

**Web Appendix to:
Primary elections and candidate strength in Latin America**

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There are two elements to this appendix:

- analysis of the effects of nomination by primary on candidate strength in Mexican gubernatorial elections, which was not included in the published article.
- description of the datasets used for the cross-national and Mexican statistical analyses. These datasets are available for download from the JOP online.

Mexican Gubernatorial Elections

Although space did not permit our reporting the results in the published version, we conducted an analysis of the effects of primary elections on the strength of Mexican gubernatorial candidates, along similar lines to our analysis of presidential candidacies. The data from Mexico include gubernatorial elections from the 30 states from 1998 through 2003 – the first full electoral cycle in which primaries were used. We generally have data on three candidates in each state, one from each of the major parties – the *Partido de Acción Nacional* (PAN), the *Partido Revolucionario Institucional* (PRI), and the *Partido Revolucionario Democrático* (PRD) – which, together, won an average of 95% of the popular vote in gubernatorial elections. During this period, the PAN held six gubernatorial primaries, the PRD 11, and the PRI held 18. In two states – Nayarit in 1999 and Yucatán in 2001 – the PAN and PRD jointly endorsed coalition PAN candidates, using primaries in neither case. In Chiapas in 2000, a PAN/PRD-endorsed gubernatorial

candidate (also no primary) was a former PRI politician who had left that party before being endorsed by the coalition. Because this shift would make the candidate's party vote share in the previous election indeterminate, we dropped that observation from the data. In Colima 2003, we were unable to determine whether the PRI candidate was selected by primary. In the end, our dataset, without PRD observations from Nayarit or Yucatan, PAN or PRD observations from Chiapas, or a PRI observation from Colima, includes 84 candidates.

Absent the potential for heteroskedasticity inherent in the pooled, cross-national data, the OLS regression for Mexico uses conventional standard errors. Otherwise, the general modeling strategy for the Mexican data was similar to that used with the cross-national data – to isolate and estimate any independent effect of holding a primary on the performance of candidates for executive office by controlling for:

- the baseline strength of the candidate's party or coalition; and
- the current electoral context in which elections were held – that is, whether other current factors were working in favor of, or against, the candidate's party.

As with the cross-national data, baseline strength of a candidate's party is estimated by:

- $Vote_{t-1}$: percentage of vote won by the candidate's party in the previous election.
- Coalition: scored 1 for the jointly-endorsed candidates and zero for all others.
- Incumbent Party: a dummy coded 1 if the candidate's party or coalition currently controlled the presidency, 0 otherwise.

With respect to current factors working for or against a given candidate, one would ideally like to have an all-embracing indicator of the direction and strength of the partisan tides at play in a given election, such that any residual effect picked up by the Primary

variable could be attributed with confidence to nomination procedure. Among the cross-national data, with no such standard indicator available, we relied on economic performance as a proxy for current conditions. Comparison of gubernatorial elections across Mexican states offers the possibility of a more catholic approach, using the variable:

- Mean Party Vote Swing: the average percentage swing, across all states holding gubernatorial elections, from the previous election period to the current one, toward (+) or away from (-) the party of a given candidate.

Some further explanation and an example will help clarify. Mexican governors serve six-year terms, and their elections are spread such that, in almost any year, multiple elections are held.¹ For a gubernatorial candidate in the state of Chihuahua in 1998, then, MPVS is the mean of differences between the vote shares of gubernatorial candidates from his party in all states that held elections in 1998 and their corresponding vote shares in 1992.² For any given candidate, MPVS is an indicator of the general electoral trends toward or against his party, uncontaminated by the outcome of the race involving the candidate in question. For this reason, we regard MPVS as a generic and broad indicator of the current partisan political environment.

Finally, having controlled for baseline party strength and current political context, we rely on a simple Primary dummy to estimate the marginal impact of nomination by primary on a candidate's vote share.

¹ In the period we considered, there were 11 gubernatorial elections in 1998, 5 in 1999, 5 in 2000, 3 in 2001, and 6 in 2003.

² In this case, the other states in question are: Aguascalientes, Baja California Sur, Durango, Oaxaca, Puebla, Sinaloa, Tamaulipas, Tlaxcala, Veracruz, and Zacatecas.

The estimated effect of primaries in Mexican gubernatorial elections, shown in Table A-1, is in the same direction as in the cross-national data, but falls short of statistical significance. As expected, the best predictor of a candidate's strength in a given state is her party's performance in the previous election. Neither Incumbent status nor Mean Party Vote Swing reaches statistical significance. The coefficient on incumbency is positive, and suggests a 6% average bonus for candidates of the governing party, but the large standard error demonstrates that incumbency was neither a reliable asset nor burden in Mexico during this period. The coefficient on MPVS is also positive, as expected, but the large standard error suggests that the electoral tides in Mexican states during this period ran relatively independent of each other. Vote swings at the aggregate level do not systematically predict outcomes at the state level. The Coalition dummy is strong and positive, indicating that the jointly endorsed candidates picked up about 26% additional support owing to the endorsement of the subordinate party in their coalitions. Finally, the coefficient on Primary is positive, as in the cross-national analysis, and the expected primary bonus is three percent of the vote, but the effect is not precisely estimated and falls short of statistical significance.

The Mexican results support those from the cross-national analysis insofar as the estimated effect of primary elections is positive. Recall that the conventional wisdom from the limited literature on primaries in Latin America suggested that primaries are an electoral liability rather than an asset. The combined results from the cross-national presidential elections and Mexican gubernatorial elections, by contrast, demonstrate that candidates for executive office selected by primaries in Latin America competed effectively against those selected by other methods. The primary bonus for presidential

candidates, reported in the published article, is around five to six percent of the general election vote, and for Mexican gubernatorial candidates it is three percent, although not estimated with the same confidence. On the whole, the evidence we present allows us to rule out the possibility that primaries systematically select weak candidates, and supports the proposition that presidential candidates selected by primaries won higher vote shares than candidates selected by other methods.

Table A1. Mexican gubernatorial elections. Dependent variable: Vote %.

| Independent Variables | <i>Dependent Variable: Vote %</i> |
|-------------------------------|--|
| <i>Vote_{t-1}</i> | .29* (.10) |
| <i>Incumbent</i> | .06 (.05) |
| <i>Mean Party Vote Swing</i> | .13 (.16) |
| <i>Coalition</i> | .26* (.10) |
| <i>Primary</i> | .03 (.03) |
| <i>Constant</i> | .19* (.03) |
| N | 84 |
| Adjusted R² | .29 |

* sig .01

Datasets

The data on all presidential elections in Latin American democracies from 1978 through October 2004 are in the dataset C&PH_JOP_2006.dta, which includes the variables: country, year, party, winner, presvote, presvote_t_1, primary, pri_t_1 pri_only_party, pri_any_other, pri_plus_some_other, pri_all_party, coalition, inc_party, inc_cand, population, electorate, EffecNumPty, GDP, inc_GDP, loginfltn, inc_loginf, inflation, inc_inflation, UE, inc_ue.

Many of these are self-explanatory. Winner is a dummy variable that identifies the party that won the presidential election in a given year. PresVote is the percentage of the first-round (or only round) vote won by the candidate of a given party. PresVote_t_1 is the party's presidential vote in the previous election. The Primary dummy and Pri_t_1 work in similar fashion. The next four variables parse the relative primary status of each party relative to others, as described in the article. Inc_Party and Inc_Cand are dummies identifying whether the party of a presidential candidate – or the candidate himself – currently held the presidency. Population is a country's population based on the most recent census. Electorate is the share of population age 18 or over multiplied by the average electoral turnout reported in the United Nations Development Programme report, *Democracy in Latin America: Toward a Citizens' Democracy* (New York: United Nations, 2005. <http://democracia.undp.org/>). EffecNumPty is the Laakso and Taagepera index of the fragmentation of the presidential vote. GDP is the mean growth rate over the years of the previous presidential term. LogInfltn is the log transformation of the mean inflation rate. UE is the mean unemployment rate. The Inc_X interactive variables are Inc_Party status multiplied by the respective economic indicator variables.

The data from Mexican gubernatorial elections are in the file C&PH_JOP_Mex.dta, which includes the variables: ptyvote, ptyvote_t_1, incumbent, coalition, meanptyvoteswing, and primary. These variables are self-explanatory in light of the discussion in discussion of Mexican gubernatorial elections, above.