

**Political Corruption in Mexico:
An Empirical Analysis**

Stephen D. Morris
University of South Alabama
Dept of Political Science
Mobile, AL 36688
smorris@jaguar1.usouthal.edu

INTRODUCTION

Analysts have long recognized the prevalence of political corruption in Mexico, and scores of surveys confirm it. On Transparency International’s (TI) annual Corruption Perception Index (CPI) (0 to 10 scale with 0 the most corrupt and 10 the least), for instance, Mexico’s score has ranged from a low of 2.7 in 1997 to a high of just 3.7 in 2001. In the organization’s latest “poll of polls” (2002), Mexico ranks 57th among 102 nations with about the same level of corruption as China and yet much higher levels than in the democracies of Europe or the regional leader Chile (see www.transparency.org). In fact among the 18 Latin American countries included in the index, Mexico’s average score since 1995 ties it with the Dominican Republic for 9th place (Morris 2003). The 2002 *Latinobarometro* poll in Mexico offers a similar profile: 77% of respondents considered civil servants corrupt, while 61% felt that corruption increased “a lot” during the prior year (Lagos 2003). Another poll conducted in November 2001 by *Transparencia Mexicana* – Mexico’s chapter of TI established in 1999 -- registered 214 million acts of corruption within the previous 12 months. It also found that the average household pays \$109.5 pesos in bribes (*mordida*) for a total of more than 23 billion pesos nationwide (*Encuesta de Corrupción y Buen Gobierno*).

While such data has helped crystallize the problem of corruption in Mexico, few have used data systematically to examine the nature of corruption in the country.¹ Camp, Coleman and Davis (2000) provide one exception. They explore factors shaping

¹ Until recently, few have sought to explore the nature of political corruption in Mexico (see López Presa 1998; Morris 1991, 1999). For an overview of the Fox anti-corruption reforms, a review of recent data and a discussion of civil society programs see *Programa Nacional para la Transparencia y Contra la Corrupción* (2001), Morris (2001, 2002), the government’s web site www.secodam.gob.mx (*Contraloría*) and Mexico’s TI Chapter (www.transparenciamexicana.org.mx).

individual perceptions toward corruption. Beyond Mexico, at the cross-national level, a number of empirical studies examining the causes and the consequences of corruption have flourished in the past decade; yet few if any have used data based on participation rates or looked empirically at corruption at the sub-national level. Such studies of course rely on national level data. The current study addresses these two weaker areas in the literature. Using data from the *Encuesta de Corrupción y Buen Gobierno* that ranks corruption by federal entity in Mexico (31 states plus the Federal District) and borrowing from the general cross-national empirical literature, this paper tests a series of hypotheses linking corruption measured by participation rates at the sub-national level to a host of demographic, economic and political factors.

CROSS-NATIONAL EMPIRICAL RESEARCH ON CORRUPTION

The study of political corruption once suffered from the lack of systematic data: an understandable handicap given the nature of the phenomenon. And though the recently elaborated measures of corruption based on perceptions and opinion polls certainly have their problems, their wide availability unleashed a frenzy of cross-national empirical research much of it sponsored by the IMF and the World Bank.² For the first time, theories that had accumulated over the years began to be put to the empirical test, quantifying the impact of a host of economic and political factors on corruption and vice versa (for a review see Lambsforff 1999).

² Johnston (2000, 2002) addresses questions of validity, reliability, and verifiability in the use of the CPI. Other measures of corruption have focused on rule of law and control of corruption (Kaufmann, Kraay and Zoido-Lobaton (1999), opacity in the bureaucracy (PriceWaterhouse Coopers 2001), participation rates (Seligson 2001a, 2002), press reports (Rehen 1997), and conviction rates (Meir and Holbrook 1992; Schesinger and Meier 2002).

Table 1 attempts to map the results of empirical studies focusing specifically on the causes of political corruption.³ Statistical analyses confirm the impact of a number of variables. Generally, corruption tends to be higher in countries with lower levels of economic and human development, lower levels of education, limited political rights, weak political competition or non-democratic, with a large state role in the economy and lower levels of economic freedom and openness. And yet despite such cross-national findings, recent experience in many regions shows corruption to have increased in new democracies and liberalizing economies (see, for example, Manzetti 1994; Manzetti and Blake 1996; and Weyland 1998). As Robinson (1998, 2) notes, “democratic structures have proved markedly ineffective in curbing the spread and tenacity of corrupt practices in developing countries.” Other factors empirically linked to corruption include ethnolinguistic factionalism, the lack of judicial independence and a free press, low civil service wages, resource endowment, among others.

Table 1 here

These studies differ in two fundamental ways from the analysis presented here. First, the unit of analysis in cross-national studies has been the nation-state, not the sub-national unit. This raises the question of whether the factors associated with corruption at the national level relate to corruption at the local level. Some empirical studies on the United States, however, have focused on state-level corruption (Johnston 1983; Meir and

³ I focus here on only one side of the equation. Many empirical studies explore the consequences of corruption particularly its impact on investment and economic growth (Mauro 1995, 1997, 2002; Keefer and Knack 1994; Wei 1997), government expenditures (Shleifer and Vishny 1993) and regime legitimacy (Seligson 2002). In some cases, cause and consequence are not easily determined.

Holbrook 1992; Schlesinger and Meier 2002). Using the number of federal prosecutions for corruption as a measure, for instance, Schlesinger and Meier (2002) first rank the level of corruption by U.S. state and then examine the impact of a wide range of variables. They find corruption to be inversely related to the number of college graduates, voter turnout and the presence of popular initiative, and positively linked to crime and gambling arrests, and urbanization. At the same time, they discover party competition, the power of the governor, centralization, ideology, a state’s computer capabilities, campaign finance restrictions, and the salary and number state employees to be unrelated to the degree of corruption. Second, prior studies have almost always relied on measures related to popular or specialist perceptions of corruption in countries rather than actual participation rates. Though both run up against distinct methodological problems, it is generally thought that perception refers to more than the reality of corruption, though Seligson (2002) finds the two to be correlated in a set of Latin American countries (Camp, et al 2000; Seligson (2001b).

STATE-LEVEL DATA ON CORRUPTION

One way of empirically exploring the causes of corruption in Mexico is to examine variations among federal entities (31 states plus the Federal District [DF]). Table 2 shows the Index of Corruption and Good Government (ICBG) from the *Encuesta Nacional de Corrupción y Buen Gobierno 2001*.⁴ The index represents a composite measure of the number of occasions within a specified period of time that an individual

⁴ The national survey of households was conducted during the months of June and July 2001 by four private firms. It included 13,790 interviews with 388 to 506 interviews per national entity.

paid a bribe (*mordida*) to obtain 58 different types of government services. The index shows the small, mid-western state of Colima to have the lowest level of corruption (3.0) and the Federal District the highest (22.6). The ranking for the Federal District in fact is well above most other entities: a point to be returned to later. The average score for the 32 entities is 7.95, the median is 6.8

Table 2 here

While the ICBG measures corruption based on participation and will be the primary dependent variable here, the survey also asked respondents whether they consider corruption to be greater at the higher, middle or lower levels of government or the same in all. Overall, 43% said corruption is higher at the federal level and 39% said it is the same at all levels; only 8.7% and 9.3% considered corruption to be more pronounced at the lower and mid-governmental levels. These measures of corruption, however, as shown in Table 3, are unrelated to the ICBG measure based on participation rates.

Table 3 here

EXPLANATIONS AND ANALYSIS OF POLITICAL CORRUPTION IN MEXICO

Cross-national research using perceptions of corruption as the dependent variable has pinpointed a range of causal factors as noted earlier. In exploring political corruption in Mexico, I borrow from the literature to test the impact of a series of demographic, economic, political and corruption-related variables. Following a review of these variables, I remove the outlier, the Federal District, to explore the data once again.

Analysis concludes using perceptions of corruption at the upper level as the dependent variable and

Demographic

In this model, four demographic variables are examined: population, annual population growth from 1995-2000, and the percent of indigenous and urbanized population (INEGI). Based on the views of Rose-Ackerman (1999) and others linking corruption to the supply and demand of government services, it can be hypothesized that population pressures increase the demand for government services and thus lead to higher levels of corruption. Faced with competitive pressures, individuals tend to “bid-up” the price of obtaining services through bribes. It can be further hypothesized that states with a larger urban population are also more likely to have greater corruption for the same reason. In terms of the impact of a large indigenous population, the macro literature shows a positive correlation linking corruption to ethnolinguistic factionalism (Mauro 1995). As indicated in Table 4, the regression model exhibits a relatively high level of predictability with population the only significantly related factor. Clearly the more populated a state/entity, the higher the level of corruption. Interestingly, population growth had no significant impact and the direction of the relationship is opposite to what was expected.

Table 4 here

Economic

The most robust finding from cross-national research on corruption links corruption inversely to a country’s level of development (see Table 1). Four factors are explored here: a state’s GDP/pc, state economic growth from 1995-2000, the percent of

the population working in agriculture and illiteracy (data are taken from the web site of Institute of Economic and Geographic Statistics [INEGI]). It is hypothesized that poorer states, those with more of the population working in agriculture and higher levels of illiteracy are more likely to exhibit higher levels of corruption. And yet, as shown below, this is not the case at the state level in Mexico. Though none of the relationships is statistically significant, the direction of the relation linking GDP/pc and corruption is in the opposite direction with the richer areas actually showing higher rather than lower levels of corruption.

Table 5 here

Political

Three sets of political variables are explored. The first set relates to the electoral arena and borrows heavily from the many studies detecting an inverse relationship linking democracy and political competition to corruption. Here, I use the percentage of the vote for the once hegemonic PRI in the 1997 election, the change in the PRI's vote from 1997 to 2000, a measure of the competitiveness of elections based on the distance between the first and second place finishers in the 1997 election and the rate of voter abstentionism in the 2000 election (data are taken from web site of the Federal Electoral Institute [IFE]). All the variables are used as indicators of the levels of democratic competition. It is therefore hypothesized that corruption will be higher in states with a larger vote for the PRI, a lower change in the PRI vote, lower levels of competitiveness and higher levels of abstentionism. The model, as shown in Table 6, does have some predictive value but in the expected direction. The PRI vote exerts a significant influence

but states with a higher electoral support for the PRI, in short, tend to have lower levels of corruption.

Table 6 here

A second political area focuses more specifically on the government itself. Three variables are examined here: a nominal variable representing the party controlling the state executive (PRI [n=17], PAN [n=8], PRD [n=5], or opposition coalition [n=2]) and two dummy variables representing incumbency (whether the governor at the time of the poll was of the same party as his predecessor) and divided government (whether the party of the governor enjoys a legislative majority) (data for these variables are taken from CIDAC.org). It can be hypothesized that corruption would be higher in those states run by the PRI, given the history of the party and the lack of competitive pressures, and that corruption should be lower among those states that have returned the same party to power. The potential impact of divided government could conceivably go either way. To the extent that it represents more intense political competition, divided government could facilitate more efficient governance and hence less corruption. And yet, to the degree that divided government can make governing more complex, leading to logjams and mutual accusations across party and institutional lines, it could result in higher levels of corruption. Comparing the mean levels of corruption for these variables, however, reveals no significant differences. States ruled by the PRI, for instance, had an average ICBG of 7.9 compared to 7.2 for the PAN-ruled states and 9.9 for the PRD states: a measure influenced significantly by the PRD’s control of the Federal District. Similarly, the average ICBG for the states with divided government (8.8) differed only slightly from that of the non-divided state governments (7.3).

Table 7 here

The third political area centers on the size and power of the state government. Despite abundant theory linking larger governments to corruption, the results from cross-national research have varied. Some show a positive correlation linking corruption to the size of government while other studies, noting the Scandinavian countries as the main exception, exhibit a weak correlation at best. Here, three distinct measures are used: the number of *municipios* (counties) within the state, per capita government spending, and the percentage of government revenue from the state’s own sources (as opposed to transfers from the federal government) (data for the *municipios* is taken from INEGI, while data for government spending comes from *Mexico en Cifras*). The number of *municipios* serves as a proxy measure of the number of governmental units in the state, per capita government spending provides one indicator of the relative size of the government, and percentage of revenue from local sources represents a proxy for state autonomy. A positive relationship with corruption is hypothesized for all three variables. As indicated in Table 8, the regression model reveals a significant and relatively high predictive value with % of government revenue from local state sources emerging as the strongest predictor of corruption. The high Beta coefficient shows that states with local revenue sources are more likely to have higher levels of corruption than states with limited local revenues. Though statistically insignificant, the relationship between corruption and government income is the not even in the expected direction.

Table 8 here

Related areas: ethics and crime

A final area explores additional societal and political areas thought to be related to corruption: two variables related to ethics and two related to the criminal justice system. Corruption -- particularly participation in corruption -- is often considered a moral and ethical issue. Though the causal direction is unclear, it has often been argued that corruption relates to the values within society. A dimension of the modernization theory linking corruption to development, for instance, suggests that in the process of development particularistic values give way to more universal values and that the spread of such “middle class” mores feed demands for a reduction of traditional forms of political corruption (Huntington 1968; Nye 1967). A society with stronger ethical values, in short, is less likely to tolerate or participate in corrupt behavior. Here, two measures of ethical values are included, both taken from the same *Transparencia Mexicana* survey and both relating to the reasons given by respondents as to why an individual should obey the law: because of the fear of punishment and because of moral principles. It is expected that corruption would be lower in states where a larger proportion of the population feels it is important to obey the law because of moral principles. In addition to being an ethical issue, corruption is also considered a crime and thus an issue that relates directly to the criminal justice system. In their analysis of corruption, Schlesinger and Meier (2002) for instance found a positive correlation linking corruption to crime. Here, the per capita rate of criminal sentencing in the state (INEGI) is used as a proxy for crime. Yet despite these arguments, Table 9 shows no relationship linking corruption to ethical values or crime.

Table 9 here

Summary

The regression models presented thus far show only three variables to have any statistically significant impact on the level of corruption by federal entity in Mexico: the percent of state income from local sources, population and the vote of the PRI. These are tested together in Table 10. The model exhibits a relatively high adjusted R square with population continuing to exert the strongest influence on the level of corruption followed by income from local services. The role of the PRI vote, however, becomes insignificant.

Table 10 here

THREE ADDITIONAL APPROACHES

Removing the Mexico City (DF) Outlier

In much of the statistical analysis the Federal District (DF) appeared as a significant outlier. Not only does the ICBG (corruption) for the DF set it well apart from the 31 states, but its demographic, economic and political situation is also unique. All of these have the potential of distorting the findings. Looking briefly then at the data excluding the case of the DF, provides a closer look at the causal impact of the factors examined.

- Demographic Model. The removal of the DF had only a limited effect on the earlier findings in this area. It strengthened the relationship of corruption to population somewhat, but slightly lowered the overall adjusted R square.
- Economic Model. By removing the DF, the impact of GDP/pc and % employed in agriculture becomes significant, both in the expected direction. This means that consistent with the broader literature on corruption, the lesser developed states in

Mexico are somewhat more likely to have higher levels of corruption than the more developed states with Mexico City being the exception.

Table 11 here

- Political Models. The removal of the DF largely eliminates the influence of the political variables. The adjusted $R^2 = .265$ for the electoral model falls to $-.073$ as the significance of the correlation to the PRI vote evaporates. The direction to the PRI vote does remain, however, though clearly the Federal District’s low vote for the PRI and high level of corruption accounted for much of the initial relationship. In terms of the impact of party in power, incumbency and divided government, the removal of the DF has no significant impact on the results noted previously. None of the variables influence the level of corruption. Finally, when looking at the impact of size and scope of government, the exclusion of the DF cancels the impact of government revenue from local sources on corruption.

Table 12 here

- Related areas. In correlating corruption to ethics and crime and comparing the means of judicial efficiency levels, the exclusion of the DF actually reverses the direction of the equation for the two ethical values, though both remain largely insignificant. More importantly, the exclusion of the DF produces a strong, statistically significant inverse correlation between corruption and crime, suggesting that in states with higher levels of crime (as measured by prosecution rates), the level of corruption is actually lower. That this finding may relate to the efficiency of the judiciary to prosecute criminals, however, is unclear given the lack of any relationship with that variable directly.

Table 13 here

- Combined. The model presented in Table 14 tests the impact of all the variables related to corruption when excluding the DF. With a relatively high adjusted r square, the model shows population to be the only significantly related factor. This reaffirms the earlier finding that smaller states tend to have lower levels of corruption than do the more populace states.

Table 14 here

Perceptions of Corruption by Levels

As noted earlier, the 2001 TM survey also provides measures of the perceived levels of corruption by governmental level. More specifically, it asks respondents whether they consider corruption to be higher at the lower, medium or upper levels, or the same at all levels. Though it is unclear whether respondents might associate the idea of lower, medium and upper level with the different layers of the federal system (local, state and federal) or simply to different bureaucratic/political “pay grades,” it can be hypothesized that states with weaker local governments are more likely to consider upper level corruption to be higher. This means that poorer, smaller states, those with greater dependence on the federal government (lower % of sources from own and poorer), and states with a lower vote for the PRI and/or a non-PRI governor will consider corruption to be higher at the upper level.

The simple bivariate correlations mapped out in Table 15 tend to confirm the hypothesis: poorer states (lower GDP/pc, higher agriculture and lower urbanization) and states with lower levels of revenue from their own local sources are indeed more likely to

see the upper level of government as the most corrupt. And though the vote for the PRI was significantly related to perceptions of upper level corruption, there was no significant difference based on the political party in power. In fact, of the 17 PRI-led states, an average of 46% of respondents felt that corruption was highest at the upper level compared to 41% in the eight PAN-led states, 40% in the PRD-controlled states, and 47% in the two states ruled by a coalition of opposition parties.

Table 15 here

The Impact of Corruption on Election of 2003

The PRI's loss of the presidency in 2000 constituted a clear watershed in the political history of the country. Fox harped on corruption in the campaign and once in office unveiled a national program to fight it. Yet during the first half of the term, the results of the Fox government were quite limited. Few much-needed and promised reforms made their way out of the seriously divided and partisan congress, the economy remained stagnant, relations with the U.S. deteriorated and corruption, according to polls, continued unabated or grew worse. Looking at the impact of the level of corruption by state on the election, of course, reverses the causal error. Rather than focusing on the causes of corruption, however, this approach explores the consequences of corruption in the electoral arena. Table 16 shows the correlations using the vote for the three major parties, abstentionism and the change in the vote from 2000 to 2003 section vote the state. As shown, there seems to be a weak and positive correlation linking the vote for the PRD and the level of corruption though this is accounted for entirely by the unique case of Mexico City. As suggested by the direction of the coefficients, states with higher

levels of political corruption were slightly more likely to vote for the PRI or the PRD than the PAN or not vote.

Table 16 here

CONCLUSION

Corruption has enjoyed a surge of attention in recent years both internationally and within Mexico. Thanks to the availability of comparative survey data, substantial cross-national research now exists exploring the causes and the consequences of this once neglected political phenomenon. Such studies specify the influence of cultural, structural and institutional factors on corruption as well as corruption’s impact on economic growth, investment, public expenditures and regime legitimacy. Within Mexico as well, a handful of surveys have been conducted in recent years that offer a wealth of data on popular perceptions of corruption, participation rates, the incidence of different types and levels of corruption, the amounts paid in bribes, etc. To date, however, the data have been used primarily for descriptive rather than analytical purposes.

The current paper has sought to explore the causes of political corruption in Mexico using state-level data from *Transparencia Mexicana’s Encuesta Nacional de Corrupción y Buen Gobierno 2001*. The study departs from prior analyses by using data on corruption at the sub-national as opposed to the national level (state/entity) and a composite index of corruption based on participation in corrupt exchanges rather than perceptions of corruption. Borrowing from the cross-national literature, the paper develops and tests a series of hypotheses linking corruption to demographic, economic, political and other related factors.

Generally, very few of the cross-national findings could be duplicated at the sub-national level in Mexico. Despite the strong inverse correlation linking level of development and corruption cross-nationally, for instance, only a very weak hint that poorer states in Mexico suffered more corruption than wealthier states emerged after removing the outlier, the Federal District. The fact that the Federal District surfaced as the most corrupt and at the same time the wealthiest certainly clearly distorted the overall results. Similarly, despite the cross-national evidence linking corruption to the lack of democratic competition, data from Mexico revealed a very weak link at best. Corruption was largely unaffected by voting patterns, the level of competitiveness, the party in power, or the power of incumbency. Despite the long-reign of the PRI and its attendant corruption, PRI-controlled states were not shown to be any more or less corrupt than states held by the opposition parties. Two factors that did prove to be significantly related to the level of state corruption were population and percent of state revenue from local sources (though removing the Federal District eliminates this latter relationship). While it can be argued that population affects the level of corruption because of its impact on the demand for government services, the analysis in the end provides little to truly account for the variation in corruption among the 32 federal entities. Of course this is a very early stage in the empirical analysis of corruption in Mexico and much remains to be done not only in analytically mining the data, but in providing detailed studies of the nature of corruption, particularly at the local levels. In many of the areas explored it is quite possible that a more nuanced picture will reveal the complex, interactive and non-linear relationships linking corruption to political or economic variables.

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Table 1. Empirical Research on the Causes of Corruption

Independent Variable	Relationship	Studies	Comments
Level of Development	Negative	Ades and DiTella (1997)	GDP/pc
	Negative	Mauro (1995, 1997)	GDP/pc
	Negative	Johnston (1999)	Human development index
	Negative	Monitolla and Jackman (2002)	GDP/pc
Democracy/ Political Competition	Negative	Ades and DiTella (1997)	Political rights
	Negative	Brunetti and Weder (1998)	Democracy
	Insignificant	Paldam (1999)	Controls for GDP/pc
	Negative	Monitolla and Jackman (2002)	Bollen data
Ethnolinguistic factionalism	Positive	Easterly and Levine (1996)	ELF index
	Positive	Mauro (1995)	
	Positive	Tanzi (1994)	
Judicial independence	Negative	Ades and DiTella (1997)	Dummy variable
Free Press	Negative	Brunetti and Weder (1998)	Freedom House Index
Pay of bureaucrats	Negative	Rijckeghem and Weder (1997)	Pay as % of mfg wages
	Insignificant	Triesman (1999)	Pay as multiple of GDP
Merit system	Negative	Evans and Rauch (1996)	Education and exams
Red tape	Positive	Kaufman and Wei (1999)	Regulatory burden
Pol. Decentralization	Insignificant	Treisman (1999)	Dummy variable
	Positive	Fishman and Gatti (1999)	Fiscal decentralization
Gov't Intervention in the economy	Positive	LaPalombara (1994)	Govt spending/ GDP
	Positive	La Porta et al. (1999)	Total govt transfers
	Negative	Elliott (1997)	Govt spending/ GDP
Industrial Policy	Negative	Monitolla and Jackman (2002)	Govt spending/ GDP
	Positive	Ades and DiTella (1997)	Subsidies to mfg
Economic Competition	Positive	Paldam (1999)	Economic openness
	Positive	Ades and DiTella (1997)	Ratio of imports / GDP
	Positive	Sachs and Warner (1995)	Years of open trade
	Positive	Triesman (1999)	Years of open trade
	Positive	Ades and DiTella (1997)	Number of firms
	Positive	Leite and Weidemann (1999)	Exports of fuels / GDP
	Positive	Monitolla and Jackman (2002)	
	Positive		
Natural Resources	Positive		
-- OPEC	Positive		
Religion			
- % hierarchical religion	Positive	La Porta et al. (1999)	
- % protestant	Negative	Treisman (1999)	
Culture [power distance, materialist, uncertainty avoidance]	Positive	Husted (1999)	
Gender [women in work force]	Positive	Swamy et al. (1999)	
	Positive	Dollar et al. (1999)	
Colonialism			
- British vs non-British	British less corrupt	Treisman (1999) Swamy et al. (1999)	Dummy variable

Table 2. Index of Corruption by State

State	ICBG (index of corruption and good government)
Colima	3.0
Baja California Sur	3.9
Aguascalientes	4.5
Coahuila	5.0
Chihuahua	5.5
Sonora	5.5
Baja California	5.7
San Luis Potosí	5.7
Guanajuato	6.0
Quintana Roo	6.1
Zacatecas	6.2
Tamaulipas	6.3
Nayarit	6.4
Tlaxcala	6.6
Hidalgo	6.7
Chiapas	6.8
Yucatán	6.8
Nuevo León	7.1
Campeche	7.3
Oaxaca	7.4
Morelos	7.7
Sinaloa	7.8
Veracruz	7.9
Querétaro	8.1
Tabasco	8.5
Durango	8.9
Michoacán	10.3
Jalisco	11.6
Puebla	12.1
Guerrero	13.4
México	17.0
Distrito Federal	22.6

low corruption



high corruption

Table 3

Correlation Coefficients

	<u>Lower level</u>	<u>Mid-Level</u>	<u>Upper Level</u>	<u>All Levels</u>
ICBG	-.062	.008	.007	.007

* Correlation is significant at the 0.05 level (1-tailed)

** Correlation is significant at the 0.01 level (1-tailed)

Table 4

	<u>Beta</u>
Population (2000)	.712**
Population growth (95-00)	-.201
Urbanization (2000)	.125
Indigenous Population (2000)	.092

F 10.259** Adjusted R² = .544

* Significant at the 0.05 level ** Significant at the 0.01 level

Table 5

	<u>Beta</u>
GDP/pc (2000)	.374
% Agriculture (2000)	-.307
Economic Growth (95-00)	.030
Illiteracy (2000)	.566

F = 1.467 Adjusted R² = .057

* Significant at the 0.05 level ** Significant at the 0.01 level

Table 6

	<u>Beta</u>
PRI Vote (1997)	-.493*
Abstentionism (2000)	-.046
Change in PRI Vote (97-00)	.008
<u>Competitiveness (1997)</u>	<u>-.118</u>
F = 2.436 Adjusted R ² = .265	
* Significant at the 0.05 level ** Significant at the 0.01 level	

Table 7

<u>Comparison of Means</u>	<u>F score</u>
Party in power	.586
Incumbency	1.859
<u>Divided government</u>	<u>1.166</u>
* Significant at the 0.05 level ** Significant at the 0.01 level	

Table 8

	<u>Beta</u>
Gov't Income/pc	-.149
% from own sources	.772**
<u>Municipios</u>	<u>.199</u>
F = 11.850** Adjusted R ² = .512	
* Significant at the 0.05 level ** Significant at the 0.01 level	

Table 9

	Correlation Coefficients		
	Fear of Punishment	Moral Principles	Crime
ICBG	-.102	.071	-.278
	* Significant at the 0.05 level	** Significant at the 0.01 level	

Table 10

	Beta
% income from own sources	.406*
Population	.541**
PRI Vote 1997	.030
F = 19.372**	Adjusted R ² = .675
* Significant at the 0.05 level	** Significant at the 0.01 level

Table 11

	w/DF	w/o DF
	Beta	Beta
GDP/pc (2000)	.374	-.568*
% Agriculture (2000)	-.307	-.792*
Economic Growth (95-00)	.030	-.044
Illiteracy (2000)	.566	.527
w/DF	F = 1.467	Adjusted R ² = .057
w/o DF	F = 2.384	Adjusted R ² = .156
* Significant at the 0.05 level	** Significant at the 0.01 level	

Correlation without DF
 -.326*

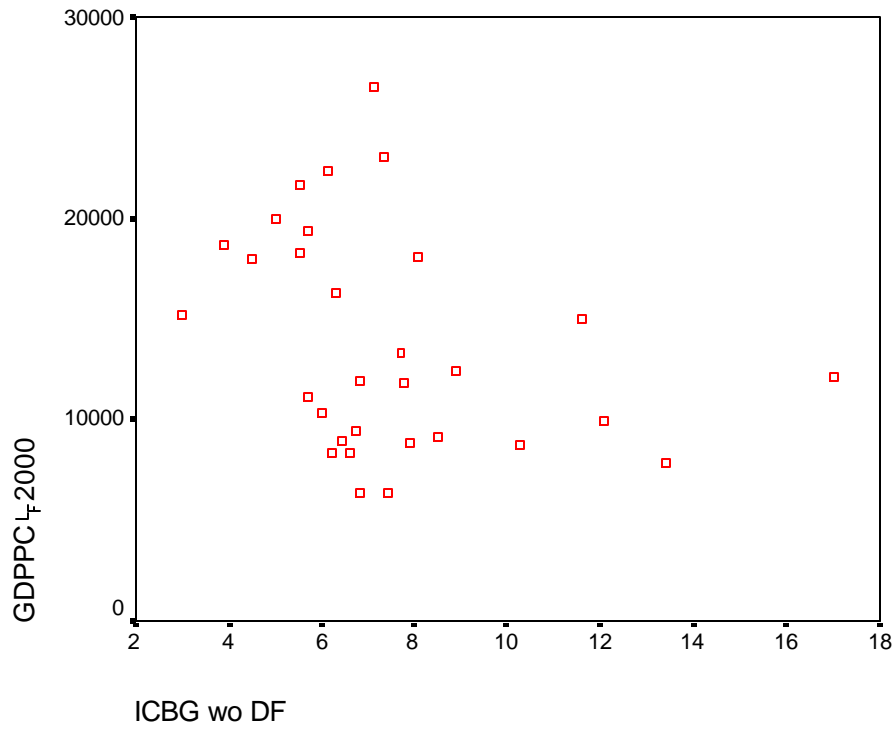
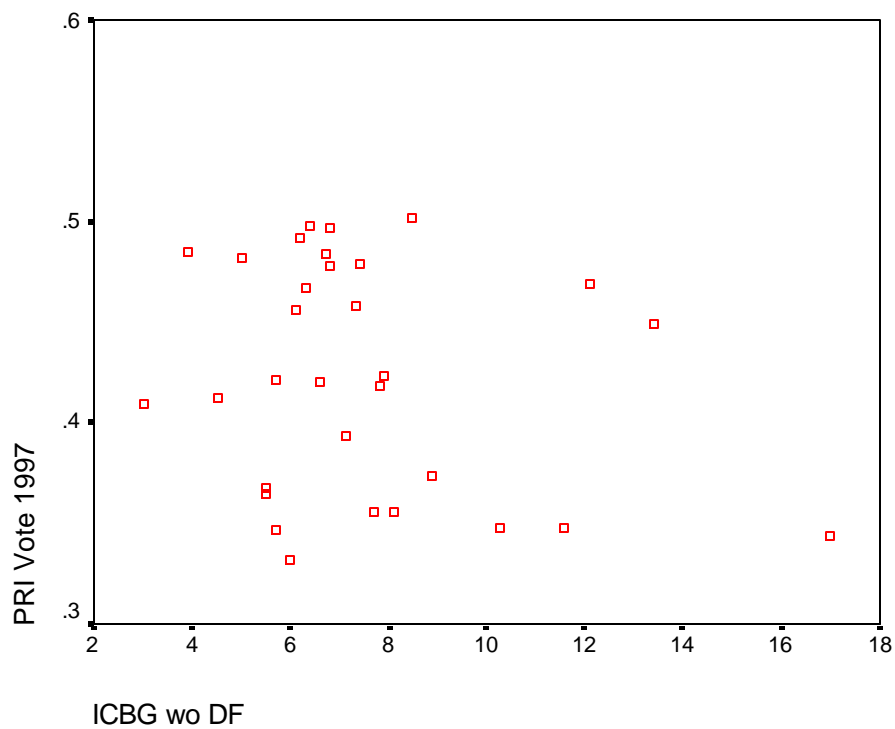


Table 12

	w/DF <u>Beta</u>	w/o DF <u>Beta</u>
PRI Vote (1997)	-.493*	-.201
Abstentionism (2000)	-.046	.034
Change in PRI Vote (97-00)	.008	.113
<u>Competitiveness (1997)</u>	-.118	-.089
w/DF	F = 2.436	Adjusted R ² = .265
w/o DF	F = .491	Adjusted R ² = -.073



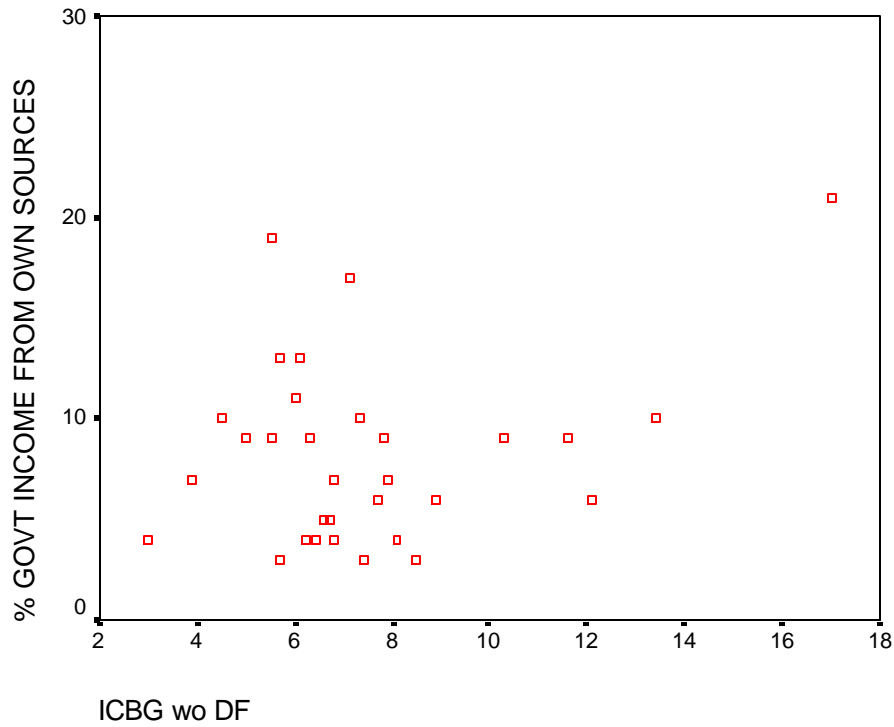
r = .231 (sig. .106) (n= 31)

Comparison of Means

	<u>F scores</u>	
	w/DF	w/o DF
Party in power	.586	.268
Incumbency	1.859	1.135
Divided government	1.166	.114

	w/DF <u>Beta</u>	w/o DF <u>Beta</u>
Gov't Income/pc	-.149	-.303

% from own sources	.772**	.300
Municipios	.199	.195
w/DF	F = 11.850**	Adjusted R ² = .512
w/o DF	F = 3.178*	Adjusted R ² = .179
* Significant at the 0.05 level		** Significant at the 0.01 level



r = .286 (sig. .059) (n=31)

Table 13

	Correlation Coefficients		
	Fear of Punishment	Moral Principles	Crime
ICBG w/DF	-.102	.071	-.278
ICBG w/o DF	.119	-.136	-.476**
* Significant at the 0.05 level		** Significant at the 0.01 level	

Table 14

Without DF

	<u>Beta</u>
GDP/pc 1995	.722
GDP/pc 2000	-1.036
% in Agriculture	-.259
Crime	-.237
<u>Population</u>	<u>.617**</u>
F = 8.840** Adjusted R ² = .566	
* Significant at the 0.05 level ** Significant at the 0.01 level	

Table 15

	Correlation Coefficients
	% saying corruption higher at the upper level
GDP/pc 1995	-.317*
GDP/pc 2000	-.354*
% in Agriculture	.302*
Urbanization	-.323*
Population	-.089
PRI vote 1997	.303*
<u>% Government Income from own sources</u>	<u>-.359*</u>
* Significant at the 0.05 level (1-tailed) ** Significant at the 0.01 level (1-tailed)	

Table 16. Corruption and 2003 Election

	<u>Correlation Coefficient</u>	
		wo/DF
Abstentionism	.068	.129
PAN vote	-.193	-.220
Change in PAN vote 2000-2003	-.139	-.079
PRI vote	-.238	.134
Change in PRI vote 2000-2003	.001	.224
PRD vote	.383*	.191
Change in PRD vote 2000-2003	.335*	.022

N = 32 31

* Significant at the .05 level (1-tailed)

** Significant at the .01 level (1-tailed)