GOOD GOVERNMENT IN MEXICO

The Relevance of the Gender Perspective

MARCIA GRIMES
LENA WÄNGNERUD
ABSTRACT

A number of studies explore the link between gender and good government, and confirm the correlation first observed by Dollar et al (2001): the number of women in elected office is related to levels of corruption. These studies build on cross-country comparative analyses and have thus far failed to discern whether the observed correlation indicates causation or whether both derive from successful liberal democratic project. We explore these issues in an analysis at the subnational level in Mexico. Using several waves of data from a bribe-payers survey conducted by Transparencia Mexicana, we examine the dynamic interrelationship between women in government and levels of corruption over time. The results suggest that levels of corruption affect women’s ability to enter the political arena, but that once in political office, the presence of women in government contributes to reducing corruption. While the latter finding is somewhat less certain, we subject the hypothesis to a rigorous test, as the analyses consider whether female representation is linked to change in the prevalence of bribe-paying between 2001 and 2010.

Marcia Grimes
The Quality of Government Institute
Department of Political Science
University of Gothenburg
marcia.grimes@pol.gu.se

Lena Wängnerud
The Quality of Government Institute
Department of Political Science
University of Gothenburg
lena.wangnerud@pol.gu.se
Latin Americas’ Supermadres?

All over the world, women who engage in politics meet high expectations. This might be particularly true for Latin American countries. Already in the 1970s, the expression *supermadres* was coined alluding to female politicians experiences of motherhood and gendered roles as homemakers and caregivers (Chaney 1979). Today, feminists argue that *supermujer* is a more accurate epithet (Schwindt-Bayer 2010, 189). Nonetheless, the idea behind these expressions is that women in society face certain obstacles and that bringing more women into politics might affect the quality of government in desirable directions. President Dilma Rousseff, Brazil, is a case in point. After just eight months in office Ms Rousseff had kicked four ministers out of office and her actions were dubbed *faxina*: the clean-up. The Rio Times cites Ms Rousseff as saying:

> It is my duty as President of all Brazilians to see an end to the impunity which shelters many of those accused of involvement in corruption practices...we will punish all abuses and excesses. *(The Rio Times, August 23, 2011)*

The issue of gender and good government is gaining increasing scholarly attention. In her extensive study ‘Political Power and Women’s Representation in Latin America,’ Leslie A. Schwindt-Bayer (2010, 171-172) substantiates the view that increased women’s representation decreases citizen perceptions of the pervasiveness of corruption in government and thus fosters greater democratic legitimacy and stability. Whether women in power actually are less corrupt than men, however, Schwindt-Bayer takes no position on. Her study focuses solely on perceptions of illegitimate behaviour.

The point of departure for this study is international research on gender and corruption. Already in the 1990s, large-N cross-country comparative research established that societies that elect large numbers of women to office tend to be less plagued by political corruption than societies that elect few women (Dollar et al 2001; Swamy et al 2001). In a similar vein, research at the individual level has presented evidence that women tend to be less involved in corruption than men (Bailey and Paras 2006; Melnykovska and Michailova 2009; Treisman 2007). Whether these patterns have anything to do with gender is, however, still highly disputed. The suggestion has been made that liberal democracy is the common denominator for good governance as well as for gender equality.
(Sung 2003). Another point of contention is that men and women differ in terms of opportunity, i.e. the access people have to situations where illegitimate transactions take place; women in most countries still have lower levels of involvement in public matters, and therefore are less corrupt by matter of circumstance rather than nature (Mocan 2008).

So far, cross-country comparative research has dominated the field. A major contribution of this study is the attempt to investigate expected relationships at a sub-national level. The great advantage with a subnational design is that we can to a greater extent keep cultural factors and general democratic developments rather constant and thus overcome some of the problems inherent in cross-country comparative research. Moreover, data from Transparencia Mexicana, the Mexican chapter of Transparency International, allows us to investigate experiences of corruption. Thus we are able to expand on the insights gained by Schwindt-Bayer (2010) in her study on perceptions of corruption among women and men in Latin America.

The paper starts with an examination of main strands in previous research on gender and corruption. The conclusion of that section is that there are more thought-provoking questions asked, than conclusive answers reached in the field. We then proceed to the presentation of the Mexican case, and the theoretical model utilized in the empirical part of the paper is presented in more detail. The section on data and methodology discuss the data and selected design, both its strengths and weaknesses. We perceive the present study as first and foremost explorative and we will develop our argument accordingly. The paper ends with suggestions for research on gender and good government on how to move ahead. The evidence is not overwhelming, but the results indicate that Mexican states with a high number of women elected tend to be less corrupt than states with a low number of women elected.

**Previous Research on Gender and Corruption**

The article ‘Are Women Really the “Fairer” Sex? Corruption and Women in Government’, by David Dollar and colleagues at the Development Research Group of the World Bank, initially sparked off research on gender and corruption. The article presents a large cross-country study and establishes that the proportion of women in parliament has a significant effect on corruption, even when other factors, such as overall level of social and economic development, political and civic freedom, average years of schooling, and ethnic fractionalization, are taken into account (Dollar et al 2001). In this first extensive study, the assumption that women are more honest than men was never test-
ed, but it was underpinned by results from previous research findings pointing in the direction that women are more likely than men to exhibit ‘helping’ behaviour and to a larger extent base voting decisions on social concerns (Eagly and Crowley 1986; Goertzel 1983).

Important to note is that there are few studies that reject the observed relationship. However, a number of authors have criticized the study by Dollar et al regarding their failure to address the issue of the possibility of reversed causality—political regimes committed to impartiality and probity might also provide opportunities for women to attain positions of political power. Hung-En Sung, one of the most fervent critics of the research initiated by Dollar and colleagues, suggests that ‘gender equality and government accountability are both great achievements of modern liberal democracy’ (Sung 2003, 718).

The main dividing line brought forward so far is between a theoretical perspective saying that gender and corruption are parallel phenomena without much connection, highlighting a spurious correlation, and a theoretical perspective highlighting effects of gender differences in society. The article from Swamy et al (2001) represents a typical work from the latter strand of research. They emphasize the use of ‘several distinct data sets’ and ‘careful analyses’ when they underpin their argumentation:

> We are making a simple point: to question the central finding of this paper, one needs to argue that the results of careful analyses of several distinct data sets have, by sheer fluke, all been biased in the same direction. Our conclusion, that there is indeed a gender differential in tolerance for corruption, is more plausible. (Swamy et al 2001, 25)

The quote illustrates that the authors rely heavily on the strength of the empirical evidence but a number of theoretically founded hypotheses are discussed in the article; most of these hypotheses concern socialization aspects, for example, that women are brought up to be more honest/law-abiding than men (Swamy et al 2001, 26).

Later studies in the same vein have fleshed out the argument. In a study using data on eight Western European countries from the World Values Survey, covering the period 1981–1999, Tor-
gler and Valev (2006) examine relationships between gender and age in the field of corruption. The results show that older individuals of both sexes were found to have similar more strict moral perceptions; young men are singled out as the deviant law-breaking group. Torgler and Valev highlight lack of self-control among young men as an explanation for their tendency to be involved in illegal activities. Torgler and Valev point to corruption as a criminal act and refer to the finding among criminologists that there is a rather universal gender gap in crime (Mendoza 2003; Steffensmeier and Allan 1996).

Another strand of research relies on a theoretical perspective saying that the relationship between gender and corruption has to do with opportunities to commit ‘reckless’ acts (cf. Torgler and Valev 2006, 138). Theories of opportunity structures basically comprise two versions, one focusing on conditions in the everyday lives of citizens and one focusing on conditions in the decision-making arena. In a study from Ghana, Namawk Alhassan-Alolo (2007) concludes that, when exposed to an opportunity for corruption, women in public life do not prove less corrupt than men. This conclusion is supported by a study on clientelist practices among male and female political candidates in Thailand (Bjarnegård 2009; see also Stockemer 2011). Anne-Marie Goetz (2007) opposes a ‘myth-making’ about male and female nature in corruption research and suggests differences in recruitment to political positions as an alternative approach:

The point is that the ways women are recruited (or not) to the leadership and rank-and-file of political parties restrict their opportunities for engaging in corrupt activities. These restrictions have to do with women’s relative exclusion from male patronage networks, and the sexual danger associated with inclusion. (Goetz 2007, 99)

It is a common understanding in corruption research that it is important to focus on collusive subsystems, sustained by the collective action among individuals who benefit from the corruption. The expression ‘good old boy networks’ is sometimes used to illustrate the durability of these subsystems and the fact that women, in most countries, are relatively few in positions of power. Turning to the citizen level, what is highlighted in research on opportunity structures is that women usually
earn less money than men and that, due to family responsibilities in the private sphere, they are also less involved in public matters. Naci Mocan (2008) develops the logic behind the argument:

All else the same, highly educated and high-income individuals should have higher exposure to being asked for a bribe by a government official because of their higher earning capacity and because they are likely to have more opportunities to interact with government officials. (Mocan 2008, 3)

The main argument in this strand of research is that gender has an indirect effect; women are less corrupt than men because they are not, to the same extent, found in certain layers of the population.vi

In sum, gender research can be described as a new direction in corruption research. Currently, more and more studies in the field use experimental designs to assess the relevance of the gender perspective. The overall impression from these studies is that gender in its pure or basic sense has little impact (Alatas et al. 2009; McCabe et al 2006).vi We find experimental research interesting since it shows that gender is no universal or unified category. Thus, the relevant research questions are when and why gender has an effect; the context seems to be decisive for outcomes.

One important incentive for our study is the empirical evidence presented by Schwindt-Bayer (2010) showing that increased women’s representation does influence perceptions of corruption among citizens. This finding is repeated in a study by Kotsadam and Nerman (2012, 21) who also find support for correlations between higher female representation and lower levels of corruption in Latin America. In their study, Kotsadam and Nerman utilize the International Country Risk Guide, ICRG, index from Transparency International. ICRG builds on evaluations from international experts which makes it different from the data Schwindt-Bayer use. Schwindt-Bayers’ (2010) conclusions builds on evaluations among citizens reported in the Americas Barometer conducted by the Latin American Public Opinion Project at Vanderbilt University.

Victoria E. Rodríguez’s study ‘Women in Contemporary Mexican Politics,’ (2003) suggests a plausible mechanism for these findings. Rodríguez finds that it is rather common among women
politicians in Mexico to have a background in social movements. This leads us to consider the role of electoral processes. There is some evidence that social movements, in many countries, serve the role as a watchdog for abuse of public office (Grimes 2008a; Grimes 2008b). It might be the case that women politicians are not just locked out from male dominated networks, where corruption is part of the game, as suggested by previous research (Goetz 2007; Bjarnegård 2009; Stockemer 2011). To reach and uphold positions of power, women might actively seek to build alternative power bases and this can cause incentives for bringing forward a new set of values to the political domain (Wängnerud 2010).

The ambition in this study is to address some of the gaps mentioned here. First and foremost, we use data from the Mexican context to explore the issue of causation in the gender-good government link. As data on bribe-paying is available from several waves of surveys, we are able to probe this issue more than previous studies. Second, we add to the literature a focus on the relationship between women in government and rates of bribe-paying in a political context. Prior research has explored whether women’s attitudes toward bribe-paying differ from men’s, but most studies exploring whether women in government is associated with better government build on perception-based indicators such as the ICRG and the World Bank’s control of corruption estimate. These indicators, while widely used, have come under some criticism (e.g. Thomas 2010). Regardless of the merits or problems with these measures, they are theoretically and empirically broad, and tend to include measures of both perceived corruption, but also accountability mechanisms and other legal measures in place. Thus we add to the corruption literature by contributing to studies that disaggregate the phenomenon.

More specifically, we test whether the number of women elected to municipal councils is associated with levels of local level corruption in one Latin American country: Mexico. The Mexican case constitutes fruitful ground for delving into matters of corruption/good government. First of all, the level of corruption varies considerably at the subnational level and so does the proportion of women in elected assemblies. Secondly, we are able to bring a set of additional demographic and political factors to the model, such as measures of marginalization and population size, and the existence of political competition. Before we outline the theoretical model in more detail, however, we introduce Mexico as a case.
The Mexican Case

Though never under the control of a military dictatorship as many other countries in Latin America, Mexico was ruled by a single party, the Partido Revolucionario Institucional (PRI), for more than 70 years. For much of this time, the PRI indiscriminately used state resources to serve the needs of the PRI (Bruhn 1996). It is far-fetched to single out the PRI as the only source of corruption in Mexico; however, the hegemonic situation fostered a climate where informal exchanges became ubiquitous and where power was in the hands of a few close to the president (Magaloni 2006; Morris 1991).

Since the mid-1990s Transparency International and the World Bank have measured levels of corruption in Mexico. Results from both organizations display the same pattern: Mexico is consistently found at the bottom of the ‘control of corruption scales’, leaning towards the end category ‘highly corrupt state’. It should also be noted that results from both organizations show small fluctuations over time. In 2000 the hegemonic rule by the PRI came to an end, when Vicente Fox from the centre-right Partido Acción Nacional became president. Even though important changes towards democratization have been taking place, corruption is still a persistent phenomenon in Mexico. Stephen D. Morris, a prominent scholar of corruption in Mexico, reminds us that democratization in Mexico is an ongoing process:

In stunning contrast to just a decade ago, the effort against corruption and abuse of power has taken new adherents and, ideologically at least, has become the norm rather than the exception. Still, as Mexico struggles to address a range of pressing issues in its transformation from an authoritarian into a truly democratic state, corruption continues to shape the nature and course of Mexican politics. (Morris 2009, 239)

However, what is important for this study is that data from the subnational level indicate considerable variation. Transparencia Mexicana (TI Mexico), has, since 2001, regularly conducted a National Survey on Corruption and Good Governance, and this survey is designed in ways that enables subnational comparisons. The backbone of the survey is a set of questions that records the frequency with which acts of corruption take place in requesting or receiving public services. About 40 ser-
vices are normally included (questionnaires vary slightly from wave to wave), such as obtaining water, collecting garbage and receiving an approval for working or selling in a public area.

On the national level the data from TI Mexico, in accordance with the data from Transparency International and the World Bank, show a stable situation. In the first study, in 2001, the national average in the National Survey on Corruption and Good Governance showed corruption in 10.6 per cent of transactions. In subsequent surveys the national average has been 8.5 per cent (2003), 10.1 per cent (2005), 10.0 per cent (2007) and 10.3 per cent (2010).

Stephen D. Morris has conducted a comparative analysis of corruption in Mexican states, using the data from TI Mexico (Morris 2005). The overall conclusion is that very few cross-national findings could be duplicated at the subnational level in Mexico. For example, Morris finds only a weak hint that poorer states in Mexico suffer more corruption than wealthier states, and corruption was largely unaffected by the level of electoral competition in the state. Moreover, despite the long reign of the PRI, PRI-controlled states were not shown to differ from states held by opposition parties. The only factor that showed a robust significant effect was population; the larger the population, the higher the frequency of corrupt transactions. Morris argues that population affects the level of corruption because of its impact on demand for government services, but what he really stresses is that the analysis, in the end, provides little to truly account for the variation (Morris 2005, 17).

In a previous study on corruption in Mexico (Grimes and Wångnerud 2010) we have argued that it is important to take into account that the survey from TI Mexico includes questions that concern payment of bribes in connection to ‘services’, like avoiding a ticket from the transit police. The survey also includes questions about services that are normally very seldom required, which makes them less useful in studies that focus on short- or medium term changes. We have, based on the data from TI Mexico, constructed a ‘thin’ index in order to get an indicator that purely concerns *entitlements* and interactions taking place ‘here and now.’ In this study we follow our previous line of reasoning and construct an even thinner index, relating only to local level entitlements and interactions.

Thus, we argue that research on gender and corruption does not only need to be developed regarding context and independent variables, i.e. why and how gender might have an effect, but also regarding dependent variables, i.e. the measurements of corruption/good government. As mentioned above, much corruption research employs the measures that capture numerous aspects
of corruption. Even Stephen Morris’ thorough study building on the TI Mexico survey employs an index that builds on all of the questions posed in the survey, including a number of questions related to services provided by private service providers, and also questions related to avoiding punishments for illegal actions (parking, traffic infractions). We explore specifically bribe-paying in the public sector, and in particular for municipal services. While the overall impression might be one of small changes in Mexico over time, as reported by Transparency International’s corruption perception index and the World Bank’s control of corruption estimate, and even Transparencia Mexicana’s overall index, we find evidence of variation over time and above all between states.

The Analytical Model

What we are studying is corruption as an indicator of good government. Good government is admittedly a broad concept and it could be argued that corruption only captures some of the important features at work. We follow Rothstein and Teorell (2008) in arguing that a cornerstone of good government is the extent to which public power is exercised in line with the principle of impartiality, i.e. that the only factors stipulated in laws and policy directives weigh into the decisions of politicians and civil servants. We are aware of the fact that corruption and bribe-paying does not fully capture this broader concept of good government; however, corruption is indisputably a deterrent of good government and it is reasonable to use it as an indicator of a more general phenomenon. There is, moreover, a plethora of studies showing that the absence of corruption is of the utmost importance for the well-being of citizens (see Rothstein and Holmberg eds. 2012 for an overview).

The novelty of this study is to get a more fine-tuned understanding of the relevance of the gender perspective. Although previous research points in different directions, it is possible to distinguish two main lines of reasoning: either good government is seen as causing gender equality or a high number of women elected is seen as causing good government. Figure 1 presents stylized versions of the two different models:
In the first model (A) additional factors, mostly liberal democracy indicators and indicators on socioeconomic development, are used as control variables: Do expected relationships hold when other factors are taken into account? In the second model (B) additional factors are, in most studies, used as interacting variables: Do expected relationships turn up under certain circumstances? In this study we will let both models guide the empirical analyses. A model where feedback mechanisms are at play may be the most probable scenario. This model (C) is presented in figure 2.

In this more complex model it is assumed that societies with low levels of corruption at the outset (T1) will elect higher numbers of women (T2), then the number of women elected will affect the level of corruption at a later stage (T3), which, in turn, will affect the number of women elected in
the future (T4). What is described here is a kind of ‘push-and-pull-development’ detected in, for example, Scandinavian countries where women-friendly developments in society have been studied in relation to women’s participation at the political elite level (Hernes 1987; Wängnerud 2009). To the extent the data allow, we test the model with feedback mechanisms.

**Design and data**

Mexico is a federation of 31 states plus the capital Mexico City (Distrito Federal). The focus of this study is variations among the states as well as variations over time. The great advantage with focusing on the subnational level is, as stated previously, that the cases share a common constitutional and legislative framework, as well as important institutional, cultural and historical similarities.

Though regional variations exist with respect to the degree of political contestation, electoral systems as well as the main party contenders are for the most part the same throughout the country. Oaxaca stands as an exception in that its electoral system differs in a way that excludes women from being elected to municipal councils (see Benton 2011 and Danielson and Eisenstadt 2009). We return to this issue below.

The states, but not Mexico City, are subdivided into 2 440 municipalities. Our analysis employs data for the municipal level for a number of reasons. As far as we have been able to determine, there is no evidence of quota laws at the municipal level in Mexico. First, a 2002 law requires that, at the national level, parties are to have no more than 70 percent candidates or alternates of the same sex (Dahlerup 2006; Frias 2008; Jaquette 2009; Zetterberg 2009). Some Mexican states have subsequently enacted quota laws for the state legislative bodies, though the laws are in some cases very weak. The existence of quota laws at the state level, in combination with the varying effectiveness of these laws, makes it less appropriate to explore the potential effects of corruption on women’s political success at this level. Moreover, the average number of women elected is highest at the municipal level. In 2005 the national average for the number of women elected to municipal legislatures was 30 percent, and the national average for state legislatures was 20 percent. A second reason for focusing on the municipal level is that a large proportion of public services are in the jurisdiction of the municipalities (Morris 2009).

It is important to note, however, that we examine the state mean values of both bribe-paying and women’s participation in municipal councils. While this limits the number of cases, it lends for more reliable measures of corruption as the number of respondents in some municipal-
ties is quite small. In sum, states are the unit of analysis, but the data reflect corruption and women’s representation in municipal government.

The survey from TI Mexico is designed to make comparisons over time and between states. At each occasion about 15,000 heads of households’ answers questions about experiences of corruption. Besides the index of corruption, our most important variable is the number of women elected. This variable is based on the number of women elected as regidores (city council members) to city councils. However, the number indicates an average for each state. Thus, in order to get a reasonable match our corruption index include only those questions that relate to services under control of local authorities.

Figure 4 presents an overview of the main variables. As illustrated in figure 1, good government/corruption will in some analyses be the dependent variable and in others the main independent variable. The same applies to the number of women elected. The fact that we only have data for 2005 when it comes to the number of women elected sets limits for the analyses. The different steps taken will be explained in tandem with the presentation of the results.

FIGURE 4  CORE VARIABLES IN THE EMPIRICAL STUDY

2001
State mean of municipal corruption *

2005
State mean of municipal corruption *
Number of women elected to city councils, averages per state **

2010
State mean of municipal corruption *

(*) The items included in the index concern bribe-paying relating to services handled by local authorities, data from TI Mexico.
(**) Sonia Frias has generously shared her data with us, see Frias (2008).

The measure of corruption

The measure of municipal corruption builds on six questions that relate to services under the jurisdiction of local authorities, and which asked respondents to answer with reference to the most recent year, month or week. The TI Mexico survey includes a large battery of questions relating to about 40 different kinds of services, but many of these refer to private service providers (e.g. telephone connection, obtaining a loan from a private bank, vehicle inspections) or services for which
the federal government is responsible (e.g. receiving welfare entitlements, securing government employment, obtaining a passport, moving goods through customs). The questions included in the municipal index to be used here refer to: 1) obtaining or expediting the issuance of a certificate of birth, death, marriage or divorce, 2) transactions related to vehicles such as deed transfers, 3) obtaining a driver’s license, 4) gaining access to municipal water, 5) soliciting proof of land use or other service from public registry, and 6) obtaining garbage removal.

For each question, respondents were asked if they had availed themselves of the service and then whether they had paid a bribe in the transaction. The measure is the state average of the percentage of transactions that involved bribe paying. The number of people indicating having used any of these services ranges from 65 in Tamaulipas to 343 in Sonora, though all but Tamaulipas have at least 120 reporting having used at least one of these services. There is no systematic relationship between number of respondents per state and rates of reported bribe-paying, i.e. the varying response rate (or alternatively variations in the extent to which residents of a state sought these services) does not seem to be a source of measurement error that might affect our analyses.

**Additional variables**

As the overarching aim of the paper is to understand the causal dynamics, if any, between good government and gender, we also include in the analysis a number of factors theorized to affect each of these two. Explanatory factors for the level of women in local government include demographic conditions: the percent of the state’s population living below two minimum wages, the percent that live in towns with fewer than 5000 residents, and the percent literate.

The analyses also consider a number of political and institutional factors, such as whether the existence of meaningful electoral competition exists in the state. We use Ríos-Cázares and Cejudo (2009) coding of states as hegemonic (PRI), dual party or multiparty. We also consider whether the state had enacted access to information law (AtI) in 2004 or before. In 2001, the federal government enacted a comprehensive access to information law recognized as one of the stronger such laws in international comparisons. The federal government required all states in the union to implement such laws, but compliance was considerably more expeditious in some states than others. Early adoption of an AtI is treated as an indicator of political will in the state to work toward better quality of government. Data on state level access to information laws is from Instituto Federal de Acceso a la Información y Protección de Datos (IFAI). A third political institutional factor examined
is judicial capacity. The measure of judicial capacity is a perception based indicator. The data come from a survey of competitiveness in the Mexican states compiled by Centro de Estudios Estratégicos (CEE) in 1997. Respondents were asked to judge how much they agreed with the statement: “In society there is confidence in the correct application of justice.” The scale ranged between 0 and 5 (the higher value the more confidence).

**Analyses**

As a first explorative step in examining the invariably complex causation in the relationship between female representation and better government, we begin with simple bivariate analyses of corruption measures and women in government for a first snapshot of the dynamics over time. Table 1 presents the correlations between the prevalence of bribe-paying in public services administered at the municipal level at three points in time, 2001, 2005 and 2010, with the percentage of municipal legislators that are women.

The correlation analyses suggest that women in government may be both a cause and effect of lower levels of corruption, though perhaps somewhat more an effect than a cause as the correlation with corruption levels 2001 ($r=-0.41, p<.05$) is somewhat stronger than with corruption in 2010 ($r=-0.35, p<.1$). Moreover, figures 5.1 and 5.2 show the distribution of the 31 states on each of these variables and suggest that the case of Oaxaca is a rather influential outlier. Municipal council elections in Oaxaca differ from other states in a way that precludes women from attaining any substantively meaningful level of representation, which accounts for the fact that no women occupy seats in municipal councils in the state. With Oaxaca omitted as a case, the level of women representation correlates only with corruption in 2005 ($r=-0.31, p<.1$, see figure 5.3) but retains no statistically significant correlation with corruption levels in 2001 or 2010 (table 1). As institutional factors account for the lack of women in local government in Oaxaca, the models that treat women representation as the dependent variable include a dummy variable for this state.
### TABLE 1  WOMEN IN LOCAL GOVERNMENT (% MUNICIPAL COUNCILORS IN 2005) AND LOCAL CORRUPTION (PEARSON’S R)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Women Councilors</td>
<td>1.00</td>
<td>-0.41**</td>
<td>1.00</td>
<td>-0.36**</td>
<td>0.14</td>
<td>-0.07</td>
</tr>
<tr>
<td>Municipal Corruption 2001^</td>
<td>-0.35*</td>
<td>0.55**</td>
<td>0.62**</td>
<td>0.35*</td>
<td>-0.25</td>
<td>0.61**</td>
</tr>
<tr>
<td>Municipal Corruption 2005^</td>
<td></td>
<td>0.75**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal Corruption 2010^</td>
<td></td>
<td></td>
<td>0.35*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption diff 2010-2001</td>
<td></td>
<td></td>
<td></td>
<td>0.33*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption diff 2010-2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.61**</td>
<td>0.66**</td>
</tr>
</tbody>
</table>

*p<.10; **p<.05; ***p<.01  
^% municipal councilors (regidores) that were women in 2005. Data from Sistema Nacional de Informacion Municipal (Frias 2008).  
^Mean rates of bribe-paying in six municipal services used within the past year, month or week. Services in battery: 1) issuance of a certificate of birth, death, marriage or divorce, 2) transactions related to vehicles, 3) obtaining a driver’s license, 4) access to municipal water, 5) services from the public registry, and 6) garbage removal. Data from survey conducted by Transparencia Mexicana.
The extent to which women succeed in securing elected office is, of course, not an exogenous factor but is contextually interrelated with numerous historical, social and cultural factors. While quantifiable, we make no a priori assumptions about women’s reasons for seeking office, or avenues to arrive there. Women in government vary along all of the parameters that representatives may vary: support base, ideological orientation, publicly-oriented versus self-interested, party loyalty, previous life experience. Moreover, even if women representatives tended to be more inclined to engage in anti-corruption policy work, or themselves less inclined to engage in corrupt practices, it seems plausible to expect that their ability to do so would greatly depend on political and institutional characteristics of the context. These political and institutional factors may also influence the extent to which women seek office in the first place. We attempt to address and model some of this complexity, in the remaining analyses.

One of the primary criticisms directed at the Dollar et al study (2001) relates to the prickly issue of causation, whether it is not more plausible that countries with more impartial governments are conducive to women attaining office, or perhaps that both factors are simply two manifestations of the same trajectory of political development. The data on bribe-paying from several years enables an examination of some of these dynamics over time. The first set of analyses below turn to
the question of which contextual factors are linked to higher rates of women attaining local level office.

The analyses begin by examining whether demographic factors relate to female representatives in local office. Based on the findings of cross-country evidence, we expect levels of development to correlate with female representation. Models 1-3 in the table below to some extent corroborate these findings. States with higher values on the index of marginalization, i.e. with lower values on a number of development indicators, do tend to have fewer women municipal councilors, though the relationship is rather weak.

The index of marginalization spans from 0 to 3.64. The estimate in model 1 indicates that the predicted difference between the most and least developed states is 8 percentage points. As the index of marginalization is a composite index reflecting measures of a large number of component indicators, the effect is somewhat of a blunt instrument and substantively difficult to interpret. Model 2 therefore examines literacy, the proportion of a state’s population in villages with fewer than 5000 inhabitants, and the proportion of the state’s population living on less than two minimum wages. Of these three factors, literacy is fairly strongly associated with the prevalence of women councilors. As the difference between the state with the highest and lowest rates of literacy is 20 percentage points (78 and 96% literates), the difference between levels of women’s representation is approximately 40 percentage points. As Morris identified state population as the only robust correlate of corruption in Mexican states, the third model considers whether the population of the state has any relation with women local government. This does not, however, seem to be the case.

TABLE 2 DEMOGRAPHIC DETERMINANTS OF WOMEN REPRESENTATIVES IN LOCAL GOVERNMENT (OLS WITH ROBUST STANDARD ERRORS)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Beta</td>
<td>B</td>
</tr>
<tr>
<td>Index of marginalization</td>
<td>-2.33* (1.38)</td>
<td>- .27</td>
<td>-2.23 (1.38)</td>
</tr>
<tr>
<td>Literacy</td>
<td>1.14* (.57)</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>% Rural</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Low income</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>0 (0) p=.23</td>
<td>.16</td>
<td>-28.2*** (3.30)</td>
</tr>
<tr>
<td>Oaxaca</td>
<td>-28.2*** (3.30)</td>
<td>.49</td>
<td>-24.2*** (3.14)</td>
</tr>
</tbody>
</table>

Dependent variable: % municipal councilors (regidores) that were women, 2005; data from Sistema Nacional de Informacion Municipal (Frias 2008); Demographic data from 2000 (Instituto Nacional de Estadistica y Geografia).
The second set of analyses explore whether political factors such as the extent of political competition, an independent judiciary and an early enactment of an access to information law have any bearing on women in municipal councils. The political competition measure, a dichotomous variable in which the reference category indicates continued dominance by the PRI, and the value 1 indicates the establishment either of a two or multi-party system (Ríos-Cázares and Cejudo 2009, 20). The PRI is generally characterized as a political machine, we expect states classified as PRI hegemonic to have fewer women councilors in local government.

An independent judiciary indicates a climate conducive to greater accountability and rule of law, which may suggest relatively lower levels of stable, tight-knit networks of nepotism and patronage. The judicial independence measure captures public confidence in the judiciary on a 0 to 5 scale. A comparatively early enactment of access to information legislation instead acts as an indicator of a more wide-spread political will to work toward better government in the state. This allows for an examination of the hypothesis that women are more likely to be promoted politically and ultimately elected in more open and progressive settings. The analyses also examine the reverse causality contention head on, and explore whether the prevalence of corruption in the municipality in 2001 affects women’s success in reaching office in 2005.

Of all of the political and institutional factors examined, only local level corruption has any bearing on women’s success in attaining office. Model 1 finds no association between women’s electoral success and a judiciary perceived as trustworthy, the extent to which the PRI’s grip has loosened in the state, nor whether the state legislature was early to adopt access to information legislation. None of these factors have even a bivariate relationship with the percentage of women in local government (bivariate relationships not shown).
### TABLE 3  POLITICAL DETERMINANTS OF WOMEN IN LOCAL GOVERNMENT (OLS WITH ROBUST STANDARD ERRORS)

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Beta</th>
<th>B</th>
<th>Beta</th>
<th>B</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>28.99*** (6.04)</td>
<td>-35** (.35)</td>
<td>35.7 (9.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption 2001</td>
<td>-38** (.17)</td>
<td>-23</td>
<td>-43* (.24)</td>
<td>-26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Party competition</td>
<td>0.41 (3.96)</td>
<td>0.02</td>
<td>-1.07 (3.09)</td>
<td>-0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judicial Independence</td>
<td>1.31 (2.44)</td>
<td>0.09</td>
<td>-34 (3.12)</td>
<td>-0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATI Law 2004 or earlier</td>
<td>0.57 (3.74)</td>
<td>-0.04</td>
<td>-51 (3.94)</td>
<td>-0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oaxaca</td>
<td>-30.34*** (4.34)</td>
<td>-57</td>
<td>-26.7*** (2.39)</td>
<td>-50</td>
<td>-25.6*** (4.9)</td>
<td>-49</td>
</tr>
<tr>
<td>N=31</td>
<td>R² = .35</td>
<td>R² = .39</td>
<td>R² = .39</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.10; **p<.05; ***p<.01

Dependent variable: % municipal councilors (regidores) that were women, 2005. Data from Sistema Nacional de Informacion Municipal (Frias 2008).

*a Mean rates of bribe-paying in six municipal services used within the past year, month or week. Services in battery: 1) issuance of a certificate of birth, death, marriage or divorce, 2) transactions related to vehicles, 3) obtaining a driver’s license, 4) access to municipal water, 5) services from the public registry, and 6) garbage removal. Data from survey conducted by Transparencia Mexicana

*b 0=continued hegemony of the Partido Revolucionario Institutional (PRI), 1=two or multi-party system established in the state

*c Perception based indicator, 0 (no confidence) to 5 (high confidence). Data from Centro de Estudios Estratégicos (CEE), 1997.

*d Access to Information law adopted pre 2004, data from Instituto Federal de Acceso a la Información y Protección de Datos (IFAI)

Note: R2 are around .08 if Oaxaca dummy is excluded

Bribe-paying in 2001 does correlate significantly with female representation, however (models 2 and 3). The most and least corrupt states differ in rates of municipal bribe-paying by 24 percentage points (between 2 and 26 percent of all transactions that entailed bribe-paying). The estimate for corruption in 2001 in model 3 (-.43) suggests that the difference in women’s representation between these two extremes would be 10 percentage points. The estimated effect of corruption on women’s representation stands even under control for the other political factors examined. It also remains significant and substantively strong under control for the percentage of low income and rural residents in the state. Controlling for the index of marginalization renders the association statistically insignificant. Corruption and marginalization correlate more strongly with each other than either correlates with the dependent variable, and the direction of causality in this relationship is also, to say the least, complex.
Women in government: a cure to corruption?

The second set of analyses considers whether the findings of cross-national comparisons can be replicated at the subnational level in Mexico. Based on a large number of different model specifications, the resounding conclusion is that while states with a greater proportion of women in local government do tend to have lower levels of corruption, it is difficult to determine the direction of causality conclusively. In contrast to Stephen Morris analyses, we also find that some portion of the variation in corruption between states can be explained in terms of social factors, but not political and institutional factors.

The first set of analyses consider whether the proportion of women in local government (2005) relates to municipal corruption at a later point in time (2010) when other social and societal factors are taken into account. As a baseline model, the first model in table 4 replicates the correlation analyses presented in table 4. As the percentage of women in local government ranges from 0 to 48, the difference in levels of corruption between the states in which women have been least and most successful in local politics is, gauging by the estimate in model 1, 8.6 percentage points. This interpretive exercise is in no way intended as having predictive value but rather only provides as a means of conveying the strength of the association. This association remains completely unchanged when the extent to which the population of the state live in rural communities or on less than two minimum wages. The proportion of residents residing in rural settings is associated with lower rates of bribe-paying, while a larger proportion living in poverty is positively associated with bribe-paying. Supplementary analyses not show in the table consider whether GDP or log GDP have any relationship with rates of bribe-paying but no such association seems to exist in the context of Mexican states. These factors combined explain a third of the variation in local bribe-paying.

The third model in table 4 tackles the issue of causality by including the measure of municipal corruption in 2001 in the model. Controlling for corruption at an earlier point in time greatly enhances the ability to elucidate causation in a correlation, as it captures historical factors and other institutional and contextual factor that are stable over time. To the extent that cultural norms of gift-giving shape the propensity to illicit and offer bribes, they would do so approximately equally at two measurement points nine years apart. In sum, it allows for an examination of factors linked to change in the dependent variable. Both poverty rates and the rural-urban distribution retain a significant relationship with average municipal bribe-paying; in states with higher rates of indigence, bribe-paying tends to increase between the two survey periods, while in states with comparatively large rural populations, bribe-paying tends to decrease.
The percentage of women in local government is marginally significant (p = .16) but does evince a negative impact on bribe-paying for local services. This finding, while not overwhelmingly strong, does add weight to the argument that women in government may contribute to curbing corruption. The analysis builds on a minimal number of observations, and by necessity builds on a measure of corruption that is somewhat of a proxy for the most theoretically plausible effect.

Women participation in legislative bodies is more likely to have an impact on corruption in, precisely, legislative bodies, such as the misappropriation of funds for private gain, or ‘selling’ legislation. In order for women in legislature to affect the solicitation or acceptance of bribes assumes that they succeed in bringing about or by some other means induce changes in institutional norms or rules governing the integrity of civil servants.

### TABLE 4  
WOMEN REPRESENTATIVES AND CORRUPTION, CONTROLLING FOR SOCIAL FACTORS (OLS WITH ROBUST STANDARD ERRORS INDICATED IN PARENTHESES)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Beta</td>
<td>B</td>
</tr>
<tr>
<td>Intercept</td>
<td>13.51***</td>
<td>(2.92)</td>
<td>6.58</td>
</tr>
<tr>
<td>Women representatives</td>
<td>-0.18**</td>
<td>-0.35</td>
<td>-0.19**</td>
</tr>
<tr>
<td>Percent rural</td>
<td>-0.17*</td>
<td>-0.63</td>
<td>-0.19**</td>
</tr>
<tr>
<td>Percent low income</td>
<td>0.22***</td>
<td>0.71</td>
<td>0.19**</td>
</tr>
<tr>
<td>Municipal corruption 2001</td>
<td>0.34*</td>
<td>(0.18)</td>
<td>0.40</td>
</tr>
<tr>
<td>R²</td>
<td>.12</td>
<td>.31</td>
<td>.43</td>
</tr>
</tbody>
</table>

*p<.10; **p<.05; ***p<.01

Dependent variable: Mean rates of bribe-paying in six municipal services used within the past year, month or week. Services in battery: 1) issuance of a certificate of birth, death, marriage or divorce, 2) transactions related to vehicles, 3) obtaining a driver’s license, 4) access to municipal water, 5) services from the public registry, and 6) garbage removal. Data from survey conducted by Transparencia Mexicana

* % municipal councilors (regidores) that were women, 2005. Data from Sistema Nacional de Informacion Municipal (Frias 2008). Demographic data from 2000 (Instituto Nacional de Estadística y Geografía).
## TABLE 5
WOMEN REPRESENTATIVES AND CORRUPTION, CONTROLLING FOR POLITICAL FACTORS (OLS WITH ROBUST STANDARD ERRORS INDICATED IN PARENTHESES)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Beta</td>
</tr>
<tr>
<td>Intercept</td>
<td>14.89***</td>
<td>2.26</td>
</tr>
<tr>
<td></td>
<td>(5.11)</td>
<td>(6.65)</td>
</tr>
<tr>
<td>Women representatives*</td>
<td>-0.19*</td>
<td>-0.08</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.09)</td>
</tr>
<tr>
<td>Electoral competition**</td>
<td>-1.34</td>
<td>-0.79</td>
</tr>
<tr>
<td></td>
<td>(1.88)</td>
<td>(2.03)</td>
</tr>
<tr>
<td>Judicial Independence***</td>
<td>-0.27</td>
<td>1.49</td>
</tr>
<tr>
<td></td>
<td>(1.75)</td>
<td>(1.24)</td>
</tr>
<tr>
<td>ATI law 2004 or earlier****</td>
<td>-0.35</td>
<td>0.48**</td>
</tr>
<tr>
<td></td>
<td>(2.04)</td>
<td>(0.24)</td>
</tr>
<tr>
<td>Municipal corruption 2001******</td>
<td>1.06</td>
<td>0.57</td>
</tr>
<tr>
<td></td>
<td>(1.85)</td>
<td>(1.85)</td>
</tr>
<tr>
<td></td>
<td>R² = .14</td>
<td>R² = .31</td>
</tr>
</tbody>
</table>

*p<.10; **p<.05; ***p<.01

Dependent variable: Mean rates of bribe-paying in six municipal services used within the past year, month or week. Services in battery: 1) issuance of a certificate of birth, death, marriage or divorce, 2) transactions related to vehicles, 3) obtaining a driver’s license, 4) access to municipal water, 5) services from the public registry, and 6) garbage removal. 2010 survey by Transparencia Mexicana.

* % municipal councilors (regidores) that were women, 2005. Data from Sistema Nacional de Informacion Municipal (Frias 2008).

** 0=continued hegemony of the Partido Revolucionario Institutional (PRI), 1=two or multi-party system established in the state

*** Perception based indicator, 0 (no confidence) to 5 (high confidence). Data from Centro de Estudios Estratégicos (CEE), 1997.

**** Access to Information law adopted pre 2004, data from Instituto Federal de Acceso a la Información y Protección de Datos (IFAI)

Political and institutional factors, in contrast to societal contextual factors examined above, do not have any detectable bearing on levels of corruption. Of the three factors examined – whether the state had enacted an access to information law in or before 2004, the extent to which the judiciary is trusted by state residents, and whether the PRI still dominates in electoral contests – none had any relationship to rates of local bribe-paying, and together added very little explanatory power to the model (.14 compared to .12 in model 1, table 4 above). The early adoption of a transparency law does correlate negatively with bribe-paying, as does perceived judicial independence, while electoral competition is negatively associated to bribe-paying. The robust standard errors of these estimates are, however, too large to conclude that these associations are systematic, much less causally related.
Women representatives in local government have the same estimated relationship with local corruption as in models 1 and 2 in table 4 above. Unlike above, however, the extent of women’s presence in local legislatures does not show any relationship with corruption once earlier levels of corruption is taken into account.

**Does context matter?**

In the spirit of an exploratory analysis, we carried out a number of analyses to determine whether, for example, the extent of women in government might have varying impacts on corruption depending on theoretically relevant attributes of the institutional and political setting, including several of the factors examined above. Are, for example, women more able to affect the prevalence of corruption in states with viable electoral competition? Or does the existence of an overall political will to increase accountability, to the extent that such a will expresses itself as the early adoption of access to information laws, make women in government redundant or alternatively enable them to better combat corruption?

The extent to which women representation matters for good government does not, based on the data from Mexico’s states, seem predicated on the political or institutional environment. The measure of women in government was interacted with the measures of political competition, the early enactment of AtI laws, the measure of judicial independence, and the level of development in a state as measured by the index of marginalization, as well as with the proportion of the state’s population in poverty or in living in rural areas. Both continuous and dichotomized versions of each of these variables were, when possible, tested, and different cutoff points examined. None of the conditions examined affected the relationship between women in government and corruption. It must be emphasized, however, that the small-N nature of these analyses means that only extremely systematic and robust relationships can be detected.

**Conclusions and discussion**

The link between gender and good government is as poorly understood as it is well-documented. Countries with a larger number of women in legislative bodies have substantively and statistically significantly lower levels of corruption. Research has to date been unable to determine whether the relationship is causal – and if so whether women’s entry into government leads to more rule-bound and impartial government, or the break-up of collusive, exclusive political machines and networks
allows new groups, including women, access to political power – or whether perhaps both are components of a broader transition from particularistic to universalistic political institutions. This study seeks to contribute to the larger effort to disentangle some of these issues. The empirical focus at the subnational level offers the advantage of holding the overall institutional and historical context constant in order to advance a more rigorous exploration of the relationship in question.

The comparative analysis of the Mexican states suggests that causation runs in both directions, though perhaps slightly more from good government to women representation than the reverse. Socio-demographic factors explain to some extent the success with which women have entered into the political game, in particular levels of education in the state and the comprehensive measure of development, the index of marginalization. In contrast, indicators of political and institutional development such as political competition, transparency legislation, and judicial independence have no relationship whatever to women’s success in getting elected to office. This speaks to some extent against the contention that gender equality in government, and lower levels of corruption are expressions of a broader process of political change. In contrast, corruption in local government does, it seems, inhibit women’s ability in gain access to office. Even once levels of poverty in the state are taken into account, levels of corruption in 2001 retain a robust and substantively strong relationship with the proportion of women in local government in 2005. That the relationship is not significant once overall levels of development are taken into account does introduce some doubt into this conclusion, but at the same time corruption has also been repeatedly shown to be strongly linked to development, and development may to some extent be an intervening variable in the equation.

The extent to which women gain access to local government legislative bodies also seems to have some effect on corruption in municipalities farther down the road as well. We subject this thesis to an inordinately tough test, not least due to the small number of cases but also because the operationalization of corruption is perhaps not the most theoretically plausible effect of women in legislative office. Nonetheless, women’s presence in local government in Mexico does seem to impel some change in the direction of lower incidence of bribe-paying.

Indeed, women who engage in politics meet high expectations. There is strand of research scrutinizing the link between the number of women elected to office and women-friendly policies, such as anti-discrimination regulations and legislation enabling for the successful combination of family life and working life (see Wångnerud 2009 for an overview). Our study is different since we
focus on good government in general instead of women-friendly policies more specifically. Still, women citizens can be expected to gain a great deal from a more well-behaved government. In most countries, women make a majority among the poor and it is a well-known fact that groups in structurally weak positions in society are hit, disproportionately hard, by dysfunctional systems.

Anne-Marie Goetz (2007) has warned against expectations of women as a new ‘anti-corruption’ force. We share her considerations. Participation in politics, also beyond the equal right to a vote, is a matter of justice. The reason for engaging in issues of gender and good government is however to learn about the mechanisms that drive change in society. Our study strengthens the idea that gender is a relevant perspective to take into account in research on the quality of government. We hope for future studies that are able to dig deeper into the model with feedback mechanisms presented in this paper (figure 2). Good government and gender equality are intertwined but the processes that determine whether societies move in a desirable direction or not need to warrant continued attention from the research community.
REFERENCES


Guerrero, M. A., & Rodríguez-Orejiga, E. (2005). *About the decisions to commit corruption in Mexico: The role of perceptions, individual and social effects*. Mexico City: Universidad Iberoamericana, A.C.


Treisman, D. (2007). What have we learned about the causes of corruption from ten years of cross-national empirical research? Annual Review of Political Science, 10, 211–244.


Notes

We would like to thank Sonia M. Frias, National Autonomous University in Mexico, and Transparencia Mexicana, the Mexican chapter of Transparency International, for generously sharing their data with us.


A well-recognized counterexample to Ms Rousseff can be found in Elba Esther Gordillo, president of Mexico’s teachers’ union and one of the most powerful women in Mexico. She has been accused of attempting to extort $1.7 million a month from a federal agency and of making "political arrangements" with President Felipe Calderón before he came into power 2006: if Gordillo backed Calderón's candidacy he was supposed to, in return, appoint Gordillo’s allies to government positions.

The studies we refer to in this section were published in 2001 but the results had, through drafts, been spread before that.

A hypothesis brought forward by Manuel Alejandro Guerrero and Eduardo Rodríguez-Oreggia, in a study about decisions among citizens in Mexico to commit corruption, is that women and men differ in their time values. Guerrero and Rodríguez-Oreggia (2005, 17) quote a male interviewee emphasizing that, if stopped by the police, ‘you save time and procedures by paying it [the bribe] there and then’, and a female interviewee emphasizing that ‘you try to negotiate and try to pay them [the police] the least you can’. The underlying assumption is that men, generally speaking, value a fast process more than women.

For example, it has been shown that egalitarian gender-role attitudes contribute to both women’s and men’s propensity to perceive unethical behaviour as unethical (McCabe, Ingram and Dato-on, 2006).

Transparency International uses a Corruption Perception Index that shows perceptions of corruption from business people and analysts like journalists and researchers. The World Bank indicator is Control of Corruption, which is based on a number of different datasets measuring perceptions of corruption. Both organizations use the following definition of corruption: ‘exercise of public power for private gain’.

Data from QuotaProject Global Database of Quotas for Women, available at www.quotaproject.org. The current (2011) number of women elected to the national lower house in Mexico, the Cámara de Diputados, is 26.2 per cent.

The index of marginality comprises data on four areas of socioeconomic development: (i) education (literacy and completion of primary school), (ii) income, (iii) size of rural population and, (iv) housing (water, waste water, electricity, overcrowding, and dirt floors. Low income is defined as less than two minimum wages (~8 USD) per day and rural is defined as the proportion of people in the state living in communities of 5,000 inhabitants or less. The data on these variables was collected and compiled by Mexico’s National Commission on Population (CONAPO) in conjunction with the National Institute of Statistics and Geography (INEGI).

Data on state level access to information laws from IFAI, http://www.ifai.org.mx/Vinculacion/estudio