

Online Appendix: Do Political Hawks Prioritize Different Policies Than Technocrats? Politicization and Governors' Spending Priorities

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A1 Robustness Checks

To formally test the plausibility of the validity of our instrument, we fit regressions that trace out the changes in labor and health spending, number of formal jobs and infant mortality rate in the years before a governor affected by the 1977 political reform took office in a given state. Specifically, let Y_s be the year that in state s takes office a governor affected by the 1977 political reform. Then, $YGA_{st} = t - Y_s$ measures the number of years between the current period and the year a governor affected by the political reform takes office in a state with a high number of proportional deputies in 1977. For example, $YGA_{st} = -3$ when state s is observed 3 years before a governor affected by the political reform takes office. Let $D(j)_{st} = 1(YGA_{st} = j)$ be a dummy variable set to 1 when $YGA_{st} = j$. We ran a regression of state level number of formal jobs and infant mortality rate on dummy variables for each value of YGA_{st} :

$$Y_{st} = \sum_{i=-6}^{-1} \gamma_j D(j)_{st} + X'\eta + \delta_s + \delta_t + \delta_{ct} + \varepsilon_{st} \quad (1)$$

In this model, γ_j coefficients measure the response of the dependent variable to future changes in the profile of the person in the government office. Under the the strict exogeneity assumption, future events do not affect current outcomes. In our case, this implies that before a governor affected by the 1977 political reform takes office, spending, labor and health outcomes for states with a high number of proportional deputies and for states with a low number of proportional deputies do not depend on when a treated governor takes office. Thus, we expect all these coefficients to be statistically equal to zero.

The coefficients on the dummy variables for our dependent variables (labor spending, health spending, number of formal jobs and infant mortality rate) are plotted in figures A1 to A4, respectively. The point estimates from these regressions are in all cases small and statistically indistinguishable from zero. The pattern of coefficients in these figures broadly support the validity of our instrument.

Another potential source of concern is that states with governors affected by the reform in office and with higher numbers of proportional deputies in 1977 are systematically different from states with lower numbers of proportional deputies in 1977 and that these differences are time-variant. State fixed effects do not account for these differences. Thus, we run models that include additional time-varying control variables (substitute governor, foreign direct investment and homicides). Tables A3 to A6 report estimates from the baseline model and from models that include additional control variables for labor spending, health spending, number of formal jobs and infant mortality rate,

respectively. The estimated effects of governors' political careers on all the dependent variables are virtually unchanged across these specifications. Taken together, the results from these models support the common trends assumption.

We also checked the robustness of our results to the model specification. Following Benton (2019), we include the lagged outcome variable for our spending regressions, making them dynamic models. This is important as fiscal outcomes might be affected by fiscal decisions in previous periods. We also test the robustness to not using the square root transformation of spending. Results for State Labor Spending and State Health Spending are presented in Tables A7 and A8 of the appendix, respectively. As can be seen, results suffer only a small change and remain statistically significant when the lagged outcome variable is included in the model (column 2). With respect to using the share of spending in levels, results remain statistically significant and have the same sign than the model that uses the square root transformation (column 3).

Finally, a different type of concern with the analysis is that the age threshold for governors to be affected by the 1977 political reform and the job classification might be driving some results. To address this concern, we first estimated our instrumental variable regression model using different age thresholds. Specifically, we ran models for 29, 30, 31, 32, and 33 years old as minimum ages for a governor to be affected by the political reform. The estimates for each specification of the model are presented in figure A5 (for labor spending), figure A6 (for health spending), figure A7 (for number of formal jobs) and figure A8 (for infant mortality rate). As can be noted, results are robust to alternative age thresholds. Estimates fail to change considerably when the age threshold varies. Importantly, most coefficients remain positive and statistically significant.¹

¹ At 33 years old, the coefficient for number of formal jobs is significant at the 15% confidence level, and at 29 years old, the coefficients for number of formal jobs and health spending are significant at the 11% and 13% confidence level, respectively.

A2 Jobs Classification

The empirical classification is based, with some adjustments, on Hamman (2004) and Galasso and Nannicini (2015). We classify a job as technocratic if it involves performing managerial duties in the public sector (e.g., Minister of Culture or Labor), including law enforcement. In addition, we include as technocratic jobs those related to occupations traditionally considered as high skilled (e.g., jobs in the Ministry of Finance or Central Bank). We classify all elected positions (except for mayors, due to their accumulation of technical skills) and roles in political parties as political jobs.² Further, we include as political those jobs that entail maintaining political relationships among different stakeholders (e.g., a position in the Ministry of the Interior or a position as private secretary). It is important to notice that we disregard time spent in the private sector and in academic jobs. However, we do consider this information by including dummy variables that control for whether or not a governor has private or academic experience. For the period analyzed in this study, prior to taking office, a governor's average time spent in political posts is 69%.

In particular, technical and administrative jobs are considered to develop primarily hard skills, and they can be divided in two groups. Firstly, there are some jobs that are agency specific. Taken into consideration agencies' goals we consider them to develop primarily hard skills. For example, according to its official website, the Secretariat of Finance is in charge of developing the Mexican economic policy. Thus, all jobs from agencies that require hard skills to pursue their goals will be considered as technical or administrative experience. Secondly, certain jobs, regardless of the agency where they are carried out, develop hard skills. For example, they include professor, treasurer, judge, etc. Mayors are also considered to develop hard skills in this research. Even though a mayor is an elected official with political experience, mayors' executive experience should provide them primarily with technical and administrative experience for performing as a governor. For a comprehensive list of the agencies and jobs considered, see Table A1.

We consider as political jobs those that develop primarily political skills. The positions that are considered to develop this kind of skill can be divided in three main groups. Firstly, given the nature of their work, jobs in certain agencies at the federal, state, and local levels develop primarily political skills. The specific agencies are chosen taken into consideration their specific goals. For example, according to the official website of the Mexican Secretariat of Government, this institution oversees the national politics, as well as the interaction between the executive branch and other levels of government. Thus, all jobs from agencies that pursue political goals will be considered as political experience. Secondly, a group of jobs that is considered to develop primarily political skills are those directly related to politics. Every job within a political party or any position in a political campaign is taken to develop primarily political skills. Finally, the last group of jobs that fall in the category of political jobs is not agency specific, but they are public sector jobs that might be found in any agency. However, their intrinsic characteristics primarily foster the development of political skills by the employee. These jobs are official mayor, private secretary, technical secretary, etc. Another post considered political is the post of advisor for political positions, such as advisor for a candidate for president or the president of a political party. For a list of the jobs and agencies considered as political jobs, see Table A1.

² Galasso and Nannicini consider party officers as 'professional politicians'.

Table A1. Jobs Classification

Technical or administrative Agencies	Political Agencies
Office of the Presidency	Secretariat of Government (Federal and State Level)
Judicial Branch	Secretary of Foreign Relations
Army	Unions
Secretariat of Finance (Federal and State Level)	Political Parties
Secretariat of Economic Development (Federal and State Level)	Political Campaigns
Secretariat of Housing and/or Public Works (Federal and State Level)	
Secretariat of Agriculture (Federal and State Level)	
Secretariat of Health (Federal and State Level)	
Secretariat of Commerce (Federal Level)	
Secretariat of Energy (Federal Level)	
Attorney General (Federal and State Level)	
Secretariat of Culture (Federal and State Level)	
Secretariat of Public Security (Federal, State and Local Level)	
Secretariat of Tourism (Federal and State Level)	
Secretariat of Public Education (Federal and State Level)	
Secretariat of Transportation (Federal and State Level)	
Secretariat of Labor (Federal Level)	
INEGI (National Statistics Institute)	
IMSS and ISSSTE (Social Security)	
Water Commission (Federal and State Level)	
Electoral Institute (Federal and State Level)	
CNBV (Banking System Regulatory Agency)	
NAFIN (National Development Bank)	
INFONAVIT (Public Housing)	
Human Rights Commission	
Universities (non-academic posts)	
Technical or administrative Positions	Political Positions
Congress. Analysis department	Private secretary
Adviser to Technocratic Jobs	Deputy (Federal and State Level)
Mayor	Adviser to Political Jobs
Judge	Public Trustee
Treasurer (Local Level)	Public Notary
Comptroller (Local Level)	Ambassador
Delegates D.F (Mayor)	Senator
Hospitals' Directors	Human and material resources manager (Oficial mayor)
Secretary City Government (Local Level)	
Material Resources Manager (<i>oficial mayor</i>)	

A3 Figures and Tables

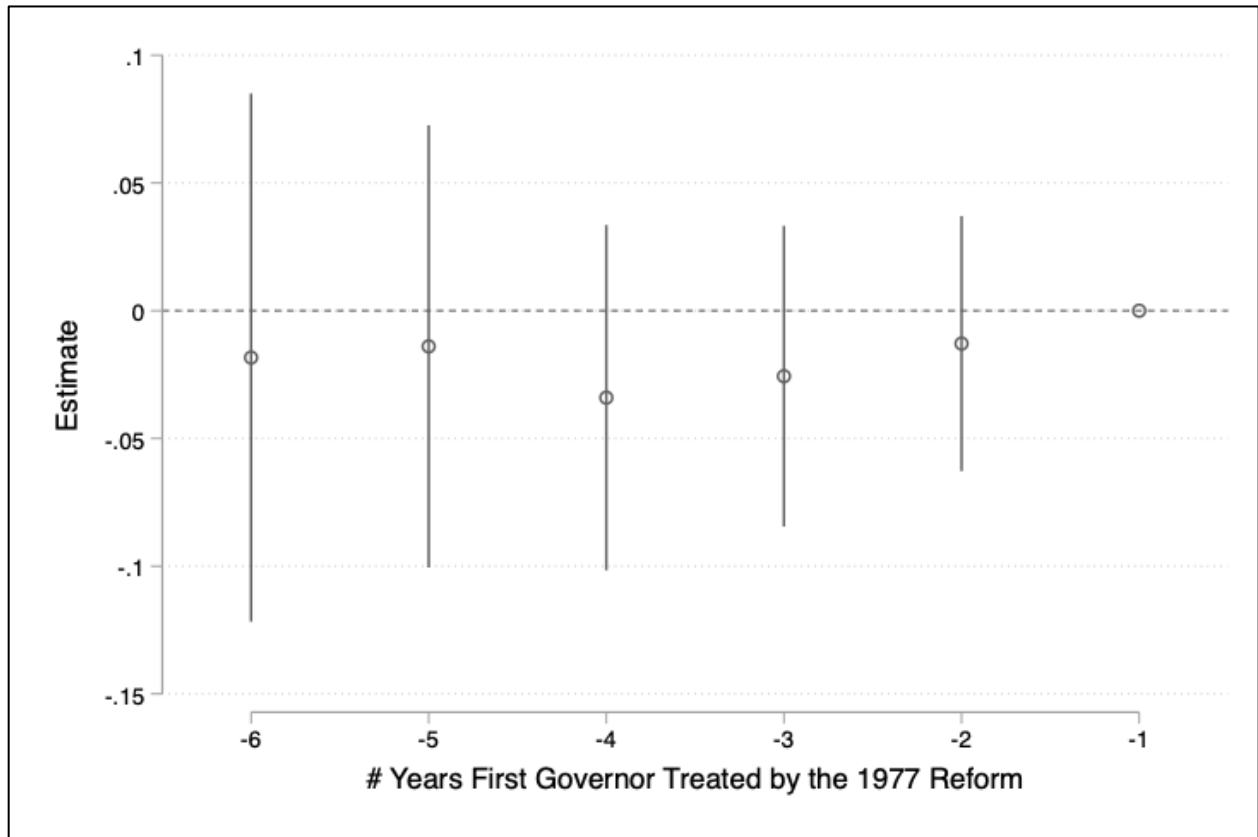


Figure A1. Leads of State Labor Spending

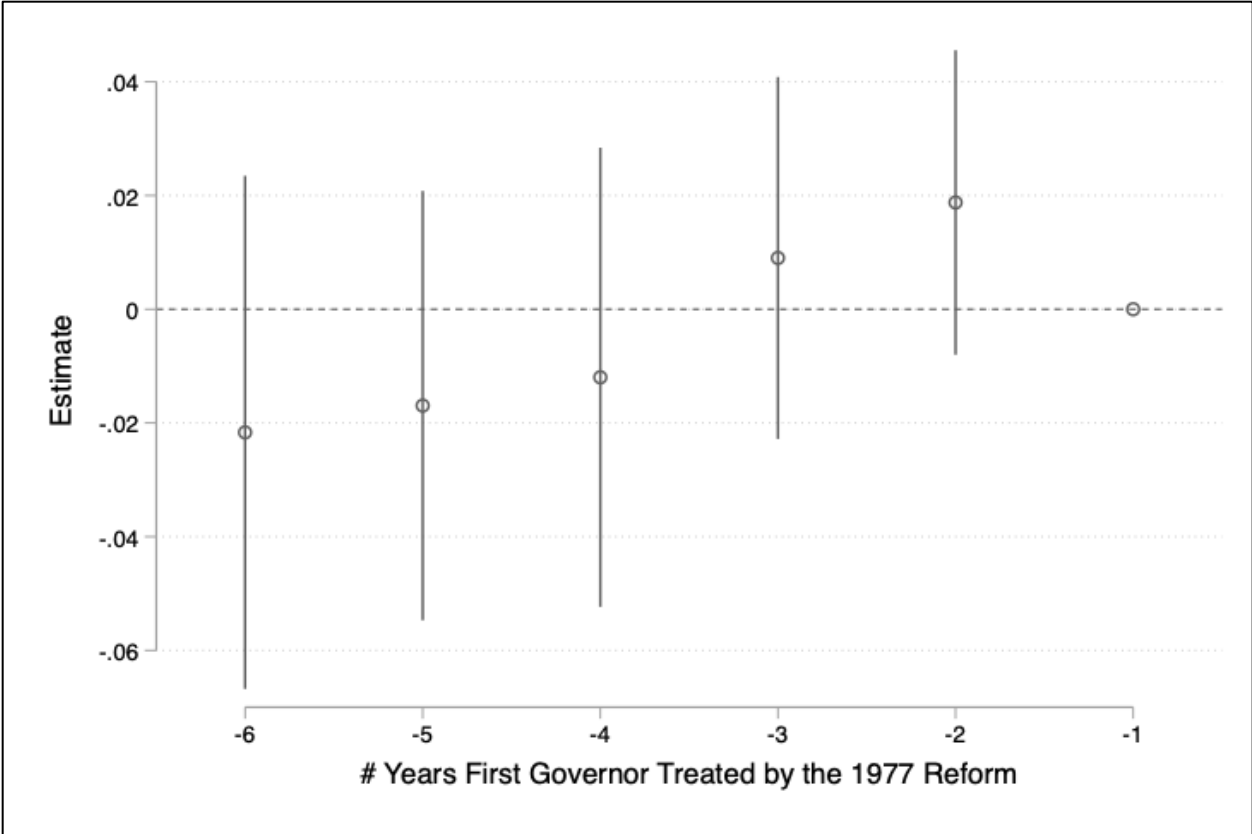


Figure A2. Leads of State Health Spending

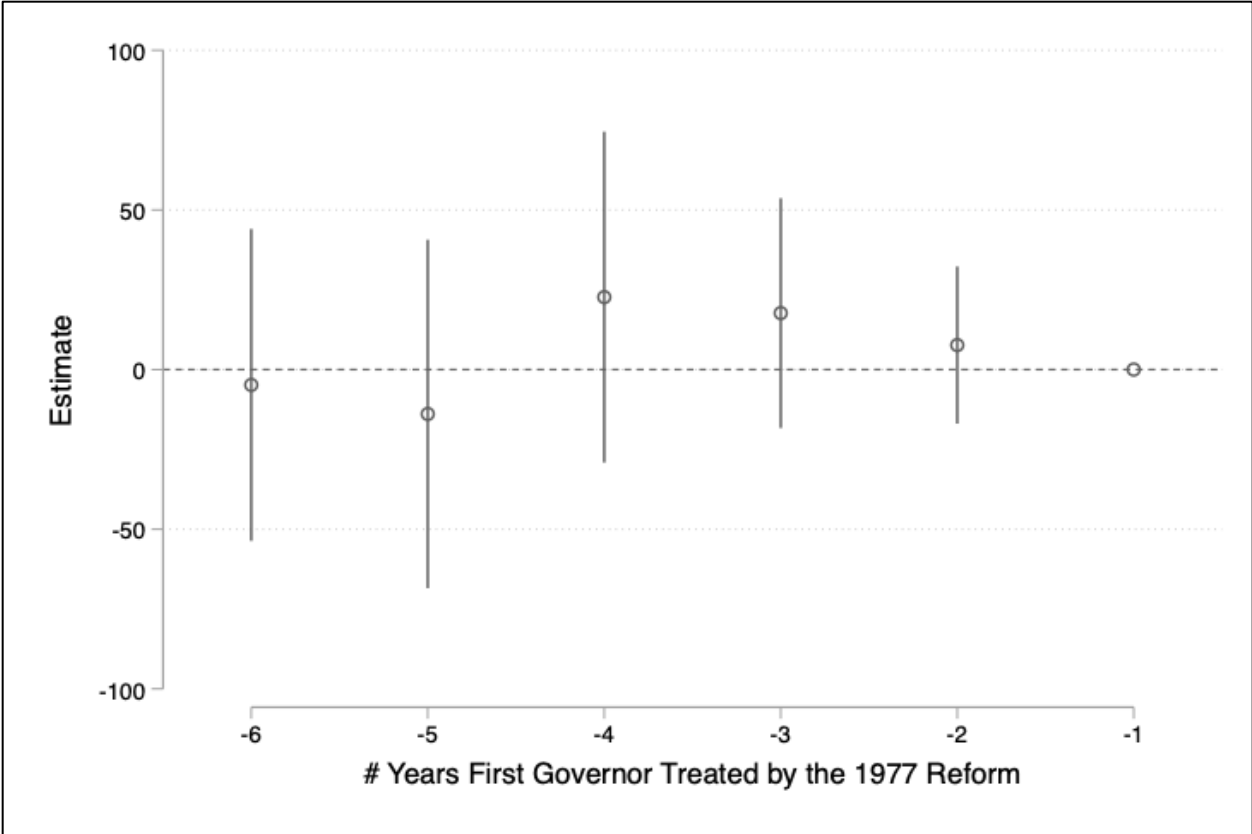


Figure A3. Leads of # Formal Jobs

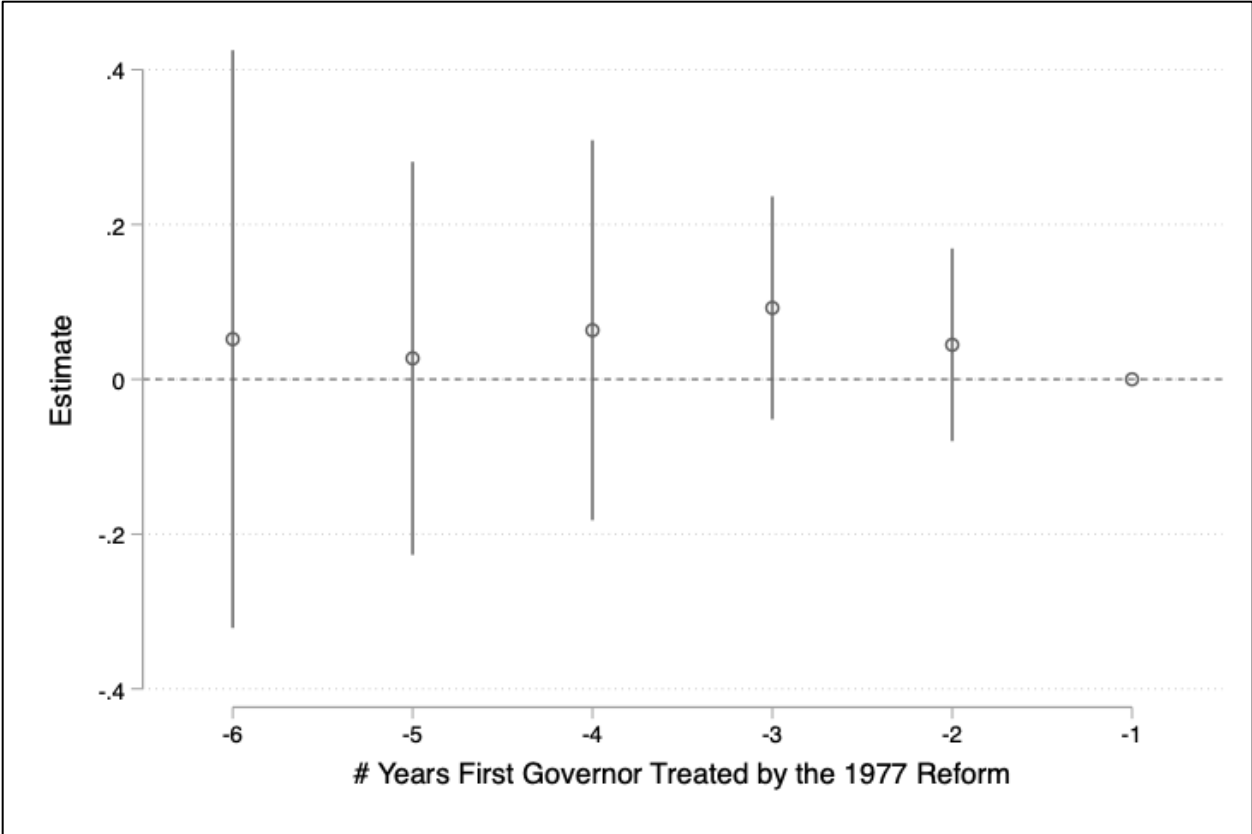


Figure A4. Leads of Infant Mortality Rate

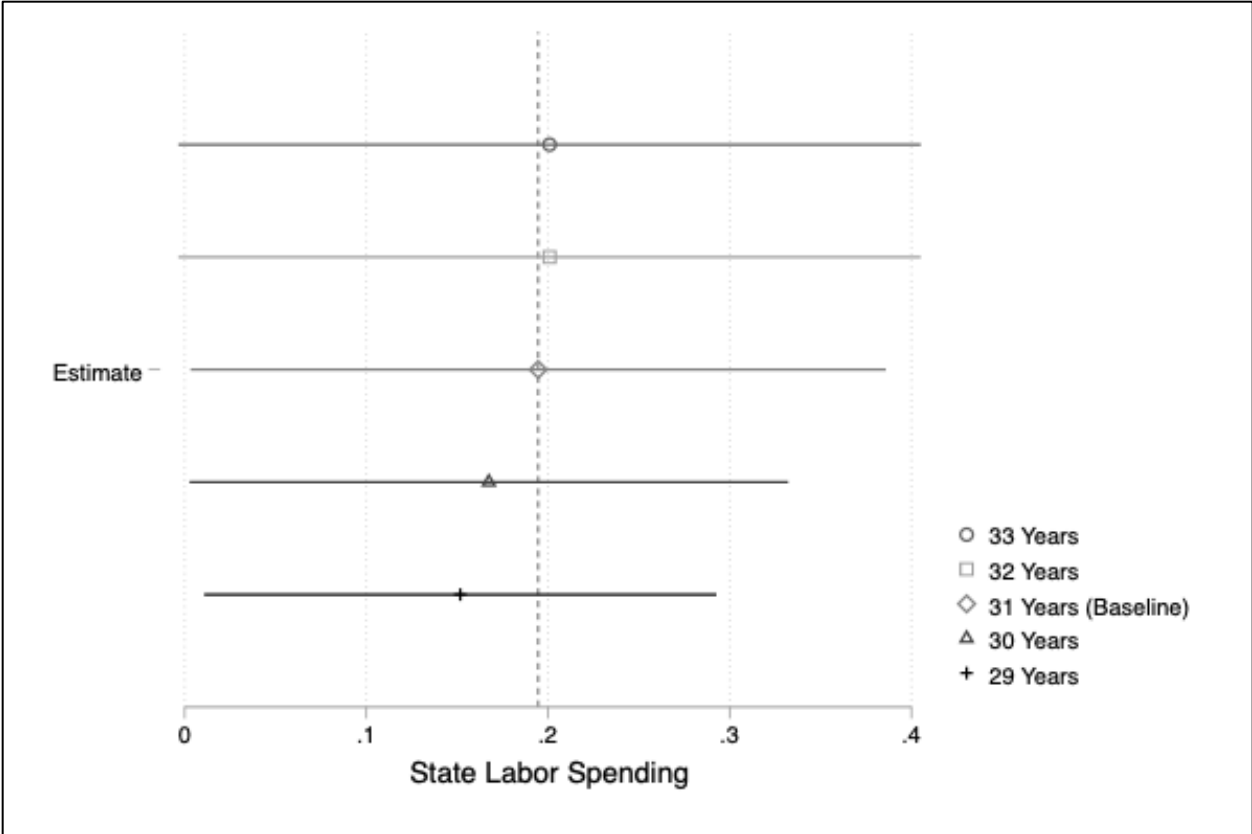


Figure A5. Robustness to Different Age Thresholds. State Labor Spending. Each horizontal line presents the point estimate and the confidence interval for the model estimated using a different age threshold.

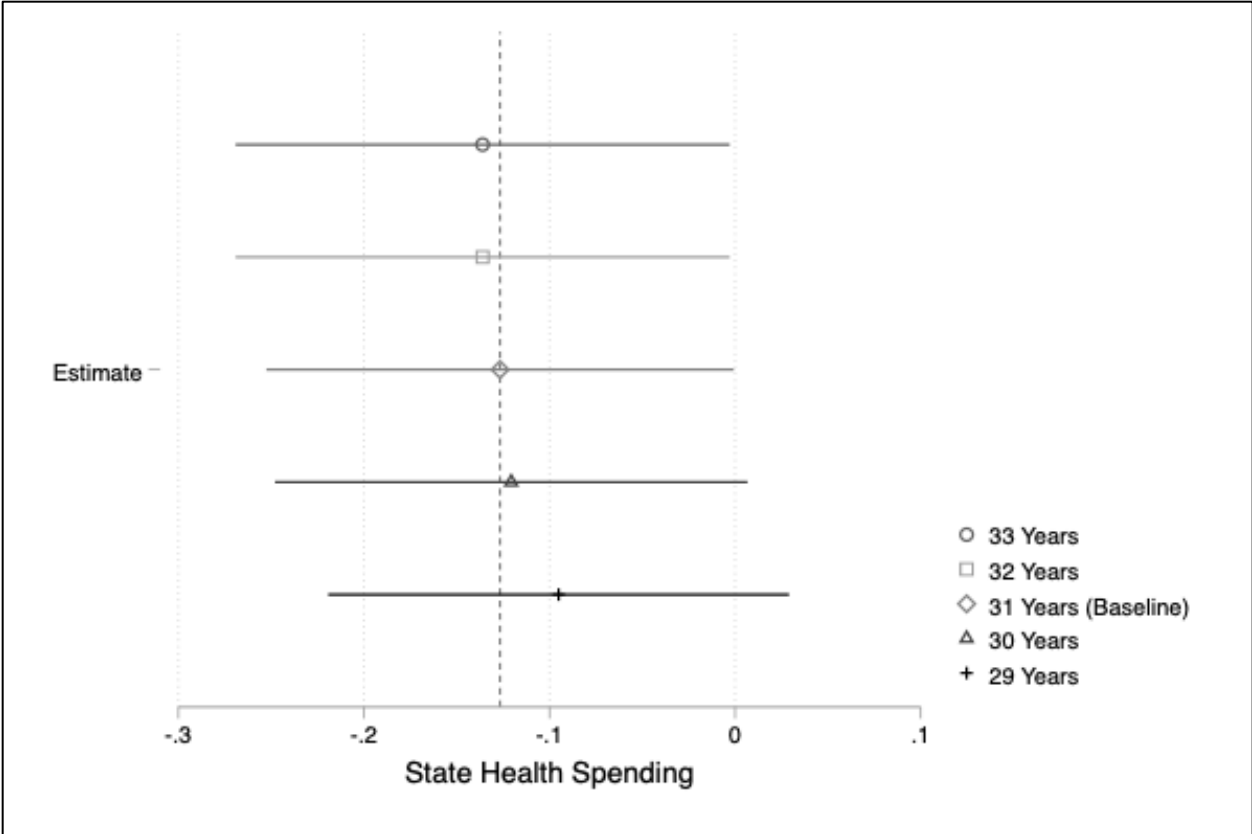


Figure A6. Robustness to Different Age Thresholds. State Health Spending. Each horizontal line presents the point estimate and the confidence interval for the model estimated using a different age threshold.

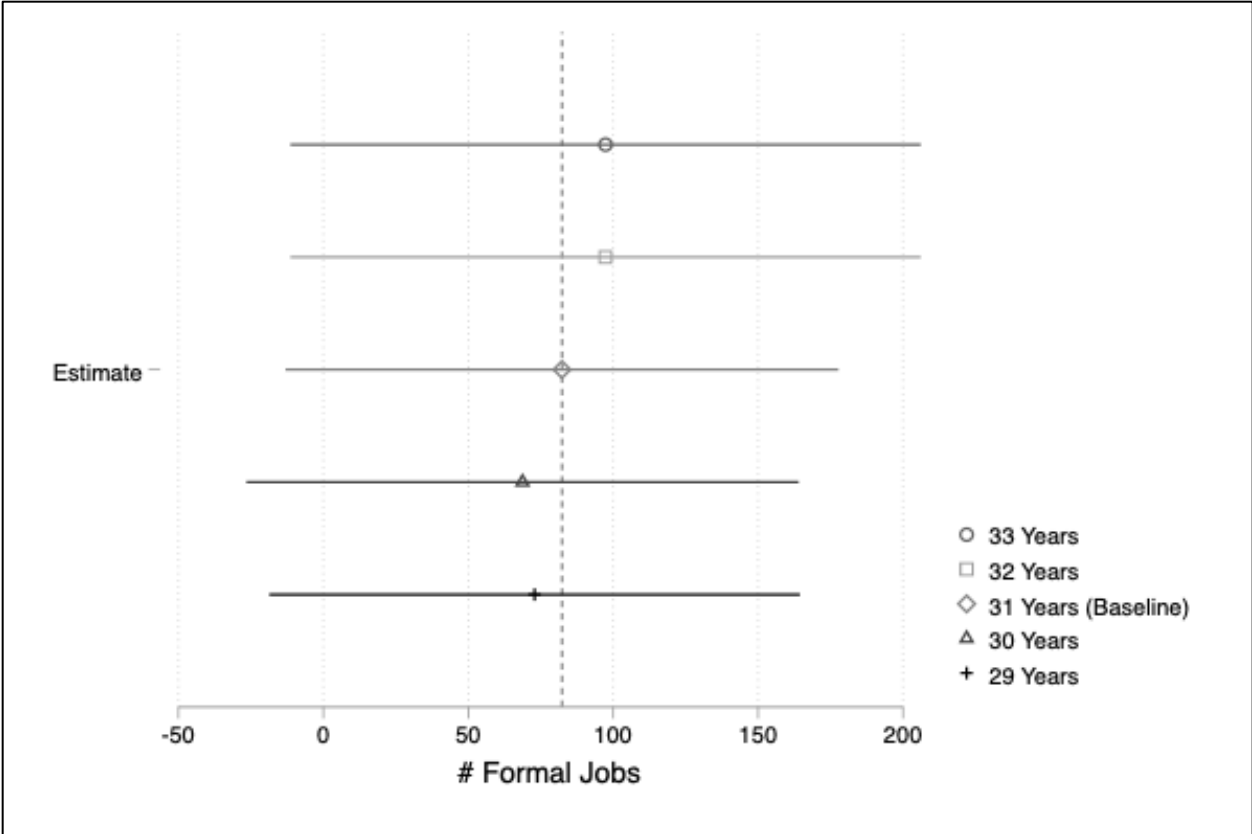


Figure A7. Robustness to Different Age Thresholds. # Formal Jobs. Each horizontal line presents the point estimate and the confidence interval for the model estimated using a different age threshold

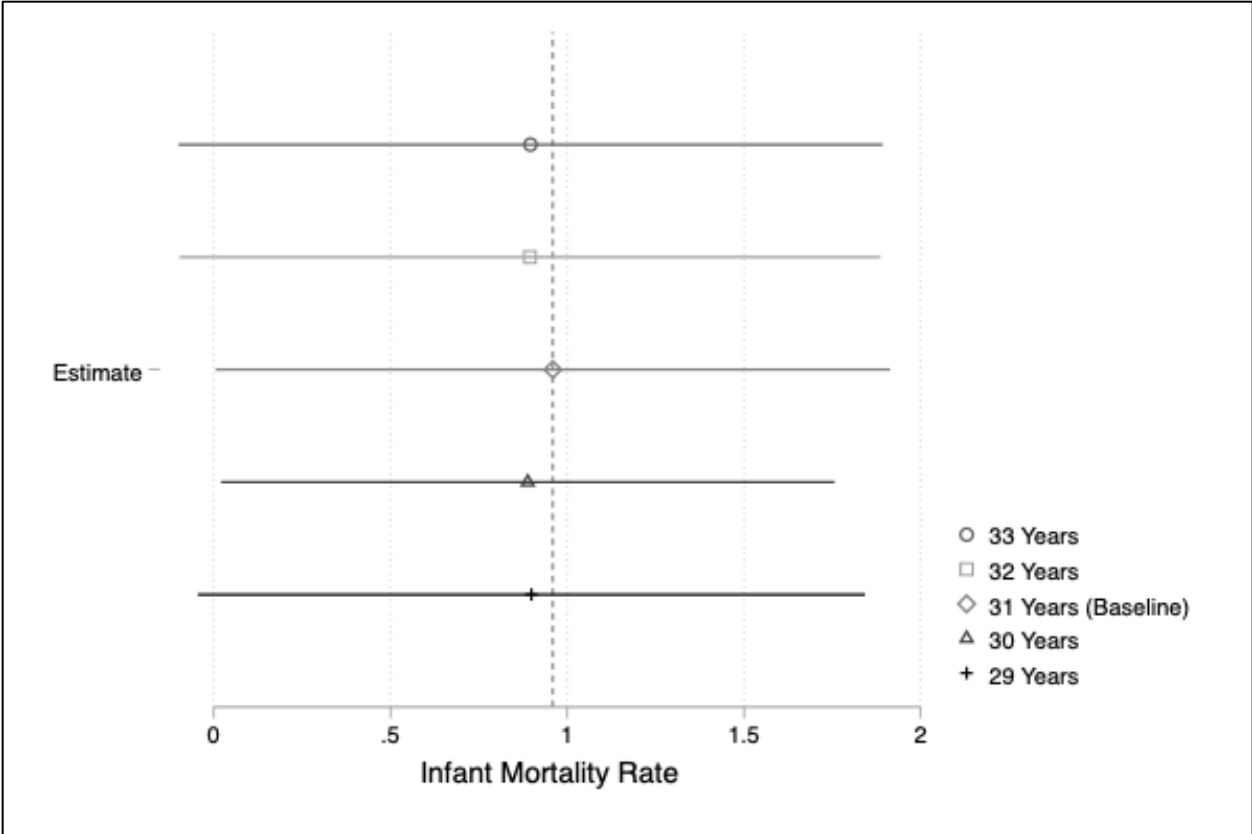


Figure A8. Robustness to Different Age Thresholds. Infant Mortality Rate. Each horizontal line presents the point estimate and the confidence interval for the model estimated using a different age threshold

Table A2. Summary Statistics

Variable	Definition	N	Mean	SD	Min	Max
Dependent Variables						
State Labor Spending	Proportion of state spending devoted to projects aimed to create jobs	527	0.015	0.022	0.000	0.214
State Health Spending	Proportion of state spending devoted to health	511	0.015	0.014	0.000	0.082
# Formal Jobs	Number of formal jobs in the state (thousands)	568	419.944	457.891	60.984	2,893.950
Infant Mortality Rate	Proportion of infant deaths to total births	640	1.228	0.426	0.300	3.318
Independent Variables						
Political Career Path	Fraction of time spent by the governors in political posts	640	0.611	0.311	0.000	1.000
# Proportional Deputies 1977	Number of proportional deputies in 1977	620	4.903	2.559	2.000	15.000
Electoral-Reform Affected Governor	Dummy variable taking the value of 1 if the governor was treated by the 1977 reform	640	0.805	0.397	0.000	1.000
Governor Specific						
Governor Age	Age of the governors	640	50.395	7.665	31.000	72.000
Governor Private Experience	Dummy variable taking the value of 1 if the governor has private sector experience	640	0.292	0.455	0.000	1.000
Governor Academic Experience	Dummy variable taking the value of 1 if the governor has academic experience	640	0.333	0.472	0.000	1.000
Governor Education (Years)	Number of years of education	640	16.770	1.853	12.000	21.000
Political						
Margin of Victory	Margin of victory of the governor election	640	16.702	16.670	0.530	81.320
Substitute Governor	Dummy variable taking the value of 1 if the governor was a substitute	640	0.042	0.201	0.000	1.000
State Specific						
Population	State population in millions	640	3.340	2.825	0.401	16.619
#State Schools	Number of schools in the state	637	175.523	175.210	14.000	1,349.000
Foreign Direct Investment	Foreign direct investment (million Mexican pesos)	640	685.383	1,141.855	-85.000	10,211.900
Homicides	Proportion of homicides	640	2.909	2.555	0.310	24.310

Note: Summary statistics at the state level. N = number of observations. SD = standard deviation. Min = minimum, Max = maximum.

Table A3: Robustness to Omitted Variables. State Labor Spending

	(1)	(2)	(3)
Dependent Variable	Baseline	Homicides	Substitute Governor
Political Career Path	0.195** (0.098)	0.199** (0.100)	0.192** (0.094)
Electoral-Reform Affected Governor	-0.049 (0.042)	-0.051 (0.042)	-0.052 (0.041)
Population	-0.014 (0.016)	-0.013 (0.016)	-0.004 (0.017)
Foreign Direct Investment	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)
# State Schools	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Margin of Victory	-0.001* (0.001)	-0.001* (0.001)	-0.001** (0.001)
PRD	-0.057 (0.045)	-0.062 (0.047)	-0.054 (0.044)
PRI	-0.012 (0.032)	-0.015 (0.033)	-0.015 (0.032)
Concurrent Elec	-0.025 (0.077)	-0.026 (0.077)	-0.031 (0.077)
Governor Private Experience	0.033* (0.017)	0.030* (0.018)	0.029* (0.017)
Governor Academic Experience	-0.017 (0.025)	-0.018 (0.025)	-0.017 (0.024)
Governor Education (Years)	0.019** (0.008)	0.020** (0.009)	0.019** (0.008)
Governor Age	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)
Homicides		0.004* (0.002)	
Substitute Governor			0.050* (0.030)
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Cohort by Year FE	Yes	Yes	Yes
Observations	524	524	524

Note: Estimated coefficients for the instrumental variable regression of State Labor Spending on Political Career Path for three specifications of the model in the period 1998 to 2014. Column (1) presents the baseline estimate. Column (2) presents the estimates including the proportion of homicides in the state as a control variable. Column (3) presents the estimates including a dummy variable that takes the value of 1 when the governor was a substitute as a control variable. Heteroskedasticity-robust standard errors clustered at state level in parentheses.

*** Significant at 1% level; ** Significant at 5% level; * Significant at 10% level

Table A4: Robustness to Omitted Variables. State Health Spending

	(1)	(2)	(3)
Dependent Variable	Baseline	Foreign Direct Investment	Substitute Governor
Political Career Path	-0.127** (0.064)	-0.128** (0.065)	-0.124* (0.065)
Electoral-Reform Affected Governor	-0.001 -0.127**	-0.002 -0.128**	0.001 -0.124*
Population	0.021 (0.015)	0.024 (0.016)	0.017 (0.015)
Homicides	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)
# State Schools	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Margin of Victory	0.001** (0.001)	0.001** (0.001)	0.001** (0.001)
PRD	0.049* (0.029)	0.048* (0.028)	0.047* (0.028)
PRI	0.023 (0.018)	0.023 (0.018)	0.024 (0.018)
Concurrent Elec	0.036 (0.042)	0.036 (0.042)	0.039 (0.042)
Governor Private Experience	0.005 (0.009)	0.005 (0.009)	0.007 (0.009)
Governor Academic Experience	0.007 (0.014)	0.006 (0.014)	0.006 (0.014)
Governor Education (Years)	-0.009* (0.006)	-0.009 (0.006)	-0.009 (0.006)
Governor Age	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
Foreign Direct Investment		-0.000 (0.000)	
Substitute Governor			-0.029** (0.015)
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Cohort by Year FE	Yes	Yes	Yes
Observations	492	492	492

Note: Estimated coefficients for the instrumental variable regression of State Health Spending on Political Career Path for three specifications of the model in the period 1999 to 2014. Column (1) presents the baseline estimate. Column (2) presents the estimates including the amount of foreign direct investment as a control variable. Column (3) presents the estimates including a dummy variable that takes the value of 1 when the governor was a substitute as a control variable. Heteroskedasticity-robust standard errors clustered at state level in parentheses.

*** Significant at 1% level; ** Significant at 5% level; * Significant at 10% level

Table A5: Robustness to Omitted Variables. Labor

	(1)	(2)	(3)
Dependent Variable	Baseline	Homicides	Substitute Governor
Political Career Path	82.338* (48.663)	83.353* (48.835)	80.966* (46.697)
Electoral-Reform Affected Governor	-1.564 (22.398)	-2.160 (22.282)	-7.235 (23.401)
Population	105.357*** (25.168)	105.863*** (24.777)	112.042*** (25.133)
Foreign Direct Investment	0.005 (0.011)	0.004 (0.011)	0.004 (0.011)
# State Schools	0.023 (0.097)	0.026 (0.097)	0.029 (0.095)
Margin of Victory	-0.221 (0.296)	-0.240 (0.298)	-0.263 (0.294)
PRD	-11.176 (22.667)	-12.597 (22.798)	-9.898 (22.068)
PRI	1.442 (19.242)	0.354 (19.242)	-0.924 (18.743)
Concurrent Elec	75.885** (30.277)	75.803** (30.140)	71.878** (29.485)
Governor Private Experience	-12.150 (9.208)	-13.064 (9.682)	-14.468* (8.715)
Governor Academic Experience	-13.787 (10.252)	-14.102 (10.176)	-13.766 (10.017)
Governor Education (Years)	5.352 (4.211)	5.626 (4.200)	4.950 (3.890)
Governor Age	0.184 (0.944)	0.202 (0.943)	0.191 (0.945)
Homicides		1.382 (3.300)	
Substitute Governor			28.387* (16.883)
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Cohort by Year FE	Yes	Yes	Yes
Observations	548	548	548

Note: Estimated coefficients for the instrumental variable regression of # Formal Jobs on Political Career Path for three specifications of the model in the period 1997 to 2014. Column (1) presents the baseline estimate. Column (2) presents the estimates including the proportion of homicides in the state as a control variable. Column (3) presents the estimates including a dummy variable that takes the value of 1 when the governor was a substitute as a control variable. Heteroskedasticity-robust standard errors clustered at state level in parentheses.

*** Significant at 1% level; ** Significant at 5% level; * Significant at 10% level

Table A6: Robustness to Omitted Variables. Health

	(1)	(2)	(3)
Dependent Variable	Baseline	Foreign Direct Investment	Substitute Governor
Political Career Path	0.959** (0.487)	0.948** (0.475)	0.955** (0.484)
Electoral-Reform Affected Governor	0.098 (0.191)	0.098 (0.190)	0.095 (0.192)
Population	-0.236*** (0.082)	-0.260*** (0.081)	-0.228** (0.094)
Homicides	0.039* (0.020)	0.038* (0.020)	0.038* (0.020)
# State Schools	-0.001* (0.000)	-0.001* (0.000)	-0.001** (0.000)
Margin of Victory	0.003 (0.003)	0.003 (0.003)	0.003 (0.003)
PRD	0.012 (0.169)	0.019 (0.165)	0.015 (0.167)
PRI	0.026 (0.100)	0.028 (0.099)	0.023 (0.102)
Concurrent Elec	-0.374** (0.189)	-0.385** (0.183)	-0.379** (0.188)
Governor Private Experience	0.019 (0.060)	0.022 (0.057)	0.016 (0.060)
Governor Academic Experience	0.010 (0.084)	0.015 (0.082)	0.010 (0.083)
Governor Education (Years)	0.049 (0.034)	0.048 (0.033)	0.049 (0.033)
Governor Age	0.007 (0.007)	0.007 (0.007)	0.007 (0.007)
Foreign Direct Investment		0.000 (0.000)	
Substitute Governor			0.037 (0.154)
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Cohort by Year FE	Yes	Yes	Yes
Observations	617	617	617

Note: Estimated coefficients for the instrumental variable regression of Infant Mortality Rate on Political Career Path for three specifications of the model in the period 1995 to 2014. Column (1) presents the baseline estimate. Column (2) presents the estimates including the amount of foreign direct investment as a control variable. Column (3) presents the estimates including a dummy variable that takes the value of 1 when the governor was a substitute as a control variable. Heteroskedasticity-robust standard errors clustered at state level in parentheses.

*** Significant at 1% level; ** Significant at 5% level; * Significant at 10% level

Table A7: Robustness to Specification. State Labor Spending

	(1)	(2)	(3)
Dependent Variable	Baseline	Lag	Levels
Political Career Path	0.195** (0.098)	0.147* (0.078)	0.030* (0.017)
Electoral-Reform Affected Governor	-0.049 (0.042)	0.001 (0.037)	-0.006 (0.010)
Population	-0.014 (0.016)	-0.006 (0.015)	-0.000 (0.003)
Foreign Direct Investment	0.000** (0.000)	0.000* (0.000)	0.000* (0.000)
# State Schools	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Margin of Victory	-0.001* (0.001)	-0.001* (0.001)	-0.000** (0.000)
PRD	-0.057 (0.045)	-0.044 (0.038)	-0.015* (0.008)
PRI	-0.012 (0.032)	-0.012 (0.028)	-0.003 (0.006)
Concurrent Elec	-0.025 (0.077)	-0.031 (0.057)	-0.006 (0.012)
Governor Private Experience	0.033* (0.017)	0.025* (0.015)	0.004* (0.003)
Governor Academic Experience	-0.017 (0.025)	-0.017 (0.022)	-0.001 (0.004)
Governor Education (Years)	0.019** (0.008)	0.016** (0.008)	0.003* (0.001)
Governor Age	0.004* (0.002)	0.003 (0.002)	0.001 (0.000)
Lagged State Labor Spending		0.228** (0.096)	
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Cohort by Year FE	Yes	Yes	Yes
Observations	524	493	524

Note: Estimated coefficients for the instrumental variable regression of State Labor Spending on Political Career Path for three specifications of the model in the period 1995 to 2014. Column (1) presents the baseline estimate. Column (2) presents the estimates including the lagged outcome variable. Column (3) presents the estimates using the share of State Labor Spending without the square root transformation. Heteroskedasticity-robust standard errors clustered at state level in parentheses.

*** Significant at 1% level; ** Significant at 5% level; * Significant at 10% level

Table A8: Robustness to Specification. State Health Spending

	(1)	(2)	(3)
Dependent Variable	Baseline	Lags	Levels
Political Career Path	-0.127** (0.064)	-0.052*** (0.020)	-0.033* (0.018)
Electoral-Reform Affected Governor	-0.001 (0.027)	-0.004 (0.012)	-0.003 (0.007)
Population	0.021 (0.015)	0.004 (0.007)	0.005 (0.004)
Homicides	0.000 (0.001)	0.000 (0.001)	0.000 (0.000)
# State Schools	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Margin of Victory	0.001** (0.001)	0.001** (0.000)	0.000* (0.000)
PRD	0.049* (0.029)	0.022* (0.012)	0.011 (0.007)
PRI	0.023 (0.018)	0.013* (0.007)	0.006 (0.005)
Concurrent Elec	0.036 (0.042)	0.030* (0.017)	0.010 (0.011)
Governor Private Experience	0.005 (0.009)	0.004 (0.005)	0.001 (0.002)
Governor Academic Experience	0.007 (0.014)	0.002 (0.005)	0.003 (0.004)
Governor Education (Years)	-0.009* (0.006)	-0.004** (0.002)	-0.003 (0.002)
Governor Age	-0.001 (0.001)	-0.000 (0.001)	-0.000 (0.000)
Lagged State Labor Spending		0.592*** (0.049)	
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Cohort by Year FE	Yes	Yes	Yes
Observations	492	461	492

Note: Estimated coefficients for the instrumental variable regression of State Health Spending on Political Career Path for three specifications of the model in the period 1995 to 2014. Column (1) presents the baseline estimate. Column (2) presents the estimates including the lagged outcome variable. Column (3) presents the estimates using the share of State Health Spending without the square root transformation. Heteroskedasticity-robust standard errors clustered at state level in parentheses. *** Significant at 1% level; ** Significant at 5% level; * Significant at 10% level