a figure that has come down to 11 per cent in 2004, but with a coefficient of variation of 0.86 throughout the period. The average turnout in Mexican local elections is 56 per cent. The disparities between states are evident when considering literacy rates, which range from 70 to 97 per cent, as well as the variation in state GDP.

¹ For clarity and convenience, Tables 1 to 5 are reported at the end of this document.

5.1. Opposition vote shares

The hypotheses stated in section III refer to different measures of electoral competition: vote shares, effective number of parties, and margins of victory, to name a few. To estimate the effect of such variables on the evolution of electoral independence in the Mexican states, we ran different specifications of equation (1) stated above. To test the hypotheses related with partisan strength, Table 2 presents estimates of the impact of partisan vote shares in gubernatorial or legislative races on state electoral independence, while controlling for a set of covariates. All regression models use robust standard errors and control for election turnout, state GDP, state population, and literacy rates; state and time fixed effects are also included.

Model 1 in Table 2 indicates that as the vote shares in governor races, lagged three years, of both the PAN or PRD increase, the current electoral independence index also rises. The estimate for the PRD is significant at the 1 per cent level, whereas that of the PAN is significant at the 10 per cent. Model 2 includes two additional controls: an indicator for governor election years and another dummy variable for states under divided government. The point estimates of model 2 imply that if the PAN and PRD increased their vote shares in 35 per cent in a given election, the electoral independence index would increase about 1 point over the next three years. Models 3 and 4 consider instead the vote shares in state legislatures. While the vote share coefficients have similar magnitudes as before, only the PRD vote share remains statistically significant at the 10 per cent.

Considered together, these results indicate that, while both PAN and PRD vote shares anticipate increases in electoral independence, votes for the PRD have a systematic impact regardless of focusing on gubernatorial or legislative races. This is consistent with Mexico's electoral history, where the PAN was more likely to participate in concertacesiones, while the PRD demanded concrete electoral reforms (Eisenstadt 2004). Finally, we also find that states with larger GDP levels are correlated with higher electoral independence. On the other hand, increases in independence are no more likely to occur in divided than unified governments. State turnout and election years do not seem to have a significant effect on electoral independence either.

5.2. Effective Number of Political Parties

Table 3 turns to another dimension of electoral competition: the effective number of parties, measured separately from the votes shares for three different types of elective offices, namely the votes cast in gubernatorial, legislative, or municipal races. Models 1, and 5 in Table 3 indicate that, as the number of effective political parties —measured in either gubernatorial or legislative races— increases, so does state electoral independence. Nonetheless, models 8 and 9 indicate that the effective number of parties in municipal races does not have a statistically significant impact on electoral

independence. These findings lend support to the hypothesis that competition in high stake races produce a larger demand for electoral reform. Governor races have high stakes because a winner takes all the benefits from holding office for the six-year duration of his term; on the contrary, legislative or municipal races produce an assortment of office holders in different districts and locations during their three-year term, thereby reducing the relative impact of electoral setbacks.

Using the effective number of parties (ENP) to measure political competition also allows us to test for a nonlinear relationship between the number of parties and electoral independence. Thus, models 2 and 3 in Table 3 include a quadratic term for the governor's ENP, while models 5 and 6 do the same for the congress' ENP. We find evidence of a concave or nonlinear relationship between the ENP in previous governor elections and electoral independence: increasing political parties have a diminishing marginal effect on independence, with a critical point found at 2.3 effective parties. When there are less than 2.3 effective parties, electoral independence is increasing in the number of parties. Figure 2 illustrates this non-linear relationship. After an ENP of 2.3, the model predicts decreasing independence levels —a result that supports our third hypothesis. Observed EII scores are non-decreasing but this is not a contradiction to the extent that the predicted confidence interval allows for non-decreasing scores, which is what we actually observe. In general, by the end of the 1990s, electoral independence stabilized with minimal changes observed afterwards. All in all, the quadratic model offers a better fit with the data than the linear specification in model 1, which predicts ever-increasing independence scores.

How do we account for this nonlinear relationship? Few states formulate electoral reforms that go above and beyond the legislation at the federal level. The 1996 electoral reform forced states to accomplish the minimal requisites that it had created for federal races. Hence, it is probable that once the basic competition conditions are met there is greater consensus around a set of rules that allows opposition parties to increase in strength without resorting to further reforms for a while.

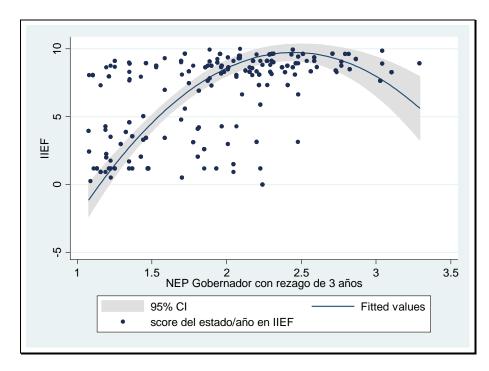


FIGURE 4. PREDICTED ELECTORAL INDEPENDENCE SCORE VS.

EFFECTIVE NUMBER OF PARTIES

What do we make of a critical point around 2.3 effective parties? As Eisenstadt (2002b) points out, as the PRI negotiated electoral results with PAN, it also created formal electoral institutions at the state level that seemed harmless at the outset. This happened when ENP was between 1 and 2. However, by combining formal and informal negotiation strategies, the PRI leaders steadily allowed for the construction of electoral rules that eventually run against themselves. In this way, independence and electoral competition simultaneously fed into each other. Once the PRD was able to enter full force into electoral competition, say with ENPs larger than 2.3, there was no need to press for further electoral independence: electoral competition could still rise, while the level of independence remained almost unchanged.

The previous results are supportive of two possible underlying mechanisms. First, from a demand side, a close competition for the governorship generates a demand for reform due to the fact that it is a zero-sum game, i.e. the winner-takes-all. Therefore, whoever loses the election has incentives to ask for the revision of electoral rules. Given that there is no way to exert power, an electoral reform is the most immediate option to assure a better competition scheme for the next election. In contrast, a close election in the legislative race will not necessarily result in a reform, because

even if a party receives few votes, it is still able to gain seats in congress through proportional representation (PR). As opposed to winner-take-all elections in governor races, PR in legislative races inhibits or diminishes the demand for electoral reform because in this case, all parties receive a positive payment.

Secondly, from the supply side, a governor that is elected as a result of a close race has incentives to negotiate a reform as a means to gain legitimacy, and avoid political protests. In addition, given that Mexican governors have been far more powerful than local congresses, they also have been able to impose or veto electoral reforms to their legislatures. Thus, it may be possible that it is not the congress' fragmentation per se what defines the passage of reforms, but rather what happens at the governorship level. The difference between governors' and legislatures' relative power may also explain the fact that the divided government appears to have no impact on electoral independence.

Since more independent electoral bodies can also lead to more competitive elections in the future, our measures of electoral competition may be correlated with the error term in our regression models, which could produce biased estimates. We address this endogeneity concern with 2SLS or instrumental variable models. A suitable instrument is a variable that is correlated with the suspect explanatory variable, electoral competition in our case, but that is not correlated with the error term in the original regression model. We posit that the effective number of parties from municipal contests is an acceptable instrument: it is highly correlated with other measures of political competition but, as models 8 and 9 in Table 3 indicate, has no significant impact on electoral independence. Accordingly, model 4 presents 2SLS estimates that use municipal ENP, with a three and six-year lag, as instruments for governor's ENP. We find results consistent with previous models: electoral independence increases with additional effective parties.

5.3. Margins of Victory

Table 4 focuses on another competition measure: the lagged margin of victory in governor races. Models 1 and 2 provide OLS estimates that indicate that lower the margin of victory in gubernatorial races, implying a more competitive election, are correlated with higher levels of independence, controlling for the same covariates as in previous models. Since margins of victory can also be correlated with the error term, model 3 presents 2SLS estimates that use municipal ENP as an instrumental variable. As before, we find that narrower margins of victory are associated with more electoral independence. These results lend support to the hypothesis that competitive elections make electoral reforms more likely by balancing out the relative bargaining power of political parties.

Models 4 and 5 in Table 4 test the hypothesis that the partisan affiliation of state governors affects the level electoral independence. Results indicate that, all else equal, states with a governor from the PRD have higher levels of electoral independence; more precisely, the Ell score is 0.6 points higher for this group. Conversely, we do not find evidence that states with a governor from the PAN have different independence levels than those states with PRI governors. This result also means that not all opposition parties are as likely to advance electoral reforms once they reach an elective office —a result that coincides with the fact that, historically, the PRD has exerted more pressure than the PAN in demanding electoral reform (Eisenstadt 2004). Finally, model 6 estimates the timing of increases in electoral independence by using four indicator variables that track the gubernatorial election year and the three prior years. This model indicates that electoral reforms that increase electoral independence are more likely to occur three years after an election, that is, halfway during a governor's term.

5.4. Electoral Independence Components

Finally, Table 5 tests the robustness of our findings by using three different definitions of the dependent variable, based on three key components of the Electoral Independence Index: the presence of the executive in the General Council (Models 1 and 2), the reelection of citizen counselors (Models 3 and 4), and the existence of an electoral civil service (Models 5 and 6). Since these are binary dependent variables, we estimate logit regressions with a linear time trend and regional fixed effects as stated in equation (2) above.

We find that models based on the electoral competition in governor races have greater explanatory power than those based on legislative competition (Models 2, 4 and 6). Notice that the relation between electoral competition and independence is also nonlinear. If we analyze the evolution of the state electoral institutes, following that of the IFE, one of the first changes made was the elimination of the executive power representatives in the General Council. This was the first and most important reform in the construction of electoral independence, which also explains the fact that legislative competition significantly affects this outcome. It was a reform that required an extended political consensus between the main political actors. Divided government also increases the likelihood of this reform, suggesting that an even distribution of power was needed to approve such a fundamental reform.

Later on, allowing for the reelection of electoral counselors was included in the design of Mexican EMBs. This was a natural step, given that now political parties were able to participate more actively in the appointment process. The electoral civil service is one of the most recent reforms in state EMBs. Thus, its introduction was made when electoral competition was already higher than before. Models 1 to 3 and 5 also find support for a

nonlinear relationship between ENP and the binary measures of electoral independence.

To summarize, our goal in this paper is to test the general hypothesis that increased political competition leads to more independent electoral management bodies. Since electoral competition can be measured in a number of ways, we specifically estimate the effect of opposition party strength, the effective number of parties, margins of victory, and governor's partisanship. Not all types of electoral competition result in greater electoral independence. We find that increased political competition in governor or state legislative races is correlated with more independent EMBs, whereas political competition in municipal races does not have such an impact. Increased political competition from the PRD elicits more independent bodies than that from the PAN. Finally, we find evidence that political parties have a diminishing marginal impact on electoral independence levels. These results are robust to the inclusion of a number of covariates, two way fixed effects, as well as instrumental variable estimation.

Conclusions

This article seeks to contribute to the literature on electoral governance and the role of electoral management bodies (EMB) in democratization processes. So far, most of the literature has dealt with the classification of electoral rules and its consequences, noting that the acceptance of electoral results greatly depends on the independence of electoral institutions (Hartlyn et al. 2003; Rosas 2006). To our knowledge, however, systematic studies of the determinants of electoral independence are rather scarce. We exploit the longitudinal variation of the EMBs in the Mexican states to uncover some of the mechanisms behind electoral reform, and to assess the determinants of electoral independence in Mexico.

We posit a simple model where increased political competition in local elections leads to more independent electoral management bodies through various mechanisms at different stages of a democratization process — emphasizing that competition in municipal, state legislature, or gubernatorial elections, do not produce the same incentives among political parties to demand or concede electoral reform. In order to test some of the hypotheses derived from our model, we develop an original measure of electoral independence (based on the analysis of the state electoral legislation), and use panel data from the 31 Mexican states during the 1990 to 2004 period.

Since electoral competition can be measured in a number of ways, we estimate the effect of opposition party strength, the effective number of parties, margins of victory, and governor's partisanship. We find that increased political competition in governor or state legislative races is associated with more independent electoral institutions, whereas political competition in municipal races does not have such an impact. Increased political strength from the PRD elicits more independent EMBs than that from the PAN. We also find evidence that political parties have a diminishing marginal impact on electoral independence levels. Our empirical results are robust to the inclusion of a number of political and socioeconomic covariates, to state and year fixed effects. Moreover, we address the potential endogeneity between political competition and electoral independence with 2SLS or instrumental variable estimation techniques.

Our findings suggest a number of future lines of research. First, it is important to develop a measure of *de facto* electoral independence, in order to analyze the potential disparity between the formal or legal independence and actual electoral practices. Second, to explore why gubernatorial races have a larger impact on electoral reform than legislative or municipal races.

Finally, although the work presented here focuses on state electoral institutions, we can try to extrapolate to the national arena. Since the landmark electoral reform of 1996, Mexico has had a divided government and

a multi-partisan Congress, eleven years passed without any substantial electoral reform. Consistent with the results shown here, it was only after an extremely close presidential election in 2006, that a significant demand for electoral reform emerged and later became into law. Whether or not the 2007 election reform, and its spillover effects throughout the states, will translate into greater or lower independence of the federal and state-level EMBs is still an open empirical question.

TABLE 1. POLITICAL COMPETITION AND INDEPENDENCE OF ELECTORAL MANAGEMENT BODIES IN THE MEXICAN STATES, 1990 - 2004

Descriptive statistics							
		Std.					
	Mean	dev.	Min	Max			
Electoral independence index	6.902	2.965	0.003	9.991			
Vote shares							
	0.575	0.1/7	0.270	0.073			
PRI governor vote share	0.575	0.167	0.278	0.963			
PAN governor vote share	0.252	0.179	0.000	0.581			
PRD governor vote share	0.152	0.160	0.000	0.561			
Effective number of parties							
ENP in governor race	2.166	0.497	1.077	3.292			
ENP in state congress races	2.566	0.634	1.251	4.731			
ENP in municipal races	2.628	0.643	1.297	6.467			
Party and closeness of governor ra	ce						
PRI governor =1	0.748	0.435	0	1			
PAN governor =1				· ·			
•	0.183	0.387	0	1			
PRD governor =1	0.058	0.234	0	1			
Margin of victory in governor race	0.310	0.267	0.010	0.948			
Non-partisan covariates							
Gubernatorial election year = 1	0.198	0.399	0	1			
Divided government = 1	0.202	0.402	0	1			
Turnout in governor race	0.565	0.097	0.327	0.771			
State level controls							
Log state GDP (in 1993 prices)	17.010	0.750	15.525	18.904			
Log state obt (iii 1773 prices)	6.290	0.730	5.502	7.117			
Literacy rate	0.887	0.062	0.696	0.966			

Number of observations = 465, number of states = 31, number of years = 15. Electoral independence is a categorical principal components index based on

the variables listed in Appendix A.

TABLE 2. Partisan vote shares and state electoral independence in Mexico, 1990-2004

Dependent variable	OLS	OLS	OLS	OLS
Electoral independence index	(1)	(2)	(3)	(4)
PAN governor vote share ~	1.028*	1.134*		
	[0.560]	[0.593]		
PRD governor vote share ~	1.866***	1.917***		
	[0.650]	[0.665]		
Other pp governor vote share ~	-0.087	-0.113		
	[0.067]	[0.079]		
PAN congress vote share ~			1.183	1.137
			[0.784]	[0.819]
PRD congress vote share ~			1.838**	1.759*
			[0.897]	[0.912]
Other pp congress vote share ~			0.056	0.064
			[0.138]	[0.145]
Divided government = 1		0.09		0.083
		[0.170]		[0.173]
Gubernatorial election year = 1		0.20		0.143
		[0.180]		[0.178]
Turnout in governor race	0.849	0.563	0.784	0.528
	[0.952]	[0.982]	[0.961]	[0.991]
Log state GDP (1993 prices)	3.292***	3.381***	3.296***	3.365 * * *
	[1.218]	[1.252]	[1.218]	[1.245]
Log state population	5.364	4.709	4.803	4.266
	[3.772]	[3.849]	[3.863]	[3.932]
Literacy rate	15.11	17.539	14.081	15.985
	[11.186]	[11.265]	[11.251]	[11.489]
Constant	101.182**	100.588**	-96.870***	-96.204***
	[26.309]	[26.503]	[26.851]	[27.033]
Observations	399	393	399	393
Number of states	31	31	31	31
Within group R-squared	0.85	0.85	0.85	0.85

Robust standard errors in brackets. Variables with a (\sim) symbol are lagged 3 years. All regression models include state and year effects

^{*} significant at 10% level; ** significant at 5%; *** significant at 1%

TABLE 3. EFFECTIVE NUMBER OF PARTIES AND STATE ELECTORAL INDEPENDENCE IN MEXICO, 1990-2004

Dependent variable: Electoral independence index	OLS (1)	OLS (2)	OLS (3)	2SLS (4)	OLS (5)	OLS (6)	OLS (7)	OLS (8)	OLS (9)
ENP governor race ~	0.346*	3.210**	3.430**	1.187***	` '	` '	` ` `	` ` `	
	[0.177]	[1.368]	[1.408]	[0.393]					
(ENP governor)^2 ~		-0.693**	-0.745**						
		[0.317]	[0.327]						
ENP state congress ~					0.421**	1.264*	1.254*		
					[0.184]	[0.709]	[0.726]		
(ENP state congress) ^2 ~						-0.167	-0.172		
						[0.115]	[0.118]		
ENP municipal races ~								0.342	0.333
								[0.229]	[0.237]
Divided government = 1			0.145	0.077			0.081		0.11
			[0.157]	[0.224]			[0.162]		[0.164]
Gubernatorial election year = 1			0.203	0.242			0.119		0.142
			[0.177]	[0.183]			[0.178]		[0.181]
Turnout in governor race	1.066	1.074	0.729	0.81	0.888	0.898	0.66	1.029	0.739
	[0.936]	[0.944]	[0.982]	[0.994]	[0.926]	[0.925]	[0.962]	[0.936]	[0.974]
Log state GDP (1993 prices)	3.032**	3.541***	3.722***	4.250***	3.133**	3.338***	3.421***	3.113**	3.218**
	[1.210]	[1.218]	[1.242]	[1.413]	[1.232]	[1.242]	[1.268]	[1.267]	[1.288]
Log state population	4.998	5.004	4.376	5.134	4.034	4.054	3.612	4.129	3.614
	[3.717]	[3.663]	[3.710]	[4.290]	[3.822]	[3.860]	[3.926]	[3.863]	[3.925]
Literacy rate	14.052	10.756	13.235	10.539	11.927	10.06	12.099	13.566	15.807
	[11.259]	[10.925]	[11.030]	[10.826]	[11.530]	[11.889]	[12.167]	[11.523]	[11.743]
Constant	-94.079**	*102.440* *	-99.235***	112.830**	-87.962**	°-90.807**	-91.065***	-89.585***	-89.920***
	[25.886]	[24.958]	[25.696]	[31.296]	[26.684]	[26.859]	[27.200]	[26.537]	[26.809]
Observations	399	399	393	368	399	399	393	398	392
Number of states	31	31	31	31	31	31	31	31	31
Within group R-squared	0.85	0.85	0.85	0.82	0.85	0.85	0.85	0.85	0.85

Robust standard errors in brackets. Variables with a (~) symbol are lagged 3 years.

All regression models include state and year effects. Instruments in model 4: municipal ENP in t-3 and t-6.

^{*} significant at 10% level; ** significant at 5%; *** significant at 1%

TABLE 4. ELECTORAL COMPETITION IN GOVERNOR RACES AND STATE ELECTORAL INDEPENDENCE IN MEXICO, 1990-2004

Dependent variable Electoral independence index	OLS (1)	OLS (2)	2SLS (3)	OLS (4)	OLS (5)	OLS (6)
Margin of victory governor ~	-0.940**		-3.203***	(')	(0)	(0)
	[0.395]	[0.401]	[1.025]			
PAN governor =1 ~				0.2	0.267	
				[0.213]	[0.209]	
PRD governor =1 ~				0.528*	0.657**	
				[0.278]	[0.313]	
Divided government = 1		0.1	0.041		0.117	0.085
		[0.161]	[0.228]		[0.168]	[0.160]
Gubernatorial election year = 1		0.211	0.256		0.19	0.201
		[0.178]	[0.185]		[0.176]	[0.177]
Gubernatorial election year in t-1						-0.266
						[0.168]
Gubernatorial election year in t-2						0.092
						[0.203]
Gubernatorial election year in t-3						0.479***
						[0.151]
Turnout in governor race	0.99	0.669	0.638	0.934	0.58	0.909
	[0.945]	[0.983]	[1.009]	[0.939]	[0.972]	[0.972]
Log state GDP (1993 prices)	3.289***	3.455***	5.139***	2.605**	2.674**	2.841**
	[1.211]	[1.234]	[1.497]	[1.248]	[1.289]	[1.242]
Log state population	4.875	4.244	4.547	4.918	4.324	5.915
	[3.711]	[3.757]	[4.314]	[3.859]	[3.909]	[3.866]
Literacy rate	13.045	15.317	7.389	16.341	19.178*	19.285*
	[11.115]	[11.179]	[11.100]	[11.204]	[11.341]	[11.410]
Constant	-95.549***	-91.669***	115.210**	87.781***	-87.536**	*100.692* * :
	[25.903]	[26.705]	[32.680]	[26.984]	[27.342]	[27.335]
Observations	399	393	368	399	393	393
Number of states	31	31	31	31	31	31
Within group R-squared	0.85	0.85	0.81	0.85	0.85	0.85

Robust standard errors in brackets. Variables with a (~) symbol are lagged 3 years.

All regression models include state and year effects. Instrument in model 3: municipal ENP in t-3 and t-6.

^{*} significant at 10% level; ** significant at 5%; *** significant at 1%

Table 5. Political competition and state electoral independence, 1990-2004

DEP. VAR:	Ехеситі v	E IN EMB	COUNSELOR REELECTION		ELECTORAL C	IVIL SERVICE
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ENP GOVERNOR	8.93		6.727		9.837	
3 YEAR LAG	[2.427]***		[1.987]***		[3.087]***	
(ENP	-2.516		-1.515		-1.887	
COVERNOR) ^ 2 3 YEAR LAG	[0.583]***		[0.458]***		[0.699]***	
ENP CONGRESS	[0.000]	6.034	[000]	-0.505	[0.077]	-0.248
3 YEAR LAG		[2.135]***		[1.443]		[2.512]
(ENP		-1.507		0.143		0.148
CONGRESS) ^ 2 3 YEAR LAG		[0.434]***		[0.277]		[0.509]
TURNOUT IN	-2.127	[0.434]	1.508	[0.277]	0.986	[0.304]
GOVERNOR RACE	[1.948]		[1.637]		[2.026]	
GOVERNOR	-0.209		-0.481		0.205	
ELECTION YEAR	[0.408]		[0.324]		[0.444]	
TURNOUT IN	[0.400]	-1.589	[0.324]	1.903	[0.444]	0.333
LEGISLATIVE						
ELECTION LEGISLATIVE	The state of the s	[1.607]		[1.211]		[1.552]
ELECTION YEAR		0.229		0.172		0.237
DIVIDED		[0.356]		[0.264]		[0.347]
GOVERNMENT	1.097	0.613	-0.126	-0.235	-0.522	0.166
LOG STATE GDP	[0.462]**	[0.452]	[0.324]	[0.315]	[0.467]	[0.438]
LOG STATE GDP	-3.123	-2.485	-0.087	-0.018	0.694	0.397
LOG STATE	[0.769]***	[0.737]***	[0.509]	[0.478]	[0.699]	[0.616]
POPULATION	6.459	5.366	1.797	1.971	1.057	2.677
LITERACY RATE	[1.780]***	[1.708]***	[1.198]	[1.149]*	[1.751]	[1.533]*
LITERACTRATE	10.498	11.88	-8.659	-4.087	30.468	25.124
TIME TREND	[5.641]*	[5.813]**	[4.227]**	[4.079]	[6.933]***	[6.102]***
TIME IKEND	0.674	0.675	0.15	0.164	0.192	0.271
CONSTANT	[0.089]***	[0.085]***	[0.050]***	[0.046]***	[0.065]***	[0.062]***
CONSTANT	-1,345.96	-1,352.66	-309.634	-337.106	-435.32	-585.611
OBSERVATIONS	[176.2]***	[169.8]***	[99.9]***	[90.7]***	[130.2]***	[124.9]***
	369	370	369	370	364	365

Logit estimates with robust standard errors in brackets. All regression models include regional effects.

* significant at 10% level; ** significant at 5%; *** significant at 1%

Appendix A

Table A1. Coding of the Electoral Independence Index (EII) 2

Variable	DESCRIPTION	Coding
COUNSELORS	NUMBER OF CITIZEN COUNSELORS IN THE GENERAL COUNCIL	= Number of citizen counselors
AUTHORITY	APPOINTMENT AUTHORITY	0 = Executive / No citizen counselors
		1 = Executive + Legislative
		2 = LEGISLATIVE
EXECUTIVE	Presence of the executive power in the General Council	0 = Yes
		1 = No
LEGISLATIVE	REPRESENTATION FORMULA OF THE LEGISLATIVE	1 = Three representatives of the legislative
	BRANCH IN THE GENERAL COUNCIL	MAJORITY AND ONE OF THE MINORITY
		2 = Two representatives of the legislative
		MAJORITY AND ONE OF THE FIRST MINORITY
		3 = Two representatives of the legislative
		MAJORITY AND ONE OF THE MINORITY/MINORITIES
		4 = Two representatives of the legislative
		MAJORITY AND A BROADER REPRESENTATION OF THE
		MINORITY / MINORITIES
		5 = One representative of the majority and
		ONE OF THE MINORITY
		6 = One for each legislative fraction
		7 = None
PARTIES	REPRESENTATION OF POLITICAL PARTIES IN THE	O = Proportionality formula that over
	GENERAL COUNCIL	REPRESENTS THE MAJORITY PARTY.
		1 = One per political party
VOTE		O = ALL (INCLUDING REPRESENTATIVES OF THE
	MEMBERS OF THE COUNCIL WITH RIGHT TO VOTE	EXECUTIVE AND LEGISLATIVE BRANCHES, POLITICAL
		PARTIES AND COUNSELORS)
		1 = ALL, except for parties with conditioned
		REGISTRY
		2 = All, except political parties
		3 = Only citizen counselors
PRESIDENT	ELECTION OF THE GENERAL COUNCIL'S PRESIDENT	0 = ELECTED BY THE EXECUTIVE POWER
		1 = ELECTED BY THE LOCAL CONGRESS
		2 = ELECTED BY THE MEMBERS OF THE COUNCIL
REELECTION	REELECTION	0 = No
		1 = YES
SPE	ELECTORAL CIVIL SERVICE	O = No
		1 = Yes

 $^{^{\}rm 2}$ Higher values represent higher levels of electoral independence.

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