

IS ALL COMPETITION GOOD? PARTY SYSTEMS AND PUBLIC GOOD PROVISION IN MEXICO'S PROVINCIAL GOVERNMENTS

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At a theoretical level, democracy and decentralization have both been associated with welfare-enhancing social policies. Democracy is routinely linked to increased redistribution and provision of public goods. Similarly, an extensive body of scholarship suggests that decentralization leads to increased efficiency in the delivery of public goods and services because local governments are better informed about citizens' preferences.

Democracy and decentralization are also seen as mutually reinforcing, especially by scholars in the liberal tradition who argue that decentralization deepens democracy by devolving power to local governments, and increasing government accountability through sub-national elections. At the same time, the effects of decentralization on the nature and quality of government remain very much open to question. Empirical evidence suggests that decentralization cannot be viewed as a neutral device because the political conditions that vary from country to country can enhance or constrain its intended effects. This paper looks at patterns of public resource allocation in Mexico's provincial governments in light of increased political competition. Preliminary evidence supports the contention that variation in government spending is not sufficiently explained by electoral competition itself. It is also necessary to consider the structure of competition, when electoral pressures create incentives for politicians at the sub-national level to divert public resources for electoral purposes.

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With the highest per capita income in Latin America, Mexico is firmly established as a middle-income country, but it still faces huge gaps between rich and poor, north and south, urban and rural.

-----World Bank, Mexico Country Brief, September 2006

Introduction

In the course of the last two decades Mexico has undergone a radical democratization, however over 40% of its population still lives below the poverty line. As noted by the World Bank brief cited above, the economic, regional and geographic disparities in this country are vast, but what is most important is that they also tend to juxtapose. How can we explain the prevalence of these dissimilarities? Mexico, like many other developing countries, has adopted specific institutions under the belief that they would help improve overall levels of welfare. Unfortunately these implementations have rendered mixed and sometimes negative results. Such is the case of decentralization, which over the past two decades has been portrayed as a panacea for the problems of development. After a clear endorsement of this view from the World Bank and the IMF, we witness an increasing worldwide trend to devolve administrative and policymaking responsibilities to local and provincial governments (Dethier 2000). Decentralization programs have been introduced in Brazil, Mexico, China, India, South Africa and Uganda, among other countries (Bardhan and Mookherjee 2000).

The central expectations of decentralization advocates were that sub-national elections and local level decision-making would yield welfare-enhancing outcomes through better quality governments, improvements in public good provision, and a policy flexibility that responded to the specific needs of the heterogeneous constituencies (Shah 1994; Oates 1977). These expectations were based on normative arguments about the beneficial effects of decentralization and democracy for social policy and public good provision (Bueno de Mesquita et al. 2003; Oates 1999, 1972; Bardhan 1997; Dasgupta 1993). Notwithstanding, empirical evidence suggests that effects of decentralization on the quality of government remain very much to open question. Important studies have found that political decentralization in fact complicates democratic accountability by making it difficult for citizens to know what level of government is responsible for policies (Gélineau and Remmer 2005). Government “capture” by local elites is also prevalent in decentralized systems (Gibson 2005; Hiskey and Seligson 2003; Krishna 2003; Galasso

and Ravallion 2001) allowing public resources to be diverted to vote-buying or clientelistic practices (Krishna 2003; Galasso and Ravallion 2001; Tanzi 2000).

Research on the effects of decentralization on social policy has advanced as the different dimensions of decentralization have been more clearly spelled out. The works by Schneider (2003) and Von Braum and Grote (2000) were pioneering in differentiating between political, administrative, and fiscal decentralization, and exploring their independent and sometimes mutually contradictory effects on government spending and specific indicators of poverty reduction¹. Their findings underscore the neutral (in the case of Von Braum and Grote) or even detrimental effects (in the case of Schneider) of state and local government elections on the welfare of the poor, thus lending support to skeptics of decentralization. The mechanisms identified point to the creation of perverse political incentives in second and third tiers of government (Wibbels 2005; Rodden 2004, 2002), which exhibit electoral logics distinct from and sometimes antithetical to the interests of other levels of government.

Added to these concerns are claims that non-competitive party systems at the sub-national level are reinforced by the delegation of responsibilities and resources from the center to the periphery (Gervasoni 2006; Gibson 2005; Hiskey 2005; Eaton 2004; Montero and Samuels 2004; O'Neill 2003). Hegemonic parties at the local level use the resources transferred from the center to engage in patronage and clientelistic practices that allow them to defend themselves from competition from other parties, as evidenced by recent literature on Argentina, Mexico and Venezuela (Magaloni et al. *forthcoming*; Rosas and Hawkins *forthcoming*; Stokes 2005; Keefer 2005, 2003; Medina and Stokes 2002). These vote-buying practices may result in vicious poverty cycles that are difficult to break (Perry et al. 2006).

Thus, although devolution of policymaking responsibilities to lower levels of government is intended to improve the fit between the preferences of citizens and public policy, in practice the effects of decentralization are highly dependent on local-level conditions (Crook 2003). Different degrees of democratic accountability may exist within a single country (Gervasoni 2006; O'Neill 2003), and these differences may be reinforced

¹ The literature on fiscal federalism had been tapping into this point long before the cited studies, but the latter present the first instances in which the different dimensions of decentralization are associated with specific causal effects on poverty reduction and social policy.

by political decentralization (Gibson 2005). When democracy is attenuated at the local level, the decentralization of policy making authority may undermine the welfare of citizens.

Consequently, the interaction between decentralization and existent political constellations at the local level can yield widely varying effects. Electoral pressures may create incentives for second and third tier level politicians to divert public resources for electoral purposes, increasing corruption and undermining growth (Treisman n.d.; Rose-Ackerman 1997). In addition, non-competitive party systems at the local level may take advantage of delegation and financing from the central government to consolidate systems of weak electoral accountability, characterized by a lack of provision of public goods and the consolidation of one-party domination at the local level.

The strategic calculus of sub-national politicians in shaping social policy may thus depart in significant ways from the expectations of the literature on decentralization and poverty reduction, especially in contexts where democratic practices at the national level do not necessarily prevail at intermediary or local levels of governance. The literature on decentralization and democracy has failed to recognize that the decisions made by politicians at the local level may vary considerably not only with partisanship but also with contextual conditions, which may differ in important ways across levels of governance with important consequences for social policy and poverty alleviation.

This paper provides an initial look at this debate by analyzing expenditure patterns of Mexican state governments as a result of increased levels of competition. Given that the patterns of competition and competitiveness are heterogeneous across states, it is possible to explore the effects of partisan differences diachronically and cross-sectionally. The main contention of this paper is that government spending is not sufficiently explained by electoral competition itself. It is also necessary to consider the type of competition that exists to fully account for variation in government spending. The following section presents a brief discussion of the literature on decentralization, party competition and social policy as well as the unanswered questions that need to be addressed. The third section draws upon this literature to formulate hypotheses for the case of Mexico. The fourth section provides preliminary empirical evidence to test these hypotheses. The final section concludes by suggesting further research paths.

Decentralization and Government Spending: Additional Concerns

The lack of correspondence between theoretical expectations and empirical evidence regarding the effects of decentralization on the nature and quality of government has yet to be resolved. The mediating role that local-level conditions play on the impact of decentralization needs to be studied in detail, particularly when dealing with political decentralization. Two bodies of literature provide important insights on these issues: the literature on distributive politics, which explores the incentives facing left- and right- wing parties to follow different spending strategies (Alesina, Roubini and Cohen 1999; Boix 2001, 1998; Alesina and Rosenthal 1995; Hibbs 1977); and the literature on clientelism, which examines the way in which citizens' dependence on public goods creates opportunities for parties monopolizing government resources to engage in clientelistic exchanges (Magaloni, Diaz-Cayeros and Estevez *forthcoming*; Keefer 2005; Keefer and Vlaicu 2005; Diaz-Cayeros and Magaloni 2004; Medina and Stokes 2002).

The literature on social policy suggests that the impact of decentralization and democracy is likely to be conditioned by political competition and partisan ideology (Chhibber and Nooruddin 2004; Alesina and Roubini 1999; Boix 1998; Hibbs 1977). Contributions from this strand of works link left-oriented parties to redistributive politics and social spending, and right-oriented parties to macroeconomic stability. However, limited empirical work has been conducted on the impact of partisanship at the sub-national level or outside of the advanced industrial nations.

The literature on clientelistic or vote-buying politics is particularly suggestive with respect to the impact of party competition in poverty-ridden new democracies (Magaloni and Diaz-Cayeros *forthcoming*; Keefer 2005; Stokes 2005; Medina and Stokes 2002). The basic contention of these studies – that clientelism is more likely to emerge and survive in poorer areas – poses a direct challenge to the idea that democracy has a beneficial effect on poverty relief, and establishes a strong rationale for focusing on the sub-national level of analysis. Thus, although scholars have identified an increase in public good provision as electoral competitiveness rises (Persson and Tabellini 1999), electoral competition may also exacerbate clientelistic spending, reducing the provision of public goods, especially in the presence of a dominant party with monopoly control over public resources (Magaloni,

Diaz-Cayeros and Estevez *forthcoming*; Remmer *forthcoming*; Rosas and Hawkins 2006; Stokes 2005; Diaz-Cayeros and Magaloni 2004; Medina and Stokes 2002; Hiskey 2000; Diaz-Cayeros and Martinez-Uriarte 1997). Evidence from sub-national units shows that spending allocations exhibit a curvilinear relationship with degree of competitiveness². Political competition is thus systematically associated with variation in the allocation of public spending.

The available literature thus leaves the following questions largely unanswered. First, how do political constellations at the sub-national level shape patterns of public good provision and government spending? Second, what is the effect of increased competition on the behavior of incumbents that can monopolize public resources and divert them for electoral purposes? Finally, how does the structure of competition affect public good provision beyond the national level when conditions for prevalent clientelistic practices are propitious? This paper contends that issue is not merely the number of parties competing in a system, but the way in which parties build electoral support – via clientelistic or programmatic appeals – at different levels of government. Neither electoral competition nor a significant left-wing presence is a guarantee of poverty reduction or social policy implementation. What matters is less the ideology of governing parties or the competitiveness of the party system than the strategies that parties utilize to compete for political power. Where these strategies are predominantly clientelistic, social policy will be framed along targeted lines, regardless of the level of electoral competition or the partisan ideology of the key electoral contenders.

State- Level Politics in Mexico

The case of Mexico represents a very interesting scenario to examine the way in which state governments allocate resources in response to changes in partisan competition because the PRI-dominated arena was not challenged at the state level until 1989. Appendix A shows the evolution in the number of parties in provincial congresses as

² In the case of Argentina, Remmer (*forthcoming*) finds that electoral support for the traditionally clientelistic Peronist party (PJ) at the provincial level exhibits a U-shaped relationship with spending on personnel, indicating that only low and high levels of support of this party lead to the distribution of patronage. Interestingly enough, the inverse relationship is found when looking at social spending, indicating that broad public goods are delivered in middle-levels of competition. Similarly, Diaz-Cayeros and Martinez-Uriarte (1997) uncover a non-monotonic relationship between social works expenditures on a sample of roughly 12% of Mexican municipalities.

measured by the Laakso-Taagepera Index for each Mexican state for the period 1990-2004 (solid line)³ and the winning differential in governor elections for the same period (dotted line). Even though the patterns for each state vary significantly, we see that there exists overall a clear movement towards more competitive elections at the state-level. In addition, by 2004, a little over half of the Mexican provinces had experienced turnover at least once⁴. It is also important to note that, with only a few exceptions – namely, Chiapas, Nayarit, and Yucatan, where the PAN and the PRD have presented common candidates – most states exhibit a bipartisan competition between the traditionally dominant PRI and the PAN or the PRD.

The federalist arrangement in Mexico provides for revenue sharing across levels of government in a context of state and municipal level elections, which allows us to test some of the mechanisms outlined above. It is important to underscore that all sub-national units – states and municipalities – in this country rely on central government transfers to finance at least 50% of their budgets (Sour 2004). Some of these transfers – *aportaciones* – are disbursed following a compensatory logic and the federal government requires them to be spent on specific rubrics. The rest of the transfers – *participaciones* – follow a non-compensatory logic and can be spent freely. In addition, several modifications have been introduced to define intergovernmental transfers since 1990s. In 1998, with the creation of *Ramo 33*, we observe a general trend to make intergovernmental transfers between the central government and the states and municipalities more transparent although some caveats still exist⁵. Today health and education spending has been decentralized and most of these expenditures are controlled at the state level.

To date, there exists a great deal of discretion in the way state governments allocate their resources in spite of the recent efforts to improve the local organisms of accountability that supervise state budgets (Pardinas, 2006; Scott, 2004). When carefully reviewing state budgets from 2006 and 2007 we observe great heterogeneity in the way states report their expenditures. Some disaggregate resources transferred from the central government and separate expenditures on salaries from expenditures on services. However,

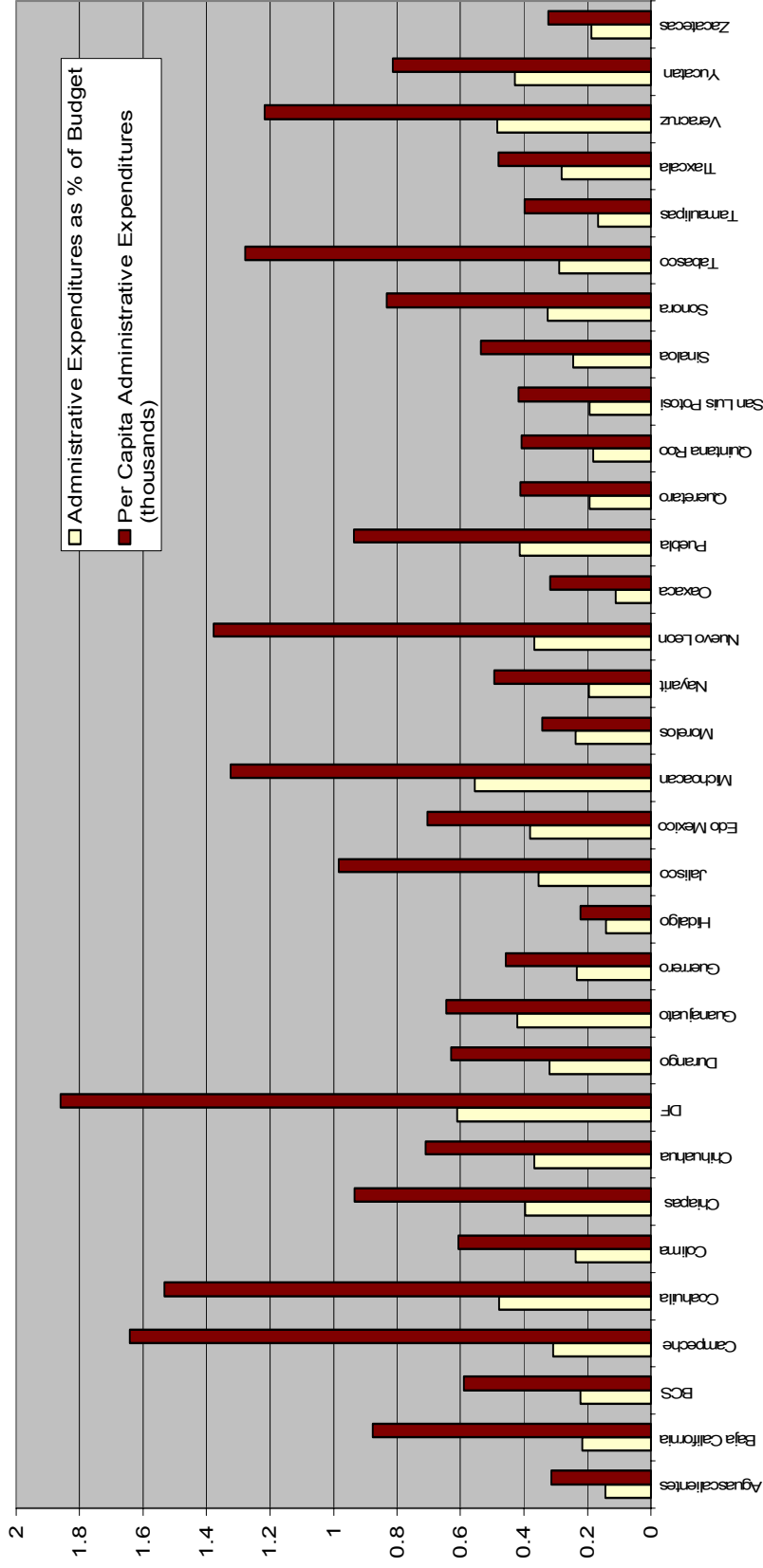
³ Mexico City is excluded from this list because elections for mayor were held for the first time until 1997.

⁴ Campeche, Coahuila, Colima Durango, Guerrero, Mexico, Oaxaca, Puebla, Quintana Roo, Sinaloa, Sonora, Tabasco, Tamaulipas, and Veracruz are the exceptions.

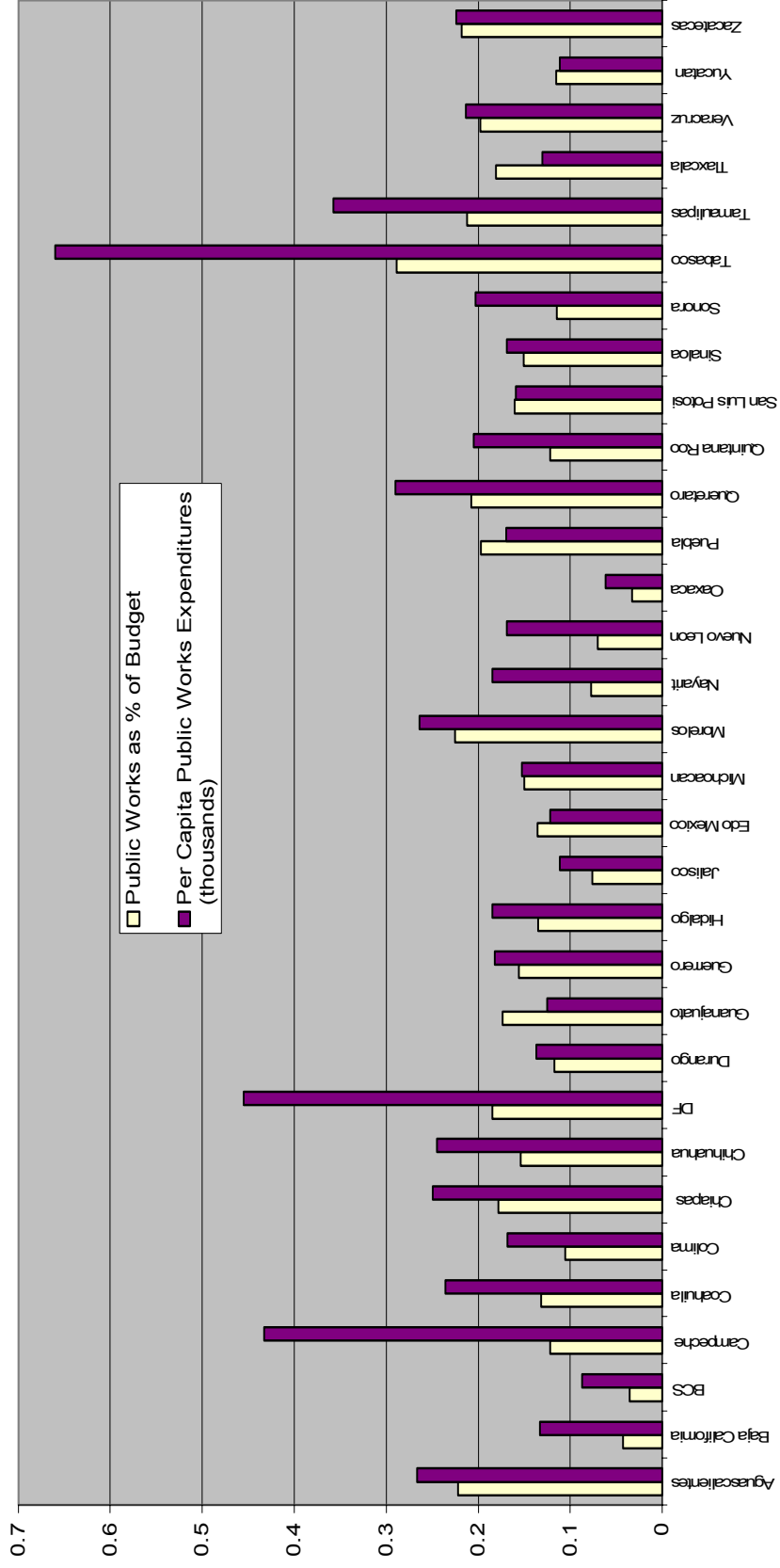
⁵ Specifically, transfers from the states to the municipalities are not entirely homogenized and the mechanisms of accountability have not been strengthened (see Scott, 2004).

others aggregate all expenditures on general development rubrics without distinguishing administrative from other types of expenditures. Data series on government spending by comparable categories is available from the Mexican Census Bureau (INGEI) for the period from 1990-2004. The categories of interest for this paper refer to aggregate levels of administrative expenditures and public works expenditures. Unfortunately, the latter comprises several categories not defined clearly for the source, but I will use them as proxies for public good provision, as explained below. Graph 1 shows average per capita administrative expenditures for each state and average administrative expenditures as a share of overall expenditures. Graph 2 exhibits the same information for public works expenditures. It is clear from these figures that there exists a significant amount of variance in both indicators.

Graph 1. Average Administrative Expenditures for the Mexican States, 1990-2004



Graph 2. Average Public Works Expenditures for the Mexican States, 1990-2004



We also observe that the composition of the budgets exhibit significant variation across the entire space in the relation between administrative expenditures and public works expenditures (Graph 3).

Graph 3. State Administrative Expenditures/ Public Works Expenditures, 1990-2004



I contend that these variations can be partly explained by the structure of party competition at the state level. As mentioned above, aside from a few exceptions and from the fact that at the national level competition tends to be multiparty, competition at the state level is bipartisan. Most explanations for this phenomenon focus on region, level of development, base of support of the different parties, and the like. In a nutshell, we observe PAN-PRI competition in the North and Bajío regions while PRI-PRD competition prevails in the South and Center⁶. This scenario is very useful to study the effects of competition from

⁶ Region tends to be a strong predictor for electoral support for both the PAN and PRD in most statistical models. Important works exist arguing that this captures other variables, like level of development, education, and prevalence of the middle class.

two different parties – one, the PRD, typically identified as more left-wing, and the other, the PAN, associated to right-oriented policies. This paper introduces an important nuance on the expected effects of competition on government spending: the existence of clientelism. I contend that the degree to which competitive pressures can undermine clientelistic practices will depend on the extent to which the competing party is programmatic and therefore influences the provision of public goods. Two questions arise. First, what incentives do incoming parties have to follow programmatic policies? Second, how will this affect spending decisions within the state-level? In spite of the existence of propitious conditions for all parties to benefit from patronage politics in certain systems, some parties fail to become clientelistic and instead offer more programmatic approaches to voters. Potential explanations for this phenomenon can be found in the logic of supply and demand for patronage politics outlined above. Reliance on a core clientele (Cox, McCubbins and Sullivan 1984) where demand for patronage goods is low reduces the possibility of affecting voting behavior through targeted concessions⁷. Similarly, weakness in the ability to monitor client compliance undermines the credible commitment to punish turncoats or defectors (Keefer and Vlaicu 2005; Stokes 2005; Medina and Stokes 2002).

Why will programmatic competition have a different effect on existent clientelistic practices? The main argument regarding the benefits of competition refers to the introduction of accountability mechanisms. However, if the main competitor is another clientelistic party promising the delivery of private goods, the accountability will only revolve around which party is better at delivering handouts. In contrast, a programmatic party will promise public good provision and non-excludability. Consequently, accountability will refer more to economic management and good governance, thus introducing a new dimension on the effects of competition. As a result, public good provision is expected to increase overall in the presence of a programmatic party, either because the previously clientelistic party will have to modify its spending strategy or because the new party will engage in different policies. I make the assumption that the

⁷ This is related to the increased sensitivity of low-income voters to clientelistic transfers: a one peso increase provides more utility to a low-income voter than a high-income one (taken from Calvo and Murillo 2004: 743).

PRD and the PRI⁸ behave in a more clientelistic manner while the PAN will be more programmatic⁹. This is fundamentally a result of the bases of support of these parties and the emergence of the PRD after a split within the PRI.

Significant distinctions have been made in the literature regarding the nature of portfolio diversification clientelistic parties engage in when confronted with political competition and a growing electorate (Magaloni, Diaz-Cayeros and Estevez *forthcoming*; Rosas and Hawkins 2006). The advantage of a dominant party will continue to reside in its monopoly control over public resources¹¹. However, competitive pressures will introduce some form of accountability over the previously hegemonic system, and a growing electorate will increase the costs of private good allocation. This, on occasions, reduces the cost in public good provision and therefore increases its incidence (Diaz-Cayeros and Martinez-Uriarte 1997). Consequently, under competitive pressures, even the most clientelistic systems tend to exhibit some type of investment in public goods (Magaloni, Diaz-Cayeros and Estevez *forthcoming*). In addition, studies have reported that portfolio diversification may be targeted to different ends – public goods to promote turnout among supporters, private goods to recover support from turncoats, and under-provision of goods to punish radical defectors (Rosas and Hawkins 2006). I posit the following testable hypotheses.

H1: PRI strongholds will exhibit lower overall spending on public goods.

⁸ Clientelistic practices by the PRI have already been proven elsewhere (see Magaloni, Diaz-Cayeros and Estevez *forthcoming*; Diaz-Cayeros and Magaloni 2004).

⁹ My current research focuses on studying campaign promises and voter perceptions to examine which parties tend to engage in clientelistic practices at the sub-national level. However, for purposes of this paper I will *a priori* assign these labels based on a generalization of empirical observation.

¹⁰ In the case of Argentina, Remmer (*forthcoming*) finds that electoral support for the traditionally clientelistic Peronist party (PJ) at the provincial level exhibits a U-shaped relationship with spending on personnel, indicating that only low and high levels of support of this party lead to the distribution of patronage. Interestingly enough, the inverse relationship is found when looking at social spending, indicating that broad public goods are delivered in middle-levels of competition. Similarly, Diaz-Cayeros and Martinez-Uriarte (1997) uncover a non-monotonic relationship between social works expenditures on a sample of roughly 12% of Mexican municipalities.

¹¹ In this sense, it is important to note that even in advanced capitalist democracies, the existence of safe-seats or incumbency advantage is a widespread phenomenon, mostly attributed to control of government resources.

¹² This is related to the increased sensitivity of low-income voters to clientelistic transfers: a one peso increase provides more utility to a low-income voter than a high-income one (taken from Calvo and Murillo 2004: 743).

H2: Introduction of competition will increase spending on public works but, in accordance with the logic of portfolio diversification, will also increase administrative spending.

H2A: Competition from the PAN will increase spending on public goods, while competition from the PRD is expected to increase administrative expenditures.

H3: Unified PRI governments will be associated to lower spending on public goods, while an increase in the number of legislative parties is expected to have a decrease on administrative expenditures.

H4: Electoral uncertainty on the side of the PRI is expected to increase administrative spending.

Data and Evidence

Patterns of State Expenditures

Per capita administrative expenditures are used as a measurement of patronage because. Per capita expenditures on public works and development are used as a proxy of spending on public goods. Although as noted above, this category comprises different types of expenditures and can also involve some type of discretionality “they also have direct consequences for the welfare of the community as a whole” (Diaz-Cayeros and Martinez-Uriarte 1997: 9). Per capita tax revenues is used in congruence with the literature on fiscal federalism, which argues that raising their own revenues will lead to more efficient government spending and thus lower administrative expenditures. I also use per capita *participaciones* or non-compensatory government transfers as a control because are not associated to specific conditionality on spending. Public debt is excluded from the analysis because it presents a strong negative correlation with tax revenues.

Following the literature on social policy, several indicators of economic performance and general government programs are also included in the analysis to control for alternative determinants of poverty levels. *Level of development* is measured using log GDP per capita. State-level FDI is used to measure economic openness (Frankel and Romer 1999; Dollar and Kraay 2004). *Growth* is the annual rate of change in the state GDP between 1990-2004 (Dollar and Kraay 2002).

The political variables are as follows. Competitiveness is measured by the effective number of legislative parties in local congresses, as measured by the Laakso-Taagepera Index¹³. In addition a dummy for states that have experienced turnover is also included. Hegemonic power is constructed as a dummy variable signaling the states where the PRI won the last gubernatorial election with a winning differential larger than 50 percentage points¹⁴. Unified governments are measured by a dummy variable indicating the states where the PRI holds control of the government and the majority (50%+1) of the local congress. The structure of party competition is measured by indicating whether turnover has occurred between the PRI and the PAN or the PRI and the PRD. Finally, electoral uncertainty is measured by the absolute value of electoral volatility in the share of the PRI vote in the last gubernatorial elections. The results are presented in Tables 1 and 2 and the matrix of correlations is included in Appendix B. The methodology employed is a cross-sectional time series regression with panel-corrected standard errors. As emphasized before, these results are preliminary and their implications for future research will be further discussed in the conclusions.

¹³ The results for local congressional elections were not available, so I used the composition of the legislature as a proxy for increase in competitiveness.

¹⁴ This variable strongly correlated with the Molinar Index for number of parties using data for the last gubernatorial elections.

Table 1. Per Capita Administrative Expenditures							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Lagged DV	1.012 (0.042)**	1.012 (0.044)**	1.016 (0.040)**	1.025 (0.188)**	1.014 (0.043)**	1.014 (0.038)**	1.009 (0.051)**
Growth	-0.378	-0.197	-0.209	-0.225	-0.066	-0.145	-0.186
Development	-1.807	-0.844	-1.139	-1.132	-1.084	-0.947	-1.037
Pc Tax revenues	0.461 (0.071)**	0.379 (0.095)**	0.373 (0.072)**	0.372 (0.071)**	0.357 (0.065)**	0.48 (0.069)**	0.383 (0.053)**
Pc Participaciones	-0.067 (0.026)*	-0.05 -0.033	-0.052 (0.023)*	-0.049 (0.024)*	-0.06 (0.022)**	-0.041 -0.022	-0.065 -0.041
PRI Hegemony	0.072 (0.027)**	0.059 (0.017)**	0.056 (0.017)**	0.057 (0.018)**	0.049 (0.017)**	0.045 (0.018)*	0.053 (0.016)**
Effective Number of Leg Parties		-0.519 (0.069)**	-0.562 (0.097)**	-0.558 (0.102)**	-0.592 (0.101)**	-0.548 (0.105)**	-0.548 (0.133)**
Unified PRI government			-0.083 -0.093	-0.091 -0.084	-0.064 -0.081	-0.127 -0.091	-0.113 -0.116
Turnover PRI-PAN				-0.035 -0.054	-0.094 -0.066	-0.086 -0.06	-0.07 -0.065
Turnover PRI-PRD						-0.233 (0.041)**	-0.179 (0.060)**
Electoral Volatility PRI						0.141 (0.027)**	0.115 (0.038)**
Turnover					-0.195 (0.046)**		-0.162 (0.056)**
Constant	-0.326 (0.165)*	-0.029 -0.234	0.21 -0.303	0.242 -0.266	0.353 -0.235	0.177 -0.252	0.367 -0.394
Observations	346	343	331	331	331	331	329
Number of states	32	32	32	32	32	32	32
R ²	0.2254	0.2761	0.2653	0.2713	0.2739	0.2873	0.2963

Note: Prais Winsten with panel-corrected standard errors in parenthesis.

* significant at 5%; ** significant at 1%

The preliminary evidence confirms some of the hypotheses outlined above. The level of development is associated to higher administrative spending because it represents overall wealthier economies. Tax revenues exhibit a negative relationship with administrative expenditures supporting the notion that greater reliance on own resources will lead to lower patronage. However, the significance of this variable does not hold in all the models. *Participaciones*, on the other hand is significant and positive with administrative expenditures probably indicating that non-conditional expenditures will be more likely targeted to clientelistic purposes as opposed to conditional ones. PRI hegemony is significant and negatively associated with administrative expenditures lending partial support to theories of portfolio diversification. In order to further test this notion it would be necessary to test for levels of turnout (Meltzer and Richard 1981), however this data is only available for a limited sample. Hypothesis 3 finds no support in the evidence because neither a unified PRI government nor the number of legislative parties have an effect in determining administrative expenditures. In contrast, turnover is significant and negative, providing evidence for Hypothesis 2. Finally, once we separate whether turnover has occurred with the PAN or with the PRD we see that competition with the latter tends to increase patronage. This indicates that the PRI and the PRD probably engage in higher administrative expenditures, while the presence of the PAN in government decreases them.

¹⁵ Mexico City is excluded from this list because elections for mayor were held for the first time until 1997.

¹⁶ Campeche, Coahuila, Colima Durango, Guerrero, Mexico, Oaxaca, Puebla, Quintana Roo, Sinaloa, Sonora, Tabasco, Tamaulipas, and Veracruz, are the exceptions.

¹⁷ The results hold when this variable is used instead.

Table. 2 Per Capita Public Works Expenditures

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Lagged DV	0.981 (0.114)**	1.016 (0.040)**	1.028 (0.193)**	1.024 (0.191)**	1.025 (0.194)**	1.028 (0.214)**	1.036 (0.228)**
Growth	0.402	0.449	0.5	0.479	0.516	0.518	0.56
Development	-0.37 (0.029)*	-0.307 0.04	(0.184)** 0.05	(0.171)** 0.049	(0.171)** 0.041	(0.175)** 0.033	-0.479 0
Pc Tax revenues	-0.033 (0.009)**	-0.035 (0.012)**	-0.034 (0.010)**	-0.031 (0.009)**	-0.035 (0.010)**	-0.035 (0.012)**	-0.042 (0.021)*
Pc Participaciones	0.036 (0.008)**	0.035 (0.011)**	0.035 (0.013)**	0.036 (0.013)**	0.034 (0.013)**	0.035 (0.014)*	0.037 (0.010)**
PRI Hegemony		-0.061 (0.010)**	-0.059 (0.021)**	-0.057 (0.023)*	-0.062 (0.022)**	-0.066 (0.024)**	-0.066 -0.045
Effective Number of Leg Parties			-0.023 -0.056	-0.032 -0.06	-0.023 -0.062	-0.027 -0.066	-0.031 -0.075
Unified PRI government				-0.037 -0.023	-0.047 (0.023)*	-0.045 (0.021)*	-0.035 -0.023
Turnover PRI-PAN						0.03 (0.012)**	0.02 0.029
Turnover PRI-PRD						-0.041 -0.046	-0.049 -0.036
Electoral Volatility PRI							0.011 -0.022
Turnover					0.05 (0.013)**		
Constant	0.016 -0.067	0.096 -0.058	0.122 -0.112	0.162 -0.131	0.195 -0.129	0.217 -0.13	0.286 -0.176
Observations	222	219	207	207	207	207	205
Number of states	32	32	32	32	32	32	32
R ²	0.2549	0.2653	0.2713	0.2759	0.2835	0.2818	0.2831

Note: Prais Winsten with panel-corrected standard errors in parenthesis.

* significant at 5%; ** significant at 1%

The results regarding public works are less robust. Development continues to indicate a positive relationship with expenditures although it is not robust in all specifications. Tax revenues again hold a negative – although in this case insignificant – relationship with the dependent variable, whereas *participaciones* is positive and robust. The latter indicates that non-conditional transfers are also spent on public works, however we would need a further refinement of this category to see what part of public works is driving this result. PRI hegemony exhibits a negative and significant relationship with spending on public works, indicating again that resources are not targeted in areas where this party enjoys electoral security. We see again that the number of congressional parties and a unified PRI government have no effect as determinants of public works expenditures. However, Hypothesis 2 is again confirmed given that turnover has significant effect on public works expenditures. Finally, there exists support for the hypothesis regarding structure of party competition, although more modest than in the previous regressions. Although turnover holds a positive relationship with spending on public works, once we separate the structure of competition we see that this is explained by turnover with the PAN. PRI-PRD turnover does not seem to explain spending on public works. The next section will briefly explore public opinion data to corroborate these findings from the perspective of citizens. The final section will discuss implications of these results.

Public Opinion

In order to further test these results, I examined public opinion data from a national survey with state-level representativeness conducted in December, 2005 by ARCOP, Mexico. Respondents were asked how satisfied they were with water and pavement services provided in their locality. Although this is responsibility of the municipal governments, I use it as a proxy for public good provision given that municipal governments depend on transfers from the central government and from the states to finance their budgets. Although states are required to transfer specific amounts to

municipalities, the criteria with which they do this is not homogenized. The results for the logistic regressions are presented below¹⁸.

Table 3. Satisfaction with Provision of Water/Pavement

	Water		Pavement	
Development	0.58 (0.125)**	0.665 (0.132)**	-0.137 -0.116	-0.047 -0.123
Pc Aportaciones	0 (0.000)**	0 (0.000)**	0 0	0 0
PC Tax revenues	0.001 (0.000)**	0.001 (0.000)**	0.001 (0.000)**	0.001 (0.000)**
FDI	0 0	0 0	0 0	0 0
Agriculture	-1.135 -1.259	-0.476 -1.324	-1.492 -1.13	-1.653 -1.176
Woman	0.151 (0.076)*	0.162 (0.077)*	0.072 -0.068	0.08 -0.069
Age	0.003 -0.003	0.003 -0.003	0.007 (0.003)**	0.008 (0.003)**
Schooling	0.062 -0.041	0.064 -0.041	0.128 (0.036)**	0.13 (0.037)**
Income	0.053 -0.038	0.046 -0.038	0.075 (0.034)*	0.076 (0.034)*
Id PRI	0.147 -0.157	0.072 -0.161	0.217 -0.141	0.178 -0.146
Id PRD	0.314 -0.162	0.379 (0.168)*	0.216 -0.138	0.247 -0.141
Id PAN	-0.059 -0.129	-0.066 -0.131	0.069 -0.117	0.048 -0.119
No of Parties	-0.026 -0.069	0.005 -0.074	0.045 -0.062	0.014 -0.065
Turnover	0.506 (0.081)**		0.374 (0.074)**	
Turnover PRI-PAN		0.452 (0.088)**		0.135 -0.078
Turnover PRI-PRD		0.301 (0.107)**		0.334 (0.098)**
Constant	-0.832 -0.528	-1.135 (0.570)*	-0.678 -0.475	-0.768 -0.513
Observations	3688	3626	3658	3596
Pseudo R-squared	0.4271	0.437	0.412	0.423

Standard errors in parentheses
* significant at 5%; ** significant at 1%

¹⁸ These regressions were also performed controlling for fixed effects and the results do not vary.

The dependent variables measure a positive response for satisfaction with provision of water supply and public pavement. Control variables were introduced to account for economic characteristics of the states, and individual socio-demographics. The presence of turnover again exhibits a positive and significant relationship on satisfaction with public services. In addition, when we examine the structure of competition, we see that in the case of water turnover with the PAN has a larger positive effect than turnover with the PRD. This is not the case for pavement, where PRI-PAN competition is insignificant and PRI-PRD competition is significant and positive. In interpreting these results through simulations¹⁹ we see that the presence of turnover increases the probability of satisfaction with both water supply and pavement by 9 percentage points. In a similar vein, turnover with PAN increases a positive response in water rating by 8 points, while PRD turnover increases it by 5 percentage points. Finally, PRD turnover increases satisfaction with pavement by 8 points.

Implications and Conclusion

Understanding the effects of decentralization on local-level government performance is a very important subject of research. The increase in electoral competitiveness produces important effects on budgetary allocation of sub-national government resources although the nature of expenditures can vary according to the nature of the incumbent party and the new competitors. The preliminary results presented in this paper support the notion that decentralization does not always produce welfare-enhancing results, but can instead provide resources for sub-national government authoritarian or hegemonic parties to defend themselves from competition when specific institutional provisions are not present. A deeper analysis of this argument has to involve government expenditures beyond the provincial level (i.e. municipalities). In addition, a refinement of the expenditures included in each category is also necessary in order to distinguish between private goods, public goods and club goods. This is essential to a better understanding of the existence of clientelistic practices beyond the national level in a new democracy like Mexico. Although this type of analysis has been conducted with relation to

¹⁹ Simulations were performed setting all economic and sociodemographic variables at their means except for female and PRI identification, which were set at their maximum values.

specific social programs, no analysis has been carried out regarding the entire composition of the budget in provincial and local governments. In addition, a key element to a more comprehensive analysis of the topics dealing with the effects of decentralization has to include individual level data in the form of public opinion surveys.

The results presented by this analysis lend partial support to the contention that party system structure and not just party ideology can explain government spending decisions and, under the assumption that the PRI and the PRD behave clientelistically, these results also point to an increase in patronage spending in the absence of programmatic parties. A next step should involve an effort to develop better indicators for each of the three dimensions measuring both variations across countries and across time. By definition, decentralization implies change over time and empirical investigation should aim to assess the effects of the transfer of government responsibilities by comparing performance levels before and after decentralization reforms across a large number of countries.

References

- Alderman, H. (2001). "Multi-Tier Targeting of Social Assistance: The Role of Intergovernmental Transfers." The World Bank Economic Review **15**(1): 33-53.
- Alesina, A. and H. D. Rosenthal (1995). Partisan Politics, Divided Government, and the Economy. Cambridge, Cambridge University Press.
- Alesina, A., N. Roubini, et al. (1999). Political Cycles and the Macroeconomy. Cambridge, Cambridge University Press.
- Bardhan, P. (1997). The Role of Governance in Economic Development. A Political Economy Approach Paris, OECD Development Center.
- Bardhan, P. and D. Mookherjee (2000). Decentralizing Anti-Poverty Program Delivery in Developing Countries, Boston University.
- Bird, R. (1993). "Threading the fiscal labyrinth: some issues in fiscal decentralization " National Tax Journal (June): 207-227.
- Bird, R. and E. R. Rodriguez (1999). "Decentralization and poverty alleviation. International experience and the case of Philippines." Public Administration and Development **19**(3): 299-319.
- Blair, H. (2000). "Participation and Accountability at the Periphery: Democratic Local Governance in Six Countries " World Development **28**(1): 21-39.
- Boix, C. (1998). Political Parties, Growth and Equality: Conservative and Social Economic Strategies in the World Economy, Cambridge Studies in Comparative Politics.
- Boix, C. (2001). "Democracy, Development, and the Public Sector." American Journal of Political Science **45**(1): 1-17.
- Brennan, G. and J. Buchanan (1980). The Power to Tax: Analytical Foundations of a Fiscal Constitution. Cambridge, Cambridge University Press.
- Breton, A. (1990). Centralization, Decentralization and Intergovernmental Competition. Kingston, Institute of Intergovernmental Relations, Queen's University.
- Brusco, V., M. Nazareno, et al. (2002). Does Poverty Erode Democracy? Evidence from Argentina.
- Bueno de Mesquita, B., J. D. Morrow, et al. (2000). Political Institutions, Political Survival, and Policy Success. Governing for Prosperity B. Bueno de Mesquita and H. L. Root. New Haven, Yale University Press.
- Bueno de Mesquita, B., A. Smith, et al. (2003). The Logic of Political Survival. Cambridge, MIT Press.

Calvo, E. and M. V. Murillo (2004). "Who Delivers? Partisan Clients in the Argentine Electoral Market." American Journal of Political Science **48**(4): 742-757.

Campbell, T., G. Peterson, et al. (1991). Decentralization to Local Government in LAC: National Strategies and Local Response in Planning, Spending and Management. LACTD, Regional Studies Program, Report No. 5. T. W. Bank. Washington D.C.

Chhibber, P. and I. Nooruddin (2004). "Do Party Systems Count? The Number of Parties and Government Performance in the Indian States." Comparative Political Studies **37**(2): 152-187.

Cox, G., M. D. McCubbins, et al. (1984). "Policy Choice as an Electoral Investment." Social Choice and Welfare **1**: 231-242.

Crook, R. (2003). "Decentralization and Poverty Reduction in Africa: The Politics of Local-Central Relations." Public Administration and Development **23**: 77-88.

Crook, R. and A. S. Sverrison (1999). To What Extent can Decentralised Forms of Government Enhance the Development of Pro-Poor Policies and Improve Poverty-Alleviation Outcomes? World Bank.

Dasgupta, P. (1993). An Inquiry into Well-Being and Destitution. New York, Oxford University Press.

Dethier, J.-J. (2000). Some Remarks on Fiscal Decentralization and Governance. Paper prepared for presentation at the Conference on Decentralization Sequencing. Jakarta, Indonesia.

Diamond, L. and S. Tsalik, Eds. (1999). Size and Democracy: The Case for Decentralization Developing Democracy. Toward Consolidation. Baltimore and London, Johns Hopkins University Press

Diaz-Cayeros, A. (2006). Federalism, Fiscal Authority and Centralization in Latin America Cambridge, Cambridge Studies in Comparative Politics.

Diaz-Cayeros, A. (2004). Federalismo, Democracia y Desarrollo Local. Prepared as Background Paper for the Human Development Report (UNDP). Mexico.

Diaz-Cayeros, A. and B. Magaloni (2004). The politics of public spending- Part II. The Programa Nacional de Solidaridad (Pronasol) in Mexico. Prepared as Background Paper for the World Bank Development Report.

Diaz-Cayeros, A., B. Magaloni, et al. (2001). Democratization and the Economy in Mexico: Equilibrium (PRI) Hegemony and its Demise.

Diaz-Cayeros, A. and J. Martinez-Urriarte (1997). Towards a Model of Budgetary Allocation and Revenue-Sharing in Mexico's Local Governments. Prepared for delivery at the Annual Meeting of the Latin American Studies Association Guadalajara, Mexico.

Eaton, K. (2004). Politics Beyond the Capital. The Design of Subnational Institutions in South America. California, Stanford University Press.

Galasso, E. and M. Ravallion (2001). Decentralized Targeting of an Anti-Poverty Program. Development Research Group, World Bank.

Gélineau, F. and K. Remmer (2005). "Political Decentralization and Electoral Accountability: The Argentine Experience 1983-2001." British Journal of Political Science **36**: 133-157.

Gervasoni, C. (2006). A Rentier Theory of Subnational Authoritarian Enclaves: The Politically Regressive Effects of Progressive Federal Redistribution. Paper prepared for delivery at the Annual Meeting of the American Political Science Association. Philadelphia, PA.

Gibson, E. L. (2005). "Boundary Control. Subnational Authoritarianism in Democratic Countries." World Politics **58**: 101-132.

Hibbs, D. (1977). "Political Parties and Macroeconomic Policy." American Political Science Review **71**(4): 1467-1487.

Hiskey, J. (2000). Does Democracy Matter? Electoral Competition and Local Development in Mexico. Paper prepared for delivery at the Annual Meeting of the Latin American Studies Association Miami, FL.

Hiskey, J. and S. Bowler (2005). "Local Context and Democratization in Mexico." American Journal of Political Science **49**(1): 57-71.

Hiskey, J. and M. Seligson (2003). "Pitfalls of Power to the People: Decentralization, Local Government Performance, and System Support in Bolivia." Studies in Comparative International Development **37**(4): 64-88.

Iversen, T. and D. Soskice (2002). Electoral systems and the politics of coalitions: why some democracies redistribute more than others. Paper prepared for delivery at the Annual Meeting of the American Political Science Association, Boston, MA.

Jatté, C. (2004). Democratic decentralization and poverty reduction. The Bolivian case. U. O. G. Center. Oslo, Norway.

Keefer, P. (2005). Democratization and clientelism: Why are young democracies badly governed? World Bank Policy Research Working Paper 3594.

Keefer, P. and S. Khemani (2003). "Democracy, Public Expenditures and the Poor." World Bank Policy Research Working Paper 3164.

Keefer, P. and R. Vlaicu (2005). Democracy, Credibility and Clientelism W. B. W. 3472.

Krishna, A. (2003). Do Poor People Benefit Less from Decentralization? . Paper prepared for delivery at the Annual Meeting of the American Political Science Association. Philadelphia, PA.

Magaloni, B., A. Diaz-Cayeros, et al. (Forthcoming). The erosion of party hegemony, clientelism and portfolio diversification: The Programa Nacional de Solidaridad (Pronasol) in Mexico. Patrons, Clients and Policies: Patterns of Democratic Accountability and Political Competition. H. Kitschelt and S. Wilkinson.

Medina, L. F. and S. Stokes (2002). Clientelism as Political Monopoly.

Montero, A. P. and D. J. Samuels, Eds. (2004). Decentralization and Democracy in Latin America. Indiana, University of Notre Dame.

O'Neill, K. (2003). "Decentralization as an Electoral Strategy." Comparative Political Studies **36**(9): 1068-1091.

Oates, W. (1972). Fiscal Federalism. New York, Harcourt, Brace and Jovanovich.

Oates, W. (1977). An economist's perspective on fiscal federalism. The Political Economy of Fiscal Federalism. W. E. Oates. Massachusetts Lexington Books.

Oates, W. (1999). "An Essay on Fiscal Federalism " Journal of Economic Literature **37**(3): 1120-1149.

Pardinas, Juan E. (2006). Decentralization and Budget Accountability in the Twilight of Mexican Presidentialism. PhD. Dissertation, London School of Economics.

Perry, G. E., O. S. Arias, et al. (2006). Poverty Reduction and Growth: Virtuous and Vicious Circles. Latin American and Caribbean Studies. W. Bank.

Persson, T. and G. Tabellini (1999). The Size and Scope of Government: Comparative Politics with Rational Politicians.

Popkin, S. (1991). The Reasoning Voter. Chicago, University of Chicago Press.

Pribble, J., E. Huber, et al. (2005). The Politics of Poverty in Latin America and the Caribbean. Paper prepared for delivery at the Annual Meeting of the American Political Science Association Washington, D.C.

Remmer, K. (Forthcoming). "The Political Economy of Patronage: Expenditure Patterns in the Argentine Provinces, 1983-2003." Journal of Politics.

Robinson, J. A. and T. Verdier (2003). The Political Economy of Clientelism, Department of Political Science and Department of Economics, University of California at Berkeley.

Rodden, J. (2002). "The Dilemma of Fiscal Federalism: Grants and Fiscal Performance around the World." American Journal of Political Science **46**(3): 670-687.

Rodden, J. (2003). "Reviving Leviathan: Fiscal Federalism and the Growth of Government." International Organization **57**: 695-729.

- Rodden, J. (2004). "Comparative Federalism and Decentralization." Comparative Politics (July): 481-500.
- Rodden, J. and E. Wibbels (2002). "Beyond the Fiction of Federalism: Macroeconomic Management in Multitiered Systems." World Politics **54**: 494-531.
- Rosas, G. and K. Hawkins (2006). Turncoats, Turnout, and Vote Purchasing.
- Rose-Ackerman, S. (1997). Corruption and Development. Proceedings of the Annual Bank Conference on Development Economics, Washington DC, World Bank.
- Schady, N. (2000). "The Political Economy of Expenditures by the Peruvian Social Fund (FONCODES), 1991-95." American Political Science Review **94**(2): 289-304.
- Scott, John (2004). "La Descentralizacion, el Gasto Social y la Pobreza en Mexico." Gestion y Politica Publica vol XIII, 3: 785-831.
- Shah, A. (1994). The Reform of Intergovernmental Fiscal Relations in Developing and Emerging Market Economies. World Bank Policy and Research Series, Paper No. 23. W. Bank. Washington, DC.
- Schneider, A. (2003). Who gets what from whom? The impact of decentralization on tax capacity and pro-poor policy. IDS Working Paper 179.
- Sen, A. (1999). "Democracy as a Universal Value." Journal of Democracy **10**(3): 3-17.
- Sour, L. (2004). "El sistema de transferencias federales en Mexico." Gestion y politica publica **13**(3): 733-751.
- Stokes, S. (2005). "Perverse Accountability: A Formal Model of Machine Politics with Evidence from Argentina." American Political Science Review **99**(3): 315-325.
- Tanzi, V. (2000). Some Politically Incorrect Remarks on Decentralization and Public Finance. Governance, Decentralization and Reforma in China, India and Russia. J.-J. Dethier, Kluwer Academic Publishers and ZEF.
- Tiebout, C. (1956). "A Pure Theory of Local Expenditures." Journal of Political Economy **64**(5): 416-424.
- Treisman, D. (2000). "Decentralization and Inflation: Commitment, Collective Action, or Continuity?" American Political Science Review **94**(2): 837-857.
- Treisman, D. (n.d.). Decentralization and the Quality of Government, Department of Political Science, University of California, Los Angeles.
- UNCHR (1999). United Nations Commission on Human Rights. New York: UNCHR.
- Von Braum, J. and U. Grote (2000). Does Decentralization Serve the Poor? IMF Conference on Fiscal Decentralization IMF. Washington, DC.

Weingast, B. (1995). "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Growth." Journal of Law, Economics and Organization **11**: 1-31.

Wibbels, E. (2000). "Federalism and the Politics of Macroeconomic Policy and Performance." American Journal of Political Science **44**(4): 687-702.

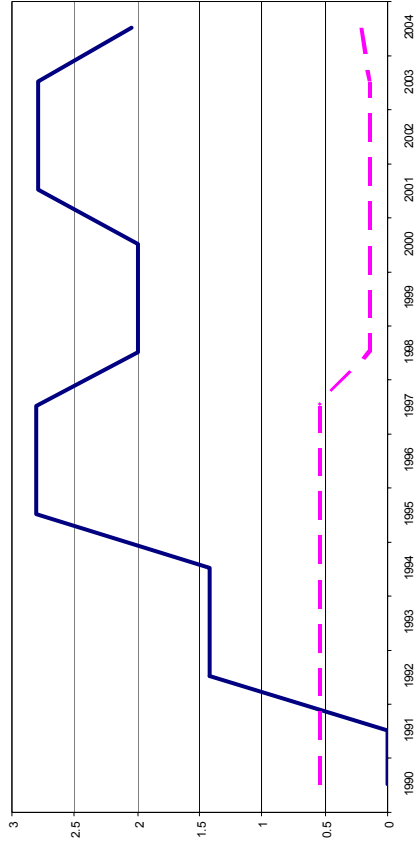
Wibbels, E. (2005). Federalism and the Market: Intergovernmental conflict and Economic Reform in the Developing World. New York, Cambridge University Press.

Zaller, J. R. (1992). The Nature and Origins of Mass Opinion. Cambridge, Cambridge University Press.

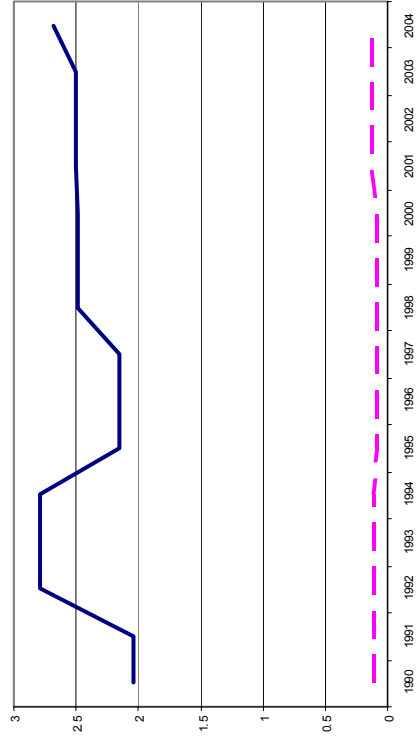
Ziblatt, D. and C. O'Dwyer (2003). Does Decentralization Make Government More Efficient and Effective? Paper presented at the Annual Meeting of the American Political science Association
Philadelphia, PA.

Appendix A. Winning Differential in Governor Elections and Number of Parties in Local Congress for the Mexican States 1990-2004

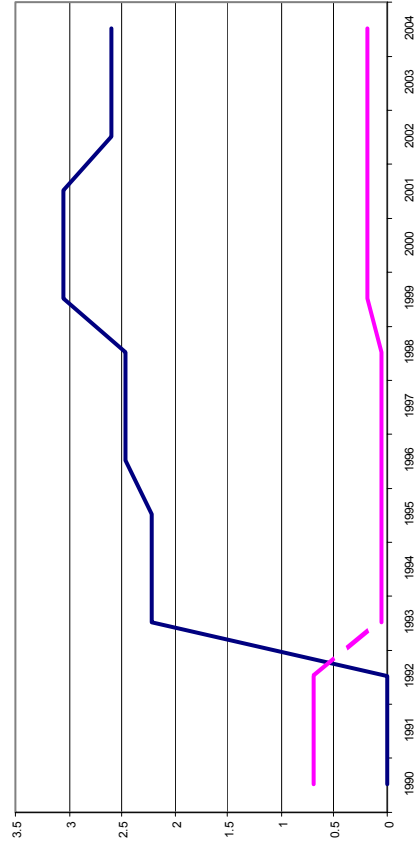
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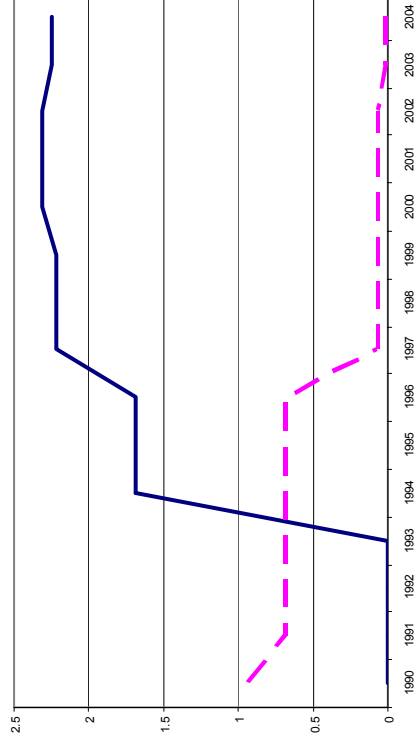
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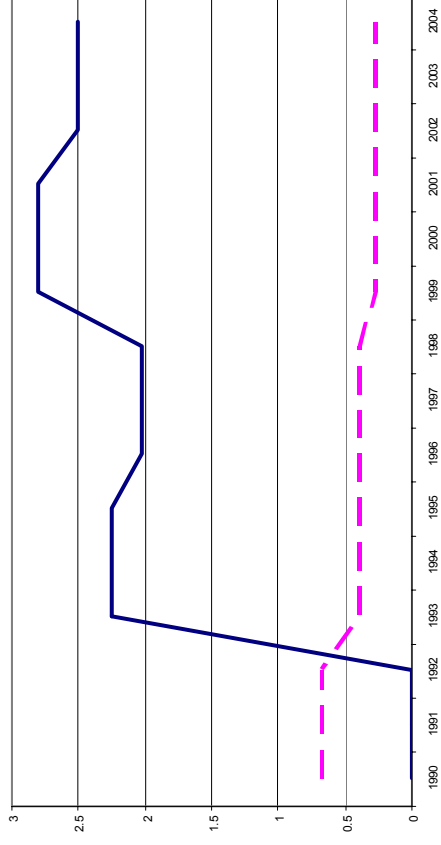
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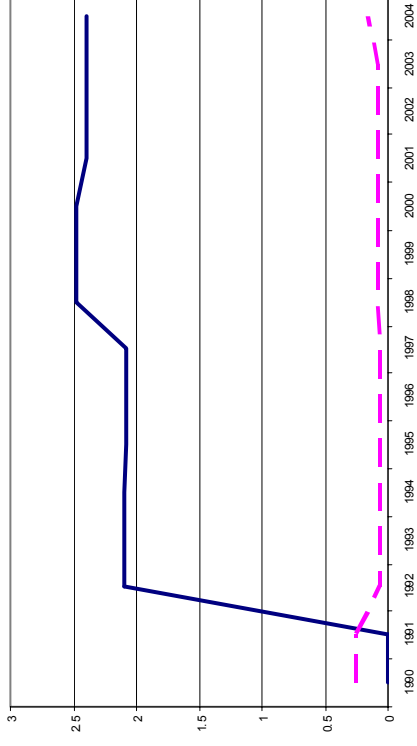
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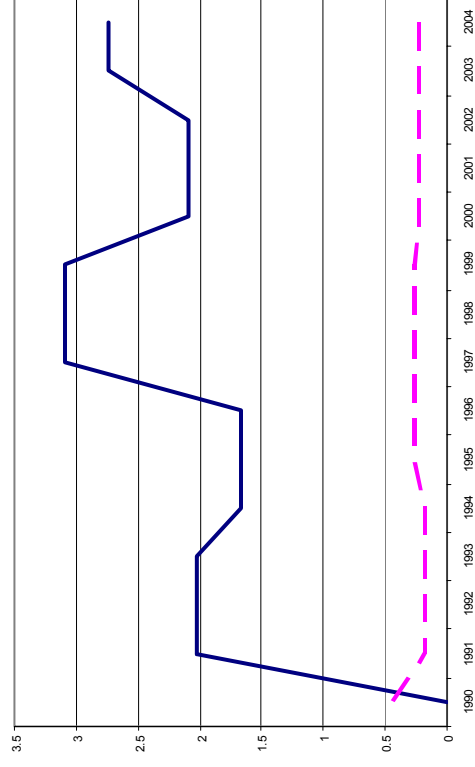
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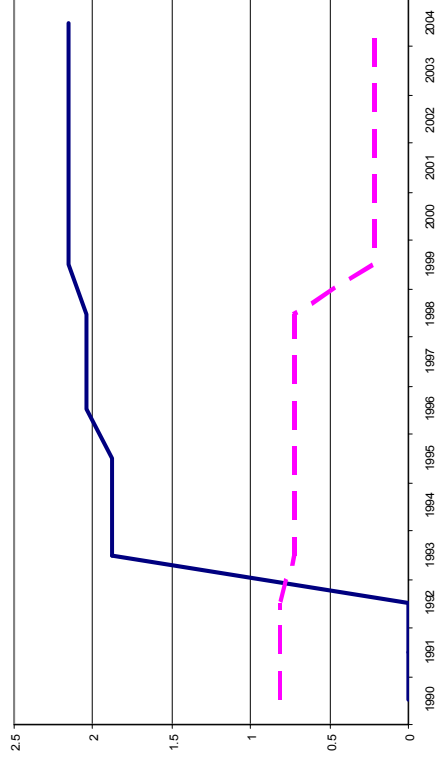
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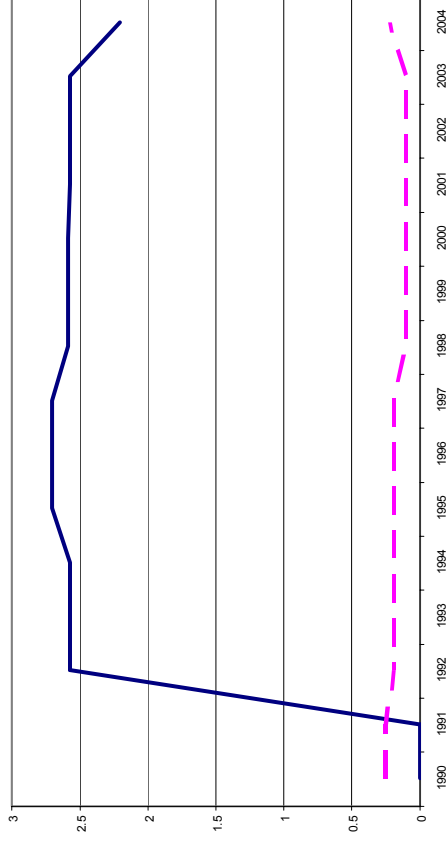
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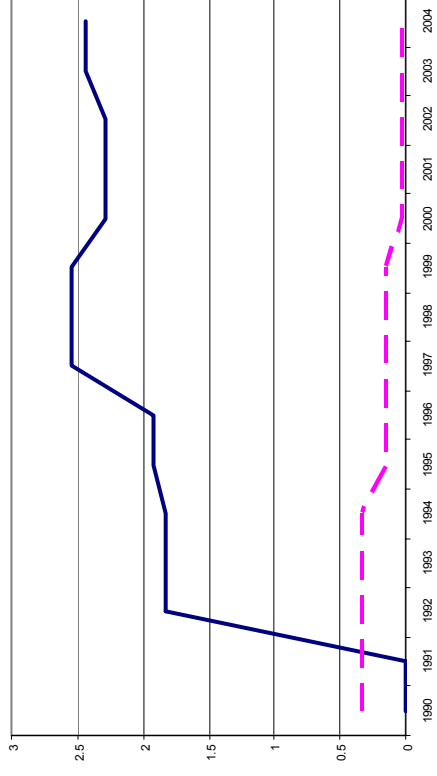
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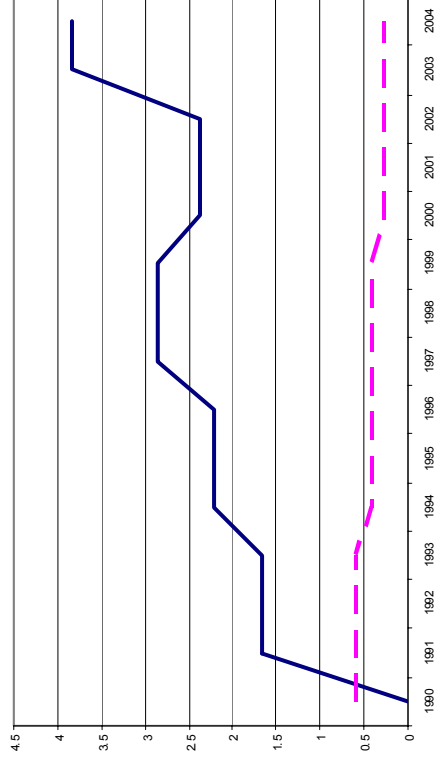
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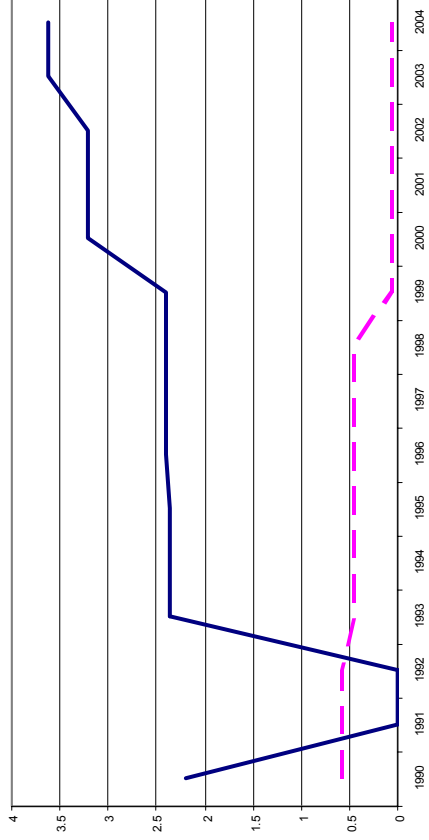
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Mexico



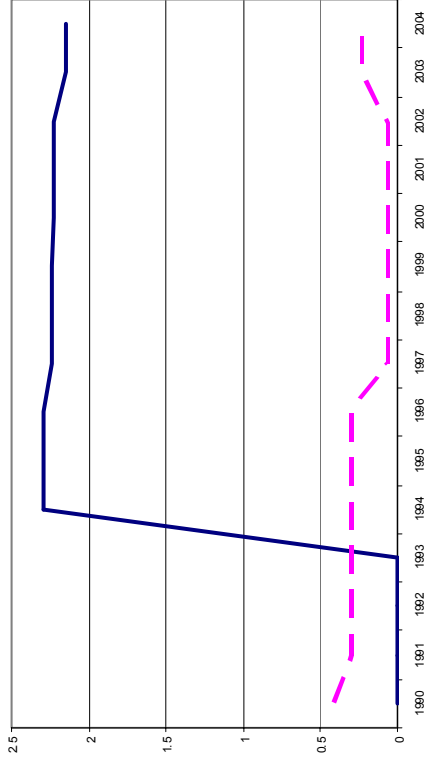
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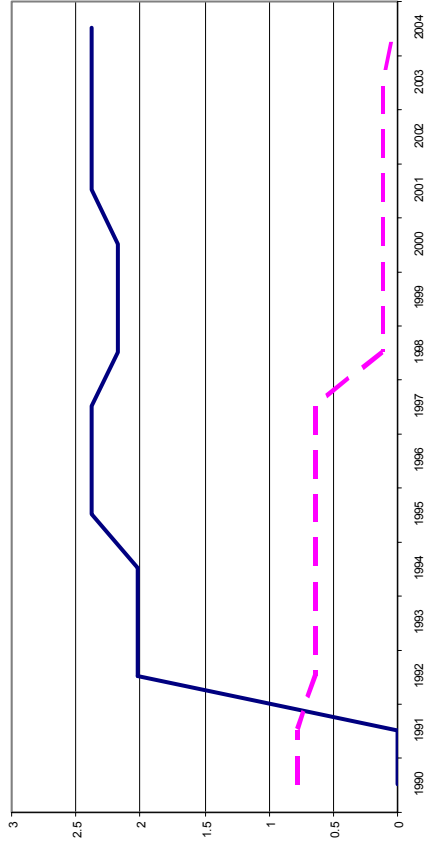
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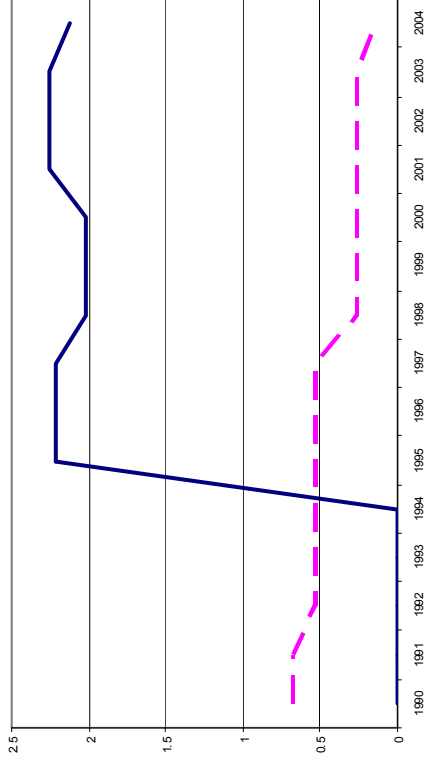
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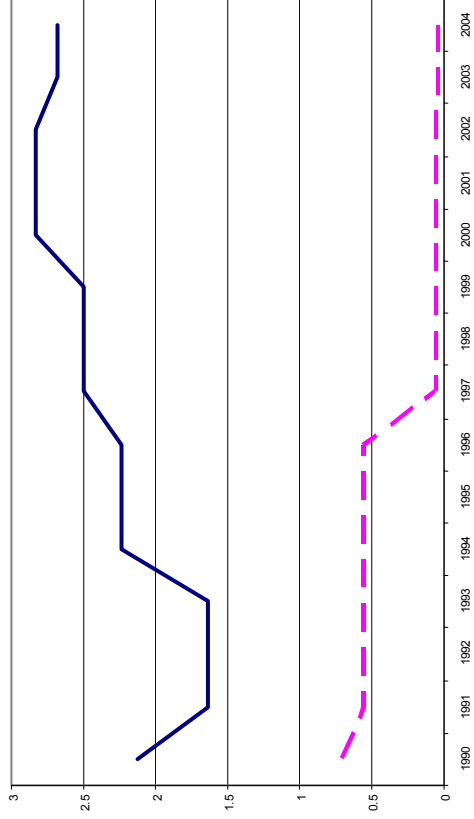
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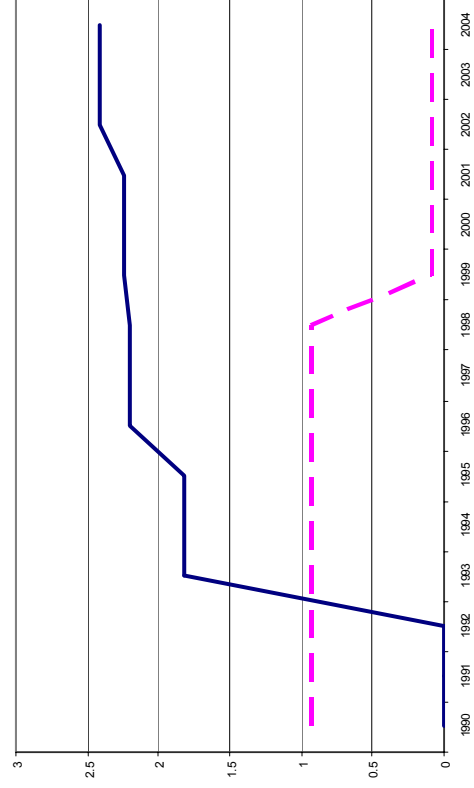
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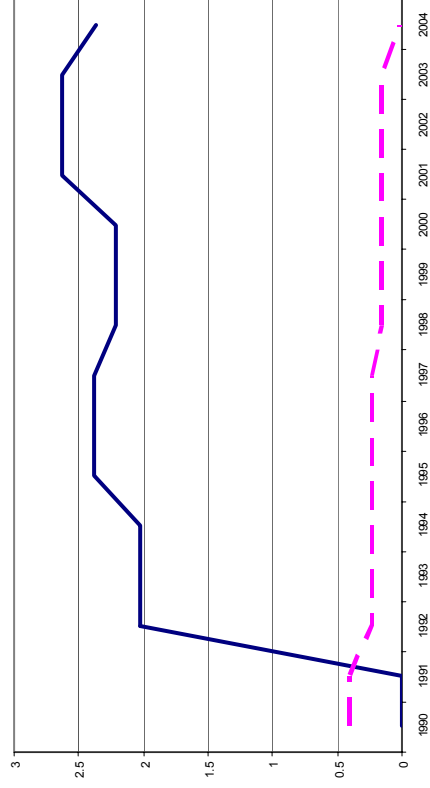
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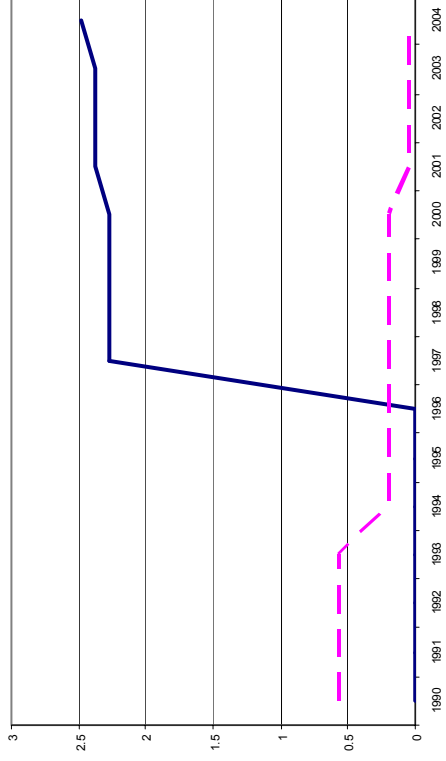
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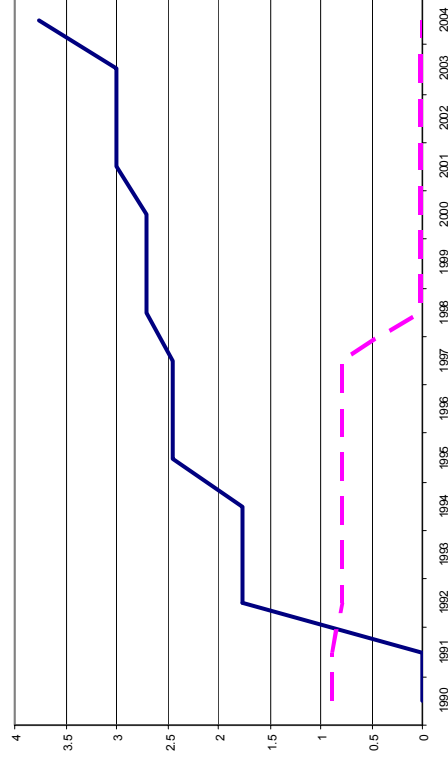
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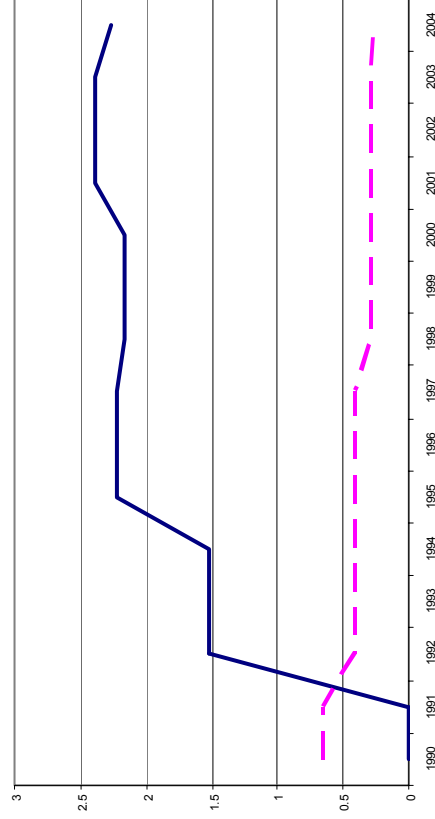
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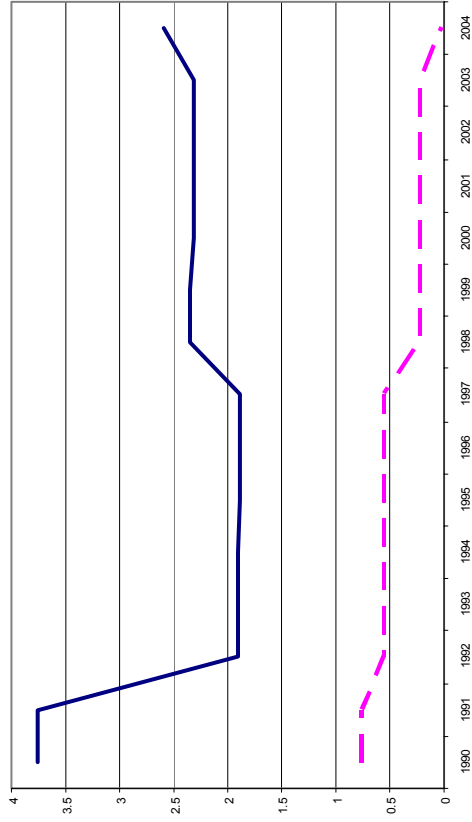
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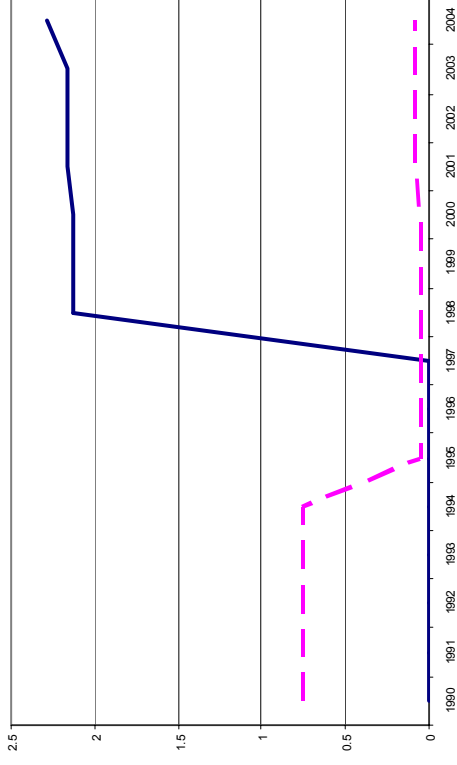
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Veracruz



Yucatan



Zacatecas



Appendix B. Correlation Matrices for Regressions in Tables 1 and 2.

	growth~e	loggdppc	taxrevpc	partpc	hegempri	unifpri	LTinde~g	turnov~n	turnov~d	privol~s
growthrate	1.0000									
loggdppc	0.2445	1.0000								
taxrevpc	-0.0293	-0.1150	1.0000							
partpc	0.1043	0.2247	0.2576	1.0000						
hegempri	-0.0319	-0.1934	0.0472	-0.1936	1.0000					
unifpri	-0.0423	-0.0152	0.1744	0.1004	0.1011	1.0000				
LTindexleg	0.0622	0.0509	-0.0188	0.1626	-0.2981	-0.1793	1.0000			
turnoverpr~n	0.0818	0.1604	-0.1361	-0.2218	-0.1240	-0.3317	0.0050	1.0000		
turnoverpr~d	-0.0342	-0.3824	-0.0982	-0.0804	-0.0226	-0.1737	0.1512	0.0149	1.0000	
privolabs	-0.0537	-0.0767	-0.0177	-0.0275	0.1703	-0.0898	0.0306	0.1191	-0.0096	1.0000

Appendix C. Correlation Matrices for Regressions in Table 3.

	loggdpcc	aporta~c	taxrevpc	ied	agric	mujer	age	escola-d	ingreso	idpri
loggdpcc	1.0000									
aportacion~c	0.0285	1.0000								
taxrevpc	0.2035	0.2449	1.0000							
ied	0.3996	-0.2463	-0.0335	1.0000						
agric	-0.4832	-0.0558	-0.1450	-0.4273	1.0000					
mujer	-0.0097	-0.0127	-0.0152	0.0083	0.0051	1.0000				
age	0.0145	-0.0515	0.0300	0.0087	0.0262	-0.0608	1.0000			
escolaridad	-0.0381	0.0306	-0.0175	0.0078	0.0236	-0.0711	-0.4161	1.0000		
ingreso	0.1373	0.0306	-0.0025	0.0836	-0.0514	-0.0870	0.4811	0.4811	1.0000	
idpri	-0.0291	0.0129	0.0046	-0.0148	0.0264	0.0239	0.0070	-0.0152	-0.0230	1.0000
idprd	-0.0504	-0.0474	-0.0305	-0.0430	0.0379	-0.0099	-0.0339	0.0343	0.0161	-0.0695
idpan	0.0119	-0.0012	-0.0056	-0.0266	-0.0422	0.0068	-0.0313	0.0141	0.0329	-0.0838
ltindex	-0.1691	-0.1403	0.0255	0.0104	-0.1684	-0.0070	0.0022	-0.0060	-0.0258	-0.0309
turnover	-0.0547	-0.2921	-0.2935	-0.0170	0.1554	0.0320	0.0329	-0.0286	0.0124	-0.0281

	idprd	idpan	ltindex	turnover
idprd	1.0000			
idpan	-0.0851	1.0000		
ltindex	0.0096	-0.0493	1.0000	
turnover	0.0250	-0.0062	-0.1264	1.0000