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*Predictors of Voter Preferences in Mexico's 1994
Presidential Election*

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Abstract*

In order to explain how voters decide whether to support PRI or opposition candidates within the semi-authoritarian context that prevailed in Mexico's 1994 Presidential election we develop a full theoretical model of the presidential vote. The model was tested against a pre-election poll and an exit poll. Some theoretical factors that influence voter choices included in our model were: partisanship, candidate image, issues, retrospective and prospective evaluations, socioeconomic characteristics, and what Dominguez and McCann (1995) refer to as "political" factors or those factors related with acceptance or rejection of the PRI regime. We find partisan orientations to be strong predictors of the vote. Along with partisanship, some other attitudinal factors (candidates image, issues, and "political" aspects) were more important than class or socioeconomic cleavages in shaping Mexican voting behavior in 1994. The analysis calls attention to the need for more theory-driven election surveys that facilitate adequate measures of several key variables affecting the vote.

Síntesis

Para explicar cómo es que los electores deciden votar por los candidatos del PRI o de partidos de oposición en un marco semiautoritario como el que prevaleció en la Elección Presidencial de 1994, desarrollamos un modelo teórico para explicar el voto. La evidencia empírica para probar el modelo proviene de dos encuestas, una realizada antes de la elección y la otra, una encuesta de salida (*exit poll*). Algunos de los factores que influyen en la decisión de voto incluidos en este modelo son: alineación partidista, imagen del candidato, temas de política, características socioeconómicas y evaluaciones retrospectivas y prospectivas del elector. Asimismo, este modelo contempla los "factores políticos" (ver Domínguez y McCann, 1995) o aquellas variables que influyen en la aceptación o rechazo del régimen priísta. Parte de los resultados indica que la alineación partidista, así como otros factores actitudinales como la imagen del candidato, tienen un peso más importante en la explicación del voto en las elecciones presidenciales de 1994, que las evaluaciones retrospectivas y prospectivas de los electores. De este análisis, se infiere la necesidad de guiar las encuestas y estudios que se realicen sobre opinión pública, a partir de un mayor marco teórico que facilite su comprobación empírica en futuras investigaciones.

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Introduction

From 1998 to the present Mexican elections have been more competitive than at any other time since the ruling Institutional Revolutionary Party (PRI) was formed in 1929. However, electoral competition has increased in a semi-authoritarian context. The PRI government has manipulated the media through a combination of ownership, licensing, bribery, and threats; selectively repressed the opposition; and refused to recognize opposition victories in some state and local elections.¹ It is uncertain whether the PRI government would accept an opposition presidential victory, creating a wasted vote phenomenon that only complicates decision making for Mexican voters. How, then, do voters decide whether to support PRI or opposition candidates for president in this semi-authoritarian context? We develop a full theoretical model of the presidential vote and test it against a pre-election poll and an exit poll from the August 21, 1994, presidential election. The polls were conducted respectively by Market and Opinion Research International (MORI) of Mexico and Mitofsky International. Because neither poll was designed specifically for our purposes we were unable to specify a full statistical model with either poll and thus were unable to reach firm conclusions about the effects of different factors on the vote.² However, the relative strengths and weaknesses of the two polls were offsetting, which allowed us to reach some tentative conclusions about predictors of presidential voting behavior in Mexico and to make recommendations for future surveys. Generally, partisan and attitudinal cleavages (toward candidates, issues, and about what Dominguez and McCann [1995] refer to as “political” factors) were relatively strong determinants of the vote, while retrospective evaluations and socioeconomic characteristics were weak and/or inconsistent predictors. The analysis of the substantive relationship between the explanatory variables and the 1994 presidential vote was hindered by several design/methodological factors (none of which were the responsibility of the pollsters), which suggests a need for more theory driven election surveys.

Theory of presidential voting

A select review of the voting literature from consolidated competitive electoral systems and transitional ones like Mexico's reveals several theoretical factors that influence voter choices in presidential elections. A comprehensive model should include but not necessarily be limited to the following: partisanship, candidate image, issues, retrospective and prospective evaluations, socioeconomic characteristics, and what Dominguez and McCann (1995) refer to as "political" factors.

Partisanship

Perhaps the least controversial assertion in all of political science is that partisanship is a strong, reliable predictor of the vote. Still, partisanship is becoming a weaker predictor in many party systems as the percent of the independent electorate increases and other factors become more salient in shaping voter choices. The Mexican electoral system provides an interesting case study of partisanship and presidential voting. The economic decline from 1982-1988 in Mexico was accompanied by a partisan dealignment. From 1983-1987 the PRI lost 27 percent of its popular support among upper and middle class voters and 32 percent among lower class voters; the majority of **PRI** defectors became independents as no opposition party during that period made proportional gains in popular support (Basáñez 1990:248, 277; Yanner 1992; Klesner 1993). Not surprisingly, the drop in PRI partisanship was followed by a period of increased electoral competition. Studies of the transition to increased competition show that partisanship remains a strong predictor of the vote at the national, state, and local levels (Yanner 1992; Klesner 1993; Moreno 1994:10; Bruhn and Yanner 1994:117).

However, the relationship between partisanship and the vote has been complicated throughout the 1988-1994 period by volatility and instability of partisan preferences. After the dealignment from 1983-1987 the Mexican

electorate entered a period of partisan realignment, which has been especially volatile for the left of center Party of the Democratic Revolution (PRD). The percentage of voting age Mexicans identifying with the PRD has risen as high as 15 in 1989, and dropped as low as 7.5 in 1994 according to MORI polls. One explanation is that during the transition period partisan cleavages have not been based on relatively concrete, objective factors such as income, education, occupation, gender, and age, but on more subjective perceptions about the viability of the opposition parties and their ability to manage the Mexican economy (Dominguez and McCann 1995). Such perceptions are much more prone to change than socioeconomic, demographic and geographic factors.

Despite any instability in the structure of partisan preferences among Mexican voters, the relationship between partisanship and the 1994 vote is relatively straightforward. Hypothesis 1: The probability that one would vote for a particular candidate increases significantly if one identifies (or sympathizes) with the candidate's party and decreases significantly if the voter identifies with another party.

Although the pre-election MORI poll contained an adequate partisanship measure, the Mitofsky exit poll did not. Without the ability to control adequately for partisanship in the exit poll, we could not be certain that statistically significant estimates on the other independent variables in the Mitofsky model were not spurious. We addressed the problem in the Mitofsky model by using the 1988 presidential vote as a proxy for partisanship. A 1988 vote for Carlos Salinas (PRI), Cuauhtémoc Cárdenas (FDN), or Manuel Clouthier (PAN) increased the probability that one would vote respectively in 1994 for Zedillo (PRI), Cárdenas (PRD), or Fernández de Cevallos (PAN). This does not solve the specification problem because the 1988 vote is not a perfect proxy for partisanship. Using the self-reported vote for 1988 as a proxy measure of partisanship raises several analytical problems. First, not all 1994 exit poll respondents voted in 1988. Moreover, many 1994 voters who

did not vote in 1988 probably identified with a party in the 1994 presidential election. But our use of the 1988 vote as a proxy for party identification excluded that group of 1994 voters from the analysis—voters who would have been included had the exit poll asked about party identification. Second, some respondents who voted in 1988 might have forgotten for whom they voted and made up an answer. Third, post election polls tend to overreport the vote for the winner and underreport support for losing candidates. And last but not least, the fact that a person voted for a candidate of a specific party does not mean the person sympathizes with that party; assuming that previous votes are adequate measures of partisanship ignores strategic and candidate-oriented voting.

In fact, the vote in 1988 reported by respondents in the 1994 exit poll varies from the official 1988 election results (which may have been fraudulent—another complicating factor for our analysis). The official 1988 results were 50.7 percent for Salinas, 31 for Cárdenas, and 17 for Clouthier (Woldenberg, 1992). In the exit poll, 51 percent of respondents said they voted for Salinas, 13 percent said they voted for Cárdenas, and 12 percent said they voted for Clouthier. Thus, the reported proportion of the vote for Salinas reflects the official vote without major problems; however, the exit poll underreports the vote for both Cárdenas and Clouthier by almost 20 and 5 percent respectively. The proportion of respondents who said that they voted for other parties was 4 percent and the proportion of non-voters was 20 percent. Still, despite all of those problems, we thought the Mitofsky model better specified with the partisanship proxy than without. That judgment remains open to criticism.

Candidate image

Studies of presidential elections in the U.S. have shown that candidate image is an important predictor of the vote (e.g. Nimmo and Savage 1976; Hacker 1995). The probability that one would vote for a particular candidate goes up

if the candidate is perceived as intelligent, compassionate, honest, competent, etc. It is not known whether and to what extent candidate image drives the vote for president in Mexico. Before 1988 the issue was not important because it was inconceivable that opposition candidates might win. As presidential elections become fairer and more competitive, the question of candidate image becomes increasingly important. If it can be shown that a positive image increases the probability of a vote for a given candidate, then the issue of free access to the media for all parties becomes undeniably a prerequisite for Mexican democracy. Without free and fair media access for the opposition, any election is rigged in favor of the PRI government.

We only were able to develop and test hypotheses about candidate image with the Mitofsky exit poll. This complicated the analysis because this poll lacks an adequate measure of partisanship. In addition, the form of the candidate image question in the exit poll questionnaire made analysis difficult for our purposes. In a single question, the Mitofsky poll asked voters whether they picked their candidate because s/he was experienced, honest, closest to the people, or had the personality to govern. It would have been better for our purposes to have a separate question for each of those aspects of candidate image. Still, the single Mitofsky question allowed us to establish whether, when controlling for other explanatory and extraneous variables, a positive image significantly increased the probability of a vote for a particular candidate. Again, the relationship between candidate image and the vote was relatively straightforward. Hypothesis 2: The probability of a vote for a given candidate increases if the candidate is perceived as honest, experienced, charismatic, or close to the people.

Retrospective-prospective evaluations

Fiorina (1981) showed that U.S. voters cast ballots based on their evaluations of how well the government had managed the economy and on their

perceptions about whether their personal situations and the nation as a whole had gotten better or worse on the incumbent's watch. In the Mexican context Yanner (1992:119-23) showed that retrospective and prospective factors were significant though, depending upon the poll, inconsistent predictors of the 1988 presidential vote.³ Dominguez and McCann's (1995) analysis of partisan cleavages in Mexico showed that retrospective and prospective factors did not significantly influence voter decisions to support a given party. Both studies suggest that the salience of retrospective-prospective measures is questionable in the Mexican context. Still, the mixed results were enough to justify including retrospective and prospective measures in the analysis of the 1994 presidential vote.

Both the MORI and Mitofsky polls have strong retrospective measures; Mitofsky included prospective measures while MORI did not. Again, our hypotheses about the effect of retrospective and prospective evaluations on the vote are relatively straightforward. Hypothesis 3: Voters who approved of Salina's management of the economy were more likely to vote for Zedillo (PRI) and less likely to vote for Fernández (PAN) and Cárdenas (PRD). Hypothesis 4: Voters who believed they and the nation were better off at the time of the election than a year before were more likely to vote for Zedillo and less likely to vote for Fernández or Cárdenas. Hypothesis 5: Voters who thought they and the nation would be better off in the future if a particular candidate won the presidency were more likely to vote for that candidate.

Issues

Do substantive political issues besides retrospective and prospective ones significantly affect the vote for president in Mexico? In the broader North American context substantive issues have influenced voter choices. The North American Free Trade Agreement (NAFTA) was a salient issue in the 1992 U.S. presidential and the 1988 Canadian parliamentary elections, for example.

In fact, the 1988 Canadian election is known as the free trade election (Johnston, et al, 1992). In the Mexican context, an analysis of the 1988 vote revealed that government handling of political corruption was a significant predictor of voter preferences (Yanner 1992:122). In 1994 the three major presidential candidates spent a lot of time discussing issues. A content analysis of more than 300 assertions made by Zedillo, Fernández and Cárdenas in a series of stump speeches from August 1-18 showed that they were primarily concerned with domestic political institutions and processes—decentralization of power, electoral reform, general democratization (Yanner 1995). A series of interviews conducted in the states of Chiapas and Yucatán from July 16-August 21 suggested that Mexican voters were equally concerned with the issue of democratization as well as the prospects for political violence surrounding the 1994 elections (Yanner 1995). It would not be surprising, then, to find that substantive political issues—especially issues concerning democratization in general and electoral fraud, political violence, reform of the PRI government, and the decentralization of presidential power in particular—helped predict the vote for Zedillo, Fernández, and Cárdenas in the 1994 election.

Although the Mitofsky exit poll did not include questions about political process and structure issues, the MORI poll did include two questions that fall under that category: one asked whether respondents believed the vote would be respected; another asked whether they believed political violence would follow if the election were fraudulent. On the other hand the Mitofsky poll did contain a question about domestic economic policy, so we were able in a very limited way to test issue-related hypothesis in both models. Hypothesis 6 holds that voters who thought the election would be free of fraud were more likely to support the PRI government, while skeptics were more likely to vote for the opposition. Hypothesis 7 holds that voters who feared political violence would be more likely—out of fear—to vote for Zedillo and the status

quo, while those who thought that the prospects for violence were low would be more likely to vote for the opposition. The expectations implied by those hypotheses were generated from Yanner's ethnographic interviews and a review of the political coverage in the popular Mexican press during the pre-election period. Hypothesis 8 states that voters who wanted to see a continuation of Salinas's economic policies were more likely to vote for Zedillo and less likely to vote for opposition candidates.

Socioeconomic status

The relationship between socioeconomic, demographic, and geographic factors and the vote is complex and difficult to analyze in the Mexican context. This stems in part from the nature of the PRI government and Mexico's single party dominant system (see, for example, Camp 1993:94-143). In competitive party systems it is common to find parties that are explicitly class based: Conservative and Labour in Britain, Christian and social democrats in Germany, the Left and Gaullist coalitions in France, the PSOE and Partido Popular in Spain, and, to a lesser extent, the democrats and Republicans in the United States. In all of those cases it has been relatively easy to find at least a modest relationship between social class and the vote—though class has declined as a salient factor in electoral politics in the latter quarter of the Twentieth Century. Among the consolidated democratic party systems perhaps the best analog to the PRI government is Japan's Liberal Democratic Party (LDP), which mobilizes voters across social classes and interest based on clientelistic networks and patronage. The PRI government has attempted to incorporate (rather than mobilize) voters across classes and regions since inception. In some respects it has been the quintessential catch all party. The PRI government has been structured in a way to reduce the possibility that social cleavages will translate into political cleavages and lay the groundwork for a competitive party system.

In that context it is not surprising that electoral studies during the transition period have uncovered weak and inconsistent relationships between most socioeconomic factors and the vote (Dominguez and McCann 1995, 1992; Moreno 1994; Bruhn and Yanner 1994; Yanner 1992). Still, some factors such as age, region, and to a lesser extent, gender have been modest predictors of support for particular parties. Young voters have been more likely than older voters to support the PRD; voters from Mexico City have been significantly more likely than others to support the PAN and PRD; northern voters have been more likely to support the PAN than the PRD and, in some locations, the PRI; men have been more likely than women to vote for the PRD. Income, education, and occupation have been at best weak and inconsistent predictors of support for any party. Based on the structure of the state party system and the findings of these empirical studies of Mexican voting behavior, we developed the following hypotheses about the relationship between socioeconomic variables and the vote: Hypothesis 9 posits a negative relationship between age and the probability of a vote for Cárdenas; hypothesis 10 posits a positive relationship between residing in the north and the probability of a vote for Fernández, and between Mexico City residence and the probability of a vote for either Fernández or Cárdenas; hypothesis 11 posits a positive relationship between gender (woman) and support for the PRI and a negative relationship between gender and support for the PRD; hypothesis 12 posits a positive relationship between urban residence (population greater than 15,000) and the probability of a vote for Fernández or Cárdenas. We expect no statistically significant relationships between indicators of social class (income and education) and the vote for president.⁴

Political factors

We consider partisanship and the “political” factors discussed by Dominguez and McCann (1995, 1992) as the engine core of the voting behavior model in

Mexican presidential elections. They are the factors that have seemed to consistently drive the vote through the transition period (for supporting analysis, see Yanner 1992:122).⁵ Unfortunately for our purposes, neither poll includes adequate measures of these political factors (e.g. perceptions about the viability of the opposition and its ability to manage the economy).⁹ Only the Mitofsky poll included questions that could be construed as measures of political variables, and those are a stretch. Still, one question in the Mitofsky poll very generally asked if respondents cast their vote because they believed the PRI remained the best option or because they believed it was time for the opposition to govern. A case might be made that those questions contain implications about the viability of the opposition and its ability to manage the Mexican economy and society. Hypothesis 13 posits a positive relationship between the perception that the PRI remains the best option and the probability of a vote for Zedillo, and a negative relationship between that perception and a vote for Fernández or Cárdenas. Hypothesis 14 posits a negative relationship between the perception that it is time for the opposition to win and the probability of a vote for Zedillo, and a positive relationship between that desire and a vote for Fernández and Cárdenas. Still, it must be kept in mind that the data do not permit a truly valid test of the Dominguez and McCann hypotheses.

[FIGURE 1 ABOUT HERE]

Figure 1 illustrates the specification problems associated with testing a full theoretical model of voting behavior with the MORI and Mitofsky polls. The biggest problem is the lack of an adequate partisanship measure in the Mitofsky poll. The inability to control for partisanship makes suspect statistically significant estimates on the other variables. The next problem is the lack of adequate measures for the political variables that Dominguez and McCann have shown to be crucial in explaining the defection of PRI supporters in the 1988 election and the realignment of partisan preferences n

the 1988-1991 period. Despite these weaknesses both polls provide an opportunity to learn something significant about the 1994 presidential vote. If retrospective and prospective factors drop out of the MORI model, for example, this will strengthen the claim of previous studies that Mexicans do not seem to be retrospective voters. If the candidate image measures in the Mitofsky model prove statistically significant, then this will strengthen the argument that future surveys should include a set of adequate measures of candidate image. Finally, it should be clear from Figure 1 that the MORI and Mitofsky polls are complementary and need to be used to piece together an analytical discussion of Mexican voting behavior in 1994 that is as comprehensive as possible. (the specific questions used to measure each theoretical variable are listed in Appendix A.)

Data and Method

This study is based on two nationwide polls. Market and Opinion Research International of Mexico (MORI) conducted a survey of 1,082 voting age (18 or older) Mexicans on August 18, three days before the election. The interviews were conducted on the street, rather than in homes, in all parts of the country. The survey was based on a probability sample, the technical details of which can be obtained directly from MORI. The Mitofsky exit poll was based on a weighted probability sample involving 5,635 voters in 241 precincts throughout Mexico. Mitofsky International makes available upon request a technical paper describing the sample design.

The statistical technique used in testing the presidential voting model described above is multivariate logistic regression. This technique permits regression of a dichotomous dependent variable on a set of independent variables, by transforming the dichotomous dependent variable into a range of probabilities from 0 to 1. The functional form of the logistic regression model

$$\text{prob}(\text{vote candidate } y) = \frac{e^{xb}}{1 + e^{xb}}$$

This equation defines the probability of a vote for a given candidate (Y = the probability of a vote for Fernández, for example) as a function of a set of independent variables, where:

e is the exponential function;

b is a vector of estimated coefficients for the explanatory variables;

x is a matrix of explanatory variables and observations.

(For a more detailed description of the logistic regression model, see Hanushek and Jackson 1977:187).

In this study we ran a separate statistical model for each candidate with each poll. In the Zedillo model, the dependent variable was coded 1 if the respondent preferred Zedillo and 0 if s/he preferred another candidate. In the Cárdenas model, the dependent variable was coded 1 if the respondent preferred Cárdenas and 0 if s/he preferred another candidate. The same applied to the Fernández model. The logistic regression estimates describe the extent to which the vector of independent variables increased the probability of a vote for a particular candidate.

Results

This study explains the 1994 presidential vote in terms of seven independent variables: partisanship, retrospective evaluations, prospective evaluations, candidate image, political factors, issue orientations, and socioeconomic characteristics. Table 1 provides logistic regression estimates of the effects of those variables on the 1994 presidential vote from the MORI pre-election poll; Table 2 provides logistic regression estimates from the Mitofsky exit poll. Generally speaking the estimates supported our hypotheses, as the magnitude, direction, and statistical significance levels of the coefficients tended to meet

our expectations, though there were some interesting inconsistencies and contradictions. We now turn to a more specific discussion of the results from each model.

[TABLE 1 ABOUT HERE]

The results from the pre-election MORI poll in Table 1 show that partisanship was an important determinant of candidate preferences in 1994. Party sympathizers were highly likely to support their party's presidential candidate and oppose other candidates.

What about independents? According to these results independent status increased the probability of a vote for all candidates but was only statistically significant in the case of Fernández (PAN). This helps explain why the PAN has become the number two party in Mexico and why Cárdenas was unable to repeat his performance from the 1988 election, though the assertion begs the question of why he was unable to mobilize independents—an increasingly larger segment of the Mexican electorate.

Table 1 lends partial support to the hypotheses about retrospective voting. Most of the coefficients that correspond to the retrospective measures are not statistically significant. However, the two statistically significant coefficients in this category provide some support for the hypothesis that favorable retrospective evaluations helped the PRI by hurting the PAN. Favorable evaluations about government handling of employment and inflation decreased the probability of a vote for the PAN's Fernández de Cevallos—although such favorable evaluations did not increase the probability of a vote for the PRI's Zedillo. The first impression from this table is that Mexican voters did not rely much on retrospective evaluations in 1994. However, the results from the MORI poll are contradicted by the Mitofsky exit poll, which shows a strong relationship between retrospective evaluations and the vote. Still, the Mitofsky results may be spurious because the model lacks an adequate partisanship measure, which suggests that a final judgment

about Mexicans and retrospective voting awaits further analysis. (The MORI poll contained no prospective measures.)

Table 1 indicates that issues were somewhat important for Mexicans' presidential preferences in 1994. The belief that the vote would be respected increased the probability of a vote for the PRI's Zedillo and decreased that of a vote for the PRD's Cárdenas. Given Mexico's electoral history it is not surprising that PRD supporters tended to be more skeptical than PRI supporters about the prospects for a fair election. Equally important were perceptions about the possibility of political violence. The belief that violence would follow if the vote were not respected increased the probability of a vote for the PAN's Fernández de Cevallos—which contradicted our hypothesis that those who anticipated violence would be more likely out of fear to support the status quo and the PRI. What is interesting here is that the belief about whether the vote would be respected drove preferences for the PRI and PRD and not the PAN, while the belief that violence would follow if the vote were not respected drove preferences for the PAN and not the PRI and PRD. This result suggests that the PAN was probably perceived as the best political option in the context of the possibility for political violence. Both the PRI and the PRD may have been closely associated with political violence in the minds of Mexican voters for a variety of reasons. Because the PRI government is mainly responsible for Mexico's long experience with electoral fraud and because of its direct role in the unsuccessful peace talks with the Zapatista rebels in Chiapas, Mexican voters considering the possibility of political violence may have been less likely to vote for the PRI. But why would they have been more likely to vote for the PAN and not for the PRD? Relations between the PRI government and the PRD during the Salinas sexenio were rough. The PRD was involved in several violent political events especially in Michoacán and Guerrero, involving the armed forces. These events were not necessarily an expression of PRD discontent, but the result of PRI government repression. As Barry Carr (1993:93) argued: "Repression continues to weaken

the left [in Mexico]; fifty of the party's members have been killed and more than 500 injured in the short period since the PRD was formed." Either as an agent of protest or as a victim of repression, the PRD has been associated with violence. This has given the PAN the advantage in voter perceptions about the better option for political stability and peace. Perceptions about the ability of the opposition to govern clearly include its capacity to keep the country peaceful and stable.

The socioeconomic factors considered in the MORI model help define a demographic profile of the Mexican electorate in 1994. By looking at the statistically significant coefficients among the socioeconomic variables in Table 1, it can be argued that preferences for Fernández de Cevallos were stronger among the younger, more educated, and wealthier voters. Support for Cárdenas was stronger among men, urban, and poorer voters. Finally, support for Zedillo was stronger among women and less educated respondents. The results on gender and age were generally consistent with our expectations, while those on education and income (class) were not. The gender results indicate that women tend to be more inclined toward the status quo and men more supportive of the left opposition in their political preferences, which may be consistent with Duverger's classic hypotheses about gender and politics in early postwar Europe (where women tended to be more conservative because they were more religious and less likely to be involved in the labor movement—conditions that probably hold in Mexico, though the assertion remains unconfirmed here). The results on the class measures suggest that the PAN is emerging as the urban middle class party while the PRD is capturing lower class constituencies, though the estimates on social class measures remain inconsistent predictors of voting behavior.

In summary, the preferences for each major candidate revealed by respondents a few days before the election day were explained by different sets of factors. Support for Zedillo was predicted by partisanship, issues—the belief that the vote would be respected, and socioeconomic factors—gender,

and education. Support for Fernández de Cevallos was predicted by partisanship, retrospective evaluations about employment and inflation, issues—the belief that fraud would be followed by violence, and socioeconomic factors—age, education, and income. Finally, support for Cárdenas was predicted by partisanship, issues—vote would be respected, and socioeconomic factors—gender, urban residence and income. The common explanatory variables across all candidates were partisanship, issues, and to a lesser extent socioeconomic factors. But because the MORI model lacked measures for some important theoretical variables (such as candidate image and “political” factors), the results must be discussed along with those from the Mitofsky model to gain a more complete analysis of the 1994 presidential vote.

[TABLE 2 ABOUT HERE]

Table 2 provides estimates for the Mitofsky model (measures for the theoretical variables are listed in Appendix A), which support many of the hypotheses stated above. Partisanship (reported vote in 1988) is a strong predictor of the 1994 vote. Support for Zedillo in 1994 is well explained by the reported vote for Salinas in 1988; votes for Fernández de Cevallos and Cárdenas in 1994 also are well predicted by the reported vote for Clouthier and Cárdenas respectively in 1988. All partisanship coefficients except one are statistically significant, and the signs of the coefficients indicate that party identification increases the probability of a vote for that party’s candidate and decreases the probability of a vote for candidates from other parties.

The retrospective index used in the Mitofsky model also predicts well the vote for the three presidential candidates. Unlike the retrospective voting results in Table 1, the results in Table 2 support the hypothesis that the more favorable the retrospective evaluations about government performance, the greater the probability of a vote for the governing party’s candidate. According to these estimates the PRI candidate, Ernesto Zedillo, benefited from favorable opinions about the Salinas government, while both Fernández

de Cevallos and Cárdenas were hurt by such evaluations. Seen from a different perspective, both opposition candidates may have benefited from the unfavorable evaluations about the performance of the Salinas government. These results suggest that retrospective evaluations played an important role in determining the 1994 vote.

Unlike retrospective factors, prospective factors seemed unimportant in shaping candidate preferences. The coefficients suggest that the more optimistic voters supported the opposition candidates, while the more pessimistic ones supported the PRI candidate. Although this may be a counterintuitive result, it could be argued that optimism about the future might influence a vote for the opposition because the opposition coming to power would pose less of a threat to personal and national economic situations. Pessimism about the future might influence a vote for the government party because it may be seen as the only party with sufficient experience to face coming problems. Still, none of the coefficients on the prospective measures is statistically significant.

By contrast candidate image was a very important factor in the 1994 election. Fernández de Cevallos, the charismatic PAN candidate who was considered the winner of the first presidential debate ever held in Mexico, enjoyed a very positive image in terms of experience, personality, and honesty. The perceptions that Fernández de Cevallos was experienced, honest, and had the personality to govern all increased the probability of a vote for him. On the other hand, negative images of Zedillo in terms of experience, personality, honesty, and closeness to the people decreased the probability of a vote for this technocratic-style PRI candidate. What is interesting is that Zedillo was able to win the election despite a relatively negative image and the fact that voters did take image into account when casting their ballots. Cárdenas was mostly hurt by the image factor. The perception that he was an experienced candidate and close to the people increased the probability of a vote for him (although the coefficients are not statistically significant), while a

negative perception of his personality decreased the probability of a vote for him. These results suggest that it may be worthwhile for future presidential election surveys to include a series of well-formulated questions about candidate image.

The issue of whether to continue the economic policies of Carlos Salinas strongly predicted support for the candidates. Those who supported a continuation of Salinas's policies were much more likely to vote for Zedillo and less likely to vote for either opposition candidate. From another perspective it may be concluded that voters opposed to Salinas's economic policies were more inclined to vote for Cárdenas and Fernández and not inclined to vote for Zedillo. This result is interesting and puzzling in the case of Fernández de Cevallos, whose party, the PAN, has usually advocated the type of free-market economic policies that Salinas implemented (e.g., the North American Free Trade Agreement). Unfortunately for our purposes, the Mitofsky poll did not include questions about other kinds of issues that may have been salient in the 1994 presidential election.

Estimates of the relationship between socioeconomic factors and the 1994 presidential vote—especially when those from the MORI and Mitofsky models are considered together—raise more questions than anything else. Both gender and education, which were statistically significant predictors of the vote in the MORI model, dropped out of the Mitofsky model. Age remained a predictor of the vote for Fernández de Cevallos (younger voters were more likely to vote for him, which supported our hypothesis) and Cárdenas (older voters were more likely to support him, which contradicted our hypothesis and the results of previous studies). Support for Cárdenas and the PRD had been thought to be strong among young voters. However, in 1994 the young electoral base of Cárdenas was diluted, which may suggest that young Mexican voters do not have strong political preferences and that the electoral arena in the future may be characterized more by changing than by stable patterns of support. These results also suggest that in 1994 Cárdenas

was the candidate of an older opposition, while Fernández was the candidate of a new, younger opposition. Income provided the only consistent predictor of support across the two polls. Fernández de Cevallos was more popular among wealthier voters, while Cárdenas tended to draw support from poorer voters. This was consistent with the results of some previous studies. As in the MORI model, the Mitofsky model indicated that class cleavages predicted the vote for opposition candidates but not for the PRI's Zedillo.

There were some interesting regional patterns of support for the three candidates in the Mitofsky poll. Strangely, Mexico City voters were not likely to vote for Cárdenas in 1994 though residence in the Federal District increased the probability of a vote for Cárdenas in 1988 (Yanner 1992). Fernández de Cevallos was strongly supported in the Federal District, however, which at least generally supports the hypothesis that Mexico City provides a strong base of support for political opposition. The overall results for Mexico City suggest, however, that future patterns of support for specific parties may be characterized more by instability than stability. There was a strong regional base of support for Fernández—especially in the north, which was expected. Region did not seem to be a major factor in the vote for Zedillo, which also is not surprising given that the PRI is the only party that historically has had a strong presence in all parts of Mexico. According to Table 2 support for Cárdenas was weak in every region, which suggests that Cardenismo weakened nationally during the 1994 electoral process. Why this happened awaits careful analysis.

Finally, political factors proved to be strong predictors of the 1994 presidential vote, which supports our hypotheses. The perception that the PRI is still the best option clearly raised the probability of a vote for Zedillo and decreased that for the opposition candidates. Protest voters and those who believed it was time for the opposition to win were much more likely to vote for the opposition, especially Fernández de Cevallos, than for Zedillo. Despite strong results consistent with the specified hypotheses, it would have been

more interesting to have more specific measures and a more valid test of the political factors that Domínguez and McCann (1992, 1995) have identified as crucial in shaping partisan preferences in Mexico since 1988. Future surveys of presidential voting may be strengthened by a series of well formulated questions based on the work of Dominguez and McCann.

In summary, support for Ernesto Zedillo, Diego Fernández de Cevallos, and Cuauhtémoc Cárdenas in the 1994 election is explained in the Mitofsky model by partisanship, retrospective factors, candidate image, political factors, issue orientations, and in the case of both opposition candidates, some socioeconomic characteristics. Support for Zedillo is better explained by the vote for Salinas in 1988, favorable retrospective evaluations about the Salinas government, the desire to continue with Salinas's economic policies, and the idea that the PRI is still the best option. Support for Fernández de Cevallos is explained by the vote for Clouthier in 1988, by a favorable candidate image based on experience, personality, and honesty, by the protest vote and the conviction that it is time for the opposition to win, and by age, income, and region. Finally, support for Cárdenas in 1994 is explained by the vote for Cárdenas in 1988, by the protest vote, by the belief that it is time for the opposition to win, and by age.

Discussion

The results of this study of the 1994 Mexican presidential vote raise several substantive and methodological issues. The methodological issues at play make it difficult to reach firm substantive conclusions about the vote. About the only thing we can say with confidence from these results is that partisanship—regardless of the measure—was a strong predictor of candidate preferences in the 1994 presidential election. Because partisanship seems to be a consistent predictor of vote choice in Mexico, a standard measure should be developed. The concept of party identification applied to the American electorate needs to find its counterpart among analysts of Mexican politics.

Otherwise, it will be difficult to assess the changing patterns of electoral behavior in Mexico in the coming years.

Voter rationale is another important substantive issue that is difficult to assess because of methodological problems in this study. The results of the MORI poll seem to support the idea that the rationale behind the decision to support official party candidates differs from the rationale behind the decision to support opposition candidates. Though partisanship was a consistent predictor of the vote for all three candidates, retrospective factors were only important for Fernández while gender was only important for Cárdenas and Zedillo. Income, education, and issue effects differed by candidate as well. These results may support the argument made by Dominguez and McCann (1995) that Mexican voting behavior is a two-step process: voters first ask whether they will support the official party; if the answer is no, then other factors come into play in shaping their decision. Nevertheless, these results do not necessarily imply a two-step process. Even though some voters may base their decisions on the PRI as a primary frame of reference, many others may have clear preferences for candidates and parties apart from their evaluation of the PRI. The analysis of the 1994 election shows, for example, that the attractiveness of Fernández de Cevallos for some voters may be explained by his favorable image.

Still, the results from the Mitofsky poll reveal a fairly consistent rationale behind voter decisions to support all three candidates. Partisanship, candidate image, political factors, retrospective evaluations, and issues were consistent predictors of support across candidates. The only significant differences were found among the different socioeconomic measures. Age, income, and region were inconsistent predictors of support, though this hardly lends support to the argument that there are different sets of voter rationale at play or that the 1994 presidential vote involved a two-step process.

However, we cannot say what would have happened in the Mitofsky model, for example, with an adequate partisanship measure and with more valid measures of the Dominguez and McCann political factors. Equally uncertain is how differently the MORI results might have looked with a larger sample. To begin with the poll had 1,082 respondents—which is on the low end for a probability sample, especially when controlling for several independent and intervening variables. After excluding from analysis respondents who did not indicate that they probably would vote in 1994, we ended up with 764 cases. Such a small number of cases could produce unstable and-or inconsistent estimates of the effects of the different independent variables on the vote. This means that any evidence the MORI results might lend to the argument about different voter rationales could be spurious.

Another substantive issue that was made more difficult to analyze because of these methodological issues was retrospective voting. Retrospective factors were statistically significant for the PAN candidate only—and then only on two of seven measures—in the MORI poll. However, the retrospective index in the Mitofsky model was a strong and consistent predictor of support for all three candidates. The difference between the MORI and Mitofsky results may stem from the small number of cases in the MORI poll, or from the lack of an adequate partisanship measure in the Mitofsky poll, or both.

The fact that issues drove preferences in both models was an interesting finding, which suggests that more work should be done in this area. Both polls asked a limited number of questions about substantive political issues—one question about economic policy in the Mitofsky poll and two questions about the voting process and the prospects for political violence in the MORI poll. The statistical results suggest that it may be worthwhile in the future to use focus groups and analysis of stump speeches to identify what seem to be salient issues for voters and candidates and then include a series of questions

about such issues in pre-election and exit polls. This would help determine whether issues matter when controlling for other factors.

Finally, these results suggest that the relationship between socioeconomic factors and voting in Mexico is inscrutable at this point. Factors such as gender, age, income, education, and region have dropped in and out of voting models in different studies since 1988. The Table 1 and Table 2 results in this study are clearly inconsistent and, at times, contradictory. The inconsistency, instability, and volatility in the relationship between socioeconomic factors and the vote probably stem from a variety of methodological and substantive factors. Since the Mexican electoral system is in a transition period, it would not be surprising for the political preferences of voters who fall into different socioeconomic groups to change from one election to another. On the other hand, different surveys and polls have used different measures for the same socioeconomic concepts. Moreover, some polls and surveys include measures for certain socioeconomic variables while other polls leave them out. These results indicate, for example, that it may be helpful to settle on some clearly defined regions that make sense in terms of political cleavages and then consistently include region as a variable in election surveys. However, unless election surveys are designed with the intention of testing full theoretical models of voting behavior, it will be impossible to definitively analyze the relationship between socioeconomic factors and the vote because of model specification problems.

The research agenda on Mexican voting behavior is open and many issues still need to be defined. Several questions remain unanswered: For example, how stable is partisanship in Mexico? Do strong partisans differ from weak partisans in their political orientations and preferences? What aspects are more important in retrospective voting in Mexico—those that the voter experiences directly or those that are communicated by the media? What is the role of sociotropic judgments? Is ideology important for the Mexican voter? When and how do issues matter? These and other questions

will be of special importance not only for political scientists, but also for the politicians and voters of a country experiencing a profound change in its political structure, as is Mexico.

Conclusion

Voting behavior in Mexico is being driven by both the electorate's changing characteristics and the transformation of the old, state-party regime. This may be reflected in the inconsistency and instability of several predictors of the vote in recent elections. Among the factors that explain Mexican voting behavior, partisanship is crucial. Partisan affiliations are strong predictors of the vote, but in the Mexican context partisanship seems to include more than a sense of identification with a particular party. The concept also includes a more general sympathy for government or opposition, as suggested by the measures of "political" factors in the Mitofsky model. Along with partisanship, some other attitudinal factors are important in shaping voter choices. For example, in 1994 the PAN benefited not only from its candidate's positive image but also from the issue of the potential for political violence if the vote were not respected. This suggests that the perception of future political stability may be a necessary condition for the opposition to win. As a result we could argue that attitudinal cleavages were more important than class or socioeconomic cleavages in shaping Mexican voting behavior in 1994.

We started from the assumption that at least two things were required to quantitatively test hypotheses about voting behavior: a properly specified theoretical model of the vote and reliable, valid measures of all theoretical variables. A critical analysis of alternative theoretical specifications is beyond the scope of this paper, though any criticism of or suggestions for improving this specification are welcome. The major problem encountered here was not in properly specifying a theoretical model of the presidential vote but in

properly specifying a statistical model to test the theory because of inadequate measures of several key theoretical variables. The pollsters are in no way to blame. Each did an excellent job of survey design for his own purposes. The situation clearly suggests, however, a need for more theory driven electoral surveys.

Notes

1. Regarding media manipulation, the PRI government owns and operates the most important television station in Mexico—Televisa, which has a history of slanting political coverage in terms of time and content in favor of the PRI government. In 1991 the Center for Public Opinion Studies (CEOP, the precursor to MORI de México) tracked Televisa's coverage of the PRI, PAN, and PRD during the mid-term congressional election campaign and found the overwhelming share went to the official party (for a summary, see Yanner 1992). Lack of access and slanted coverage have become a major point of contention for the PAN and PRD, and many political analysts believe the Mexican state cannot be considered democratic until media relations with the official and opposition parties become more equitable (see Gamboa, 1994). On the other hand, private channels such as TV Azteca, and other cable and satellite alternatives are making the Mexican media more competitive and less open to direct manipulation by the PRI government. In addition, the Zapatista phenomenon in Chiapas showed how political opposition could use domestic and international media to neutralize the official party (Trejo Delarbre 1994^a, 1994b; García de León, 1994). Still, the case of Raúl Cremoux, a reporter who was kidnapped and beaten during the 1991 election campaign for allegedly criticizing then-president Salinas, provides an example of how selective repression may have a chilling effect on political coverage (*Proceso* 771, August 12, 1991). Regarding selective repression against the opposition, the PRI government's use of political violence against the PRD has been documented elsewhere (e.g. Bruhn 1993, Carr 1993, Yanner 1992). Regarding the PRI government's refusal at times to recognize opposition electoral victories, the cases of the gubernatorial elections in Guanajuato and San Luis Potosí in 1991 and in Chiapas in 1994 are instructive.

2. Both authors wish to thank Miguel Basáñez of MORI de México, and Warren Mitofsky of Mitofsky International for generously supporting this project by providing access to their data.

3. Voter perceptions about whether their personal situations had gotten better or worse were a significant predictor of the vote for both Carlos Salinas and Cuauhtémoc Cárdenas in the 1988 MORI poll, while voter perceptions about the national situation overall were not. Still, the 1988 MORI poll lacked an adequate measure of partisanship, which means that the results might have been spurious.

4. As a measure of income, the MORI poll asked respondents how many light fixtures (focos) they had in their homes.

5. An August 1989 MORI poll showed that respondents who were asked for whom they would vote if the election were held that day were more likely to pick Salinas if they believed that the PRI would be able to democratize internally and that the opposition would not gain strength in the future; those who believed the PRI incapable of internal reform and that the opposition would gain strength were more likely to pick Cárdenas. Those questions came as close to any MORI has posed to measuring the political concept of Dominguez and McCann (1995).

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Figures and Tables

Figure 1. comparison of the statistical models based on the MORI and Mitofsky polls with the full theoretical model of Mexican presidential voting behavior.

Theoretical model	MORI model	Mitofsky model
Partisanship	Yes	No—proxy used
Candidate image	No	Yes
Retrospective evaluations	Yes	Yes
Prospective evaluations	No	Yes
Issue orientation	Yes	Yes—limited
Socioeconomic factors	Yes	Yes
Political factors	No	Yes—limited

Table 1. Logistic regression estimates of predictors of the vote in the 1994 Mexican presidential election for Diego Fernández de Cevallos (PAN), Cuauhtémoc Cárdenas (PRD), and Ernesto Zedillo (PRI)—MORI model.

Variable	Fernández	Cárdenas	Zedillo
Partisanship			
PAN	2.45**	-1.13*	-1.32**
PRD	-3.34	2.39**	-1.41**
PRI	-.95*	-.26	1.66**
Independent	.69**	.30	.30
Candidate image			
Retrospective evaluations			
personal situation	-.01	.02	.01
national situation	-.01	-.18	.24
employment	-.52**	-.07	-.08
inflation	-.50**	.26	-.10
corruption	.14	.05	.06
housing	.02	-.20	.05
government approval	.04	-.20	.09
Prospective evaluations			
Political factors			
Issues			
respect vote	-.04	-.29*	.30**
prospect for violence	.29**	.02	.15
Socioeconomic factors			
gender (female)	-.01	-.60**	.24*
rural/urban residence	.03	.22*	-.002
age	-.13*	-.04	.01
education	.21*	.06	-.21**
income	.15*	-.22*	-.04
Constant	-6.07	.35	-3.58**
Percent predicted	87.17	92.15	78.14

Source: MORI National Poll, August 18, 1994. N=764 (analysis includes only respondents who said they would vote and rejects some missing data). Note: Entries are unstandardized regression coefficients.

*Significant at .05.

**Significant at .01.

Table 2. Logistic regression estimates of predictors of the vote in the 1994 Mexican presidential election for Fernández, Cárdenas, and Zedillo—Mitofsky model.

Variable	Fernández	Cárdenas	Zedillo
Partisanship (1988 vote)			
PAN/voted for Clouthier	.67**	-.66**	-.34**
PRD/voted for Cárdenas	-.68**	.84**	-.52**
PRI/voted for Salinas	-.08	-.32**	.45**
Candidate image			
experienced	.18*	.06	-.21**
personality to govern	.45**	-.23*	-.46**
honest	.24**	-.05	-.29**
close to people	-.009	.15	-.21*
Retrospective index	-.05*	-.19**	.31**
Prospective evaluations			
better personal future	.11	.009	-.03
better national future	.13	.02	-.03
Political factors			
PRI best option	-.67**	-.49**	.61**
Vote of protest	.73**	.46**	-1.16**
Time for opposition win	.79**	.51**	-1.31**
Issues (continue Salinas Economic policies)	-.19**	-.23**	.31**
Socioeconomic factors			
Region			
Federal District	.13*	-.28**	.06
North Central	.27**	-.33**	.001
East	.14**	-.12	.05
North West	.37**	-.21**	-.15*
Gender (female)	-.04	-.08	.05
Age	-.13**	.12**	-.003
Education	.06	-.01	-.07
Income	.12**	-.14**	-.01
Constant	.58	-.143**	-4.46
Percent predicted	81.97	88.01	88.43

Source: Mitofsky Exit Poll, August 21, 1994. N=5,631; cases included=4,273. Note: Entries are unstandardized regression coefficients. *Significant at .05; **significant at .01.

Appendix A

Below is a list of the measures we used for each dependent and independent variable in the MORI and Mitofsky models. The English translation of the exit poll was provided by Mitofsky International; the MORI questions were translated by the authors.

Dependent variable MORI model: If the election for president of the republic were today, which candidate would you vote for?

Response categories included the three major candidates plus Cecilia Soto of the Partido del Trabajo (PT), other minor candidates, no candidate, undecided, and no answer. An explanation of how this variable was coded for the analysis is contained under the Data and Method section.

Dependent variable Mitofsky model: For which party or candidate did you vote for president of the republic today?

Response categories included party logos plus the names of the candidates for each party, including the three major candidates, Soto of the PT, Marcela Lombardo Otero of the PPS, Rafael Aguilar Talamantes of the PFCRN, Pablo Emilio Madero Belden of the PDM, Alvaro Pérez Treviño of the PARM, and Jorge Gonzales Torres of the Mexican Greens. Exit poll respondents marked some of their own answers on the questionnaire.

Partisanship measure MORI model: Do you sympathize with a political party? If so, with which party?

Response categories included PAN, PRD, PRI, other, none, with two parties equally, or no answer. We transformed this variable into a series of four dummy variables; one each for the three major parties and independents (the none response).

Partisanship measure Mitofsky model: In the 1988 elections for president of the republic, which candidate did you vote for?

Response categories included Manuel J. Clouthier, Carlos Salinas de Gortari, Cuauhtémoc Cárdenas Solorzano, Rosario Ibarra de Piedra, other, and could not vote. We transformed this variable into a series of three dummy

variables for Clouthier (1=voted for him, 0=did not vote for him), Cárdenas, and Salinas.

Candidate image measure MORI model: No measures.

Candidate image measure Mitofsky model: Which of the following reasons comes closest to your reason for voting for your candidate?

Response categories included 1) has experience to govern, 2) has personality to govern, 3) is honest, 4) is the closest to the people, and 5) none of the above. We transformed this variable into a series of four dummy variables for the first four response categories.

Retrospective voting measures MORI model: Measure number 1 (personal situation)—How would you rate your personal economic situation today with that from one year ago: better or worse? Response categories included much better, better, the same, worse, much worse, and don't know/no answer. We coded this variable so that the much better response=5 and the much worse response=1.

Measure number 2 (national situation)—How would you rate the economic situation of the country today with that from one year ago: better or worse? The response categories and coding for this variable were the same as for the personal situation variable.

Measure numbers 3 through 6—How much success has the government had in the following areas: much, some, little, or none? The areas included 1) creation of jobs, 2) control of prices, 3) control of corruption, and 4) housing. Response categories included those listed in the question plus a don't know/no answer category. For all four measures the most positive response was coded 4 and the most negative response was coded 1.

Measure number 7 (government approval)—How would you rate the current government? Good or bad? Response categories included very good, good, fair, bad, very bad, don't know/no answer. The most positive response was coded as 5 and the most negative response was coded as 1.

Retrospective voting measures Mitofsky model: We collapsed three variables into a nine-point retrospective index in the Mitofsky model. The three questions were: 1) In general do you agree or disagree with the way in which the President of the Republic Carlos Salinas de Gortari has governed? (response categories included agree, partly agree, disagree); 2) Do you believe that since Carlos Salinas de Gortari took office that the economic situation of the country has improved or worsened? (response categories included improved, remained the same, worsened); 3) And your personal and family economic situation, is it better or worse now than before the Salinas took office? (response categories included better, the same, worse). We coded the most positive response as 3 and the most negative response as 1 for each question and then added the scores on all three variables for each respondent to generate the index.

Prospective voting measures MORI model: No measures.

Prospective voting measures Mitofsky model: Did you vote for this party or candidate because you thought that...? Response categories (visible to the respondent) included: 1) my personal and family economic situation will improve; 2) the economic situation of the country will improve; 3) none of the above.

We transformed this variable into two dummy variables of 1) personal and family situation will improve and 2) national economic situation will improve.

Issue measures MORI model: Issue measure number 1—Do you believe that the vote will be respected in the next election? Issue measure number 2—If the vote is not respected in the next election do you believe that there would be violence? Response categories ranged on a five point scale from definitely yes to definitely no with an additional don't know/no answer category.

Issue measure Mitofsky model: What would you prefer that the next president continue in general with the economic policies of President Salinas

or that they be changed in an important way? Response categories included 1) continue with the economic policies, 2) change them. This was obviously coded as a dummy variable.

Political measures MORI model: No measures.

Political measures Mitofsky model: All of the presidents who have governed Mexico over the past 65 years have been from the PRI. Which of the following reasons motivated you more to vote for the party you chose today? Response categories included 1) the PRI continues being the best option, 2) in politics it is better to know a bad one than expect a good one to come 3) I voted for the opposition to demonstrate my displeasure, 4) it's time for the opposition to win. We transformed this variable into a series of three dummy variables for categories 1, 3, and 4.

Socioeconomic measures MORI model: Gender was a dummy variable coded as 1 for woman and 0 for man.

Rural/urban residence was a five category variable with 1) less than 2,500 residents, 2) 2,500 to 15,000, 3) 15,000 to 50,000, 4) 50,000 to 500,000, and 5) more than 500,000 as the options.

Age was a nine category variable (18-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60 and older).

Education was an eight category measure—Up to what year did you go in school? Response categories included none, grades 1-3, grades 4-6, secondary school, prep school, first two years of university, three to five years of university, graduate school.

Income was a nine category measure—More or less how many light fixtures do you have in your house? Response categories ranged from less than five to seventeen or more.

Socioeconomic measures Mitofsky model: The gender, age, and education measures were virtually identical in both polls. The income measure in the Mitofsky model was an eight category variable—Adding what everyone in your house makes, how much is your monthly family income?

Response categories ranged from 0 to 1 minimum salary up to more than 60 minimum salaries.

Region was a five category variable that was transformed into a series of four dummy variables for residence in 1) Mexico City, 2) North Central Mexico, 3) Eastern Mexico, and 4) North West Mexico.

All ordinal level socioeconomic measures were coded so that the greatest amount of the measure had the highest value and the least amount had the lowest value.