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This paper investigates whether the party affiliation of governors (Democrat or Republican) has an impact on the allocation of state expenditures. Exploiting gubernatorial election results from 1960 to 2012 and a Regression Discontinuity Design (RDD), we find that Democratic governors allocate a larger share of their budget to health/hospitals and education sectors. The results are robust to a wide range of controls and model specifications.

JEL Classification: D72, H75, H72

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I. Introduction

Some major cuts to state education and health budgets have been widely discussed in the news. For example, in 2011, Pennsylvania's Republican governor proposed slashing the state's higher education funding by hundreds of millions of dollars. In 2015, Illinois' Republican governor decided to cut \$300 million to the health care system. Louisiana's Republican governor's 2015 budget plan proposed offsetting a \$1.6 billion funding shortfall largely through budget cuts to education. These cuts are generally associated with Republican governors. It is commonly believed that Democrats are more likely than Republicans to support social policies, increase government involvement, and spend a higher share of their budget on key sectors such as education and health.

Despite the above anecdotal evidence, the literature is ambiguous as to whether party affiliation of governors (Democratic vs. Republican) matters regarding allocation of public expenditures. Inconsistent results regarding the impact of party affiliation on budgetary decisions are often due to a failure to address endogeneity concerns or small sample of years, which yields imprecise estimates. In this paper, we use a Regression Discontinuity Design (RDD) to investigate the causal impact of the party affiliation of governors on distributive budgetary decisions over key sectors (education, health/hospitals, public safety, social welfare, and we group the other sectors). We match data from gubernatorial election data with state government finance data from the U.S. Census Bureau for 1960 to 2012.

Our results support the existence of gubernatorial partisan differences over budgetary decisions. We find that under Democratic governors, the share of spending on education, health/hospitals,

and public safety sectors are respectively 2.6, 4.3, and 3.6 percent higher and there is a decrease in the other sectors. This is important because the literature documents benefits to higher funding to education and health (e.g. Barro, 1991 ; Cellini et al, 2010 ; Martin et al, 2012 ; Gupta et al., 2002). Results are robust to different RD specifications, controls, and robustness checks.

The rest of the paper is organized as follows: Section II discusses the role of governors and reviews the literature; Section III presents the methodology; Section IV discusses the data and descriptive analysis; Section V presents the main results, heterogeneity, and sensitivity analysis; and Section VI concludes.

II. Role of Governors and Related Literature

II.A Role of Governors

Governors have a high degree of autonomy in the administration of their state. As head of the executive branch the governor prepares and administers the budget, sets policies, recommends legislation, signs laws, and appoints department heads. Governors can veto bills, which gives them considerable control over policies. In all but seven states, governors have the power to use a line-item veto on appropriations bills; this gives the governor the authority to reject part of a bill passed by the legislature that involves taxing or spending. In some states, the governor has additional roles, such as commander-in-chief of the National Guard, and has partial or absolute power to commute or pardon criminal sentences.

II.B Related Literature

Our paper contributes to a growing literature on the impact of partisan allegiance (Democratic vs Republican) on economic outcomes at the state level. Besley and Case (1995) find a positive and significant impact of Democratic lame duck governors on income taxes, workers' compensation benefits, and spending during 1950 to 1986.¹ In another study, they show that the unified effect of Democratic governor and Democrats controlling both the upper and lower houses of the legislature has a positive impact on total taxes, income taxes, total spending, and family assistance (Besley and Case, 2003). Ansolabehere and Snyder (2006) find that the party in power allocates more funds towards counties that provide them with the strongest electoral support. Leigh (2008) investigates the gubernatorial partisan impact on numerous policy settings, economic, and social outcomes during the period 1941 to 2001. He finds few differences between Democratic and Republican governors' outcomes and no impact on state spending. He finds a slightly higher minimum wage, lower post-tax inequality, and unemployment rate under Democratic governors. Joshi (2014), using a RDD, finds no impact of gubernatorial partisanship on health expenditures during the 1991 to 2009 period. Fredriksson et al. (2012), using RDD, investigate the effect of gubernatorial party affiliation on tax policies from 1970 to 2007; they find that the impact is dependent on whether the governor is a lame duck or eligible for re-election. While re-electable Democrats tend to increase income taxes, lame duck Democrats tend to decrease it. Beland (2015) and Beland and Unel (2015), using RDD, find that minorities such as blacks and immigrants have better labor-market outcomes under Democratic rather than

¹ Lame duck governors are those who are in their last term and are facing binding term limits. In other words, lame duck governors cannot run for the next term.

Republican governors.² Our paper contributes to the literature by investigating the causal impact of party affiliation of the governor on distributive budgetary decisions over key sectors using RDD and the long time period of 1960 to 2012.

I. RD Methodology

Following Lee (2001, 2008), we use a Regression Discontinuity Design (RDD) to investigate whether the party affiliation of the governor (Democratic vs. Republican) has a causal impact on the allocation of state spending. Endogeneity concerns surrounding election outcomes come from factors such as labor-market conditions, voter characteristics, quality of candidates, the resources available for campaigns, and other unmeasured characteristics of states and candidates that would bias estimates of the impact of the party allegiance of governors. These factors can influence who wins the election. Lee (2001, 2008) demonstrates that looking at close elections provides quasi-random variation in winners and allows for the identification of causal effects of political parties. Similar methodology is used in papers such Lee, Moretti, and Butler (2004), Pettersson-Lidbom (2008), Ferreira and Gyourko (2009, 2014) and Beland (2015).

We use a parametric RDD approach as our primary specification. We estimate:

$$Y_{st} = \beta_0 + \beta_1 D_{st} + f(MOV_{st}) + \mu_s + \delta_t + \varepsilon_{st} \quad (1)$$

² There are other studies investigating the partisan impact with an application of RDD at other levels of government in the U.S. and in other countries. By example, Ferreira and Gyourko (2009) find no significant party affiliation impact of the mayor on the size of city government, spending, and crime rate. Lee et al. (2004), using an RD design, find that party affiliation has a large impact on a legislator's voting behavior. Pettersson-Lidbom (2008) finds a positive party effect of left-wing government on spending and tax using Swedish local government data.

Y_{st} represents the share of state spending on different budgetary sectors at state s and year t . We use the share of expenditure as our outcome variable to reflect policy choices of governors over the allocation of the state government budget. We consider the following sectors: education, health/hospital, public safety, social welfare and we group the other sectors.³ D_{st} takes value of one if the winner of the election at state s and year t is a Democrat and zero if the winner is a Republican. β_1 is the coefficient of interest which shows the effect of the Democratic governor on the share of state spending in the above sectors. MOV_{st} represents the margin of victory of the elected governor at the most recent election. Elections are held in November and the elected governor takes office the following January. Considering a term length of four years, political affiliation and margin of victory of the elected governor are used for the consecutive four years after taking the office. Margin of victory is the difference between the percentage of the vote cast for the winner and the candidate who finished second. Zero defines the cutoff point of the margin of victory and it takes positive values if the winner is a Democrat and negative values if the winner is a Republican. We estimate the party affiliation impact of the governor on the state spending controlling for the margin of victory, using a second order polynomial: $f(MOV_{st})$. X_{st} represents time-varying controls used in some specifications regarding states' demographic and political characteristics. Demographic characteristics include population, and whether the state is located in the south. Political characteristics include majority of Democrats in the state legislature (House and Senate), re-electability and gender of the

³ Other sectors group the following: Highway, natural resources, park and recreation, interest on general debt and governmental administration. We group them under *Other sectors* for brevity, all have individually non positive coefficients. In Appendix, we also presents results for outcome: total expenditures in the state.

governor.⁴ μ_s and δ_t are state and year fixed effects. Standard errors are clustered at the state level to account for potential serial correlation within a state over time.⁵ Following Lee and Lemieux (2014), we also present different polynomials (1st, 3rd and 4th order polynomials) and local-linear RDD.

III. Data and Descriptive Statistics

IV.A Data

The U.S. Census Bureau provides a data set called *State Government Finances* which presents a comprehensive annual summary of state governments expenditures; data are available from 1960 to 2012. We use variables of state government spending on education, health/hospitals, public safety, social welfare and group all others.⁶

Gubernatorial election data come from two main sources: ICPSR 7757 (1995) files called *Candidate and Constituency Statistics of Elections in the United States* for elections prior to 1990, and the Atlas of U.S. Presidential Elections (2011) for post-1990 elections. We only keep elections where the political party of the elected governor is either a Democrat or Republican.⁷ Variables

⁴ Upper house and lower house majority are two dummies illustrating whether the majority of the state legislators in the senate or house are Democrat or Republican. Values of one indicate that the majority of the state legislators is Democrat and values of zero show that the majority is Republican. Both majority is a dummy variable getting value of one if the majority of both upper house and lower house are Democrats and zero otherwise.

⁵ We keep observations where the margin of victory is between -60 to 60. There are 43 cases where the margin of victory in absolute value is greater than 60 in our sample. We drop them as high values of margin of victory are indicators of non-contested elections.

⁶ Other sectors group the following: Highway, natural resources & park and recreation, interest on general debt and governmental administration.

⁷ There are 40 observations in our sample where the elected governors are neither Democrat nor Republican. We exclude these observations from the sample. There are some cases in which the governor changed mid-term. It can happen in three conditions including: death, resignation, or impeachment of the governor. In these cases, the lieutenant governor or the executive officer of a state who is next in rank to a governor takes the governor's place. We kept observations where the new governor has the same political party as the previous one using the margin

taken from these sources are the political party of the winner and the margin of victory. As described above, the margin of victory is the difference between the percentage of vote cast of the winner and the candidate who finished second. It takes positive values if a Democrat won and negative values otherwise. We also include other characteristics of elections and other level of government. As mentioned above, we control in some specifications, for which party controls the state house and senate, gender of the governor, and re-electability. These data come from Klarner's political data site at Indiana State University.⁸

IV.B Descriptive Statistics

In our sample, there are 2,343 years in office which includes 1,269 years (54%) governed by Democrats. Table 1 shows the number of years governed by either a Republican or Democratic governor and the number of elections where either a Democratic or Republican governor was elected by a sub-interval of years. It shows that Democratic governors are slightly more frequently in power than Republicans over this period.

Table 1

Table 2 shows the number of elected governors by margin of victory (5%, 10% and 15%). There are 1,025 years in office at the margin of victory of 10 percent, 519 of which are governed by Democrats. At the margin of victory of 5 percentage points there are 540 years in office and Democratic governors are in office for 257 of them. Table 2 provides evidence that the number

of victory of the previous governor as they are usually elected on the same ticket. We dropped observations where the new governor is from a different political party than the previous one.

⁸ Data are available at: <http://www.indstate.edu/polisci/klarnerpolitics.htm>

of Democratic and Republican governors are balanced for close elections. We discuss this more formally in the Sensitivity/Validity of RDD section.

Table 3 shows summary statistics regarding the share of spending on education, health/hospitals, public safety, social welfare and other sectors and reports that the average spending is respectively 33, 6, 3, 15 and 41 percent of the state budget.

Table 2

Table 3

IV.C Graphical Evidence

As is customary in RDD analysis, we next turn to graphical evidence. Figure 1 presents the discontinuity at zero percent of the margin of victory. Each dot in these graphs represents the average of the outcome variable at state s and year t , grouped by margin of victory intervals. The vertical axis measures share of state spending and horizontal axis indicates margin of victory. The solid line shows the fitted values. Figure 1 shows a higher share of state government expenditure on education, health/hospitals and public safety when Democratic governors are in office. There is no discontinuity on the share of spending on social welfare and share of spending is lower for the other sectors. The graphs suggest that some money is shifted from the other sectors to the education, health/hospitals, and public safety sectors under Democratic governors. The following section estimates these effects precisely.

Figures 1

IV. Results

V.A Main Results

Table 4 presents results using the RDD specification. The first row shows the party affiliation impact of the governor using a second order polynomial without inclusion of any control variables. Table 4 shows that shares of spending on education and health/hospitals are significantly higher under Democratic governors by 2.6 and 4.3 percent respectively. Public safety spending is also significantly higher by 3.6 percent. Table 4 shows that there is no difference over the budgetary decision on social welfare between Democrats and Republicans, and the share of spending on the other sectors are 2.1 percent lower under Democratic governors.⁹

Other rows of Table 4 investigate the sensitivity of the results to the inclusion of control variables. In a valid RDD, the estimated party affiliation impact of the governor, should not be sensitive to adding control variables.¹⁰ Results are robust to adding different control variables. These results also show that Democratic governors spend a significantly higher share of the budget on education, health/hospitals, and public safety sectors; and less on the other sectors.

Table 4

⁹ In Appendix, we also presents results for outcome level of total expenditures in the state. We investigate whether total government expenditure depend also on party affiliation. Table A.1, A.2 and Figure A.1, shows that party affiliation (Democratic vs Republican) has no impact on total expenditures, only on allocation of funds.

¹⁰ Although there is no need to include any control variables in the main equation, it can be added as a robustness test to check the sensitivity of the results (Lee and Lemieux, 2014).

V.B Sensitivity/ Validity of RDD

We next undertake several sensitivity checks to examine the validity of our RDD estimates. The main idea behind the RDD is that states with margin of victory just below the cutoff are good comparisons to those just above. In other words, states where Democrats barely win are similar to states where Republicans barely win. In a valid RDD, all variables determined prior to the assignment variable are independent of the treatment status (Lee and Lemieux, 2014). In other words, political party of the governor does not have any effect on predetermined demographic and political characteristics of the states and governors. This is investigated in Table 5 by regressing the political party of the governor using specification (1) on the control variables: population, majority of Democrats in the upper and lower houses, whether the governor is female. Results show that party affiliation of the governor has no effect on these variables.

Table 5
Figure 2
Figure 3

Another central assumption for a valid RDD is continuity of the assignment variable around the cutoff point. The two most common ways to verify this assumption are using the histogram of density and the McCrary test (Lee and Lemieux, 2014; McCrary, 2008). The density should be smooth around the cutoff point indicating the balance of the number of Democratic and Republican governors. Random variation around the cutoff point is due to the agents' inability to precisely control the assignment variable near the cutoff point (Lee, 2008). Figures 2 and 3 exhibit

the histogram of density and McCrary test. Both figures verify the balance of the assignment variable around the threshold; there is no unusual jump.¹¹

Following Lee and Lemieux (2014), we explore the sensitivity of the results to using different orders of polynomial. Table 6 present results for 1st, 3rd and 4th degree polynomials. Results using different polynomials are qualitatively the same as Table 4.

Table 7 shows non-parametric estimations for the party effect of the governor on different sectors of the state budget using optimal bandwidth procedures of Calonico, Cattaneo and Titiunik (CCT) (2013), and Imbens and Kalyanaraman (IK) (2012). Results are qualitatively the same as Table 4. The similarity of the estimates across parametric and non-parametric methods is a sign of the unbiased estimate.

Table 6

Table 7

One possible concern regarding the discontinuity of the outcome variable is that the jump in the shares of spending across sectors are a phenomenon independent from the political party of the governor. In other words, it could be the case that states with higher preference for education and health/hospitals are more likely to elect a Democratic governor, even for close elections, which could bias the estimated impact. In order to address this issue, we run a placebo RDD test to investigate the party effect on previous term spending, which is presented in Table 8. Results

¹¹ We also investigate whether campaign spending is different for close elections. It could be that the winning party is the one who spent the most, even for close elections (Caughey and Sekhon, 2011). Using campaign finance data from Jensen and Beyle (2003), we find no evidence for this.

do not show any significant results for outcomes in the term before the election. This imbues confidence that the results are not due to long term trends.

These numerous robustness checks provide confidence in the RD design and that party allegiance of governors does indeed play a role in allocating state spending. It presents evidence that Democratic governors increase state spending on education, health/hospitals, and public safety.

Table 8

V.C Potential Heterogeneity of the Effect

We next investigate heterogeneity of the impact. The Democratic Party has some conservative members whose political views are similar to their Republican counterparts, and they are generally from Southern states. Consequently, we investigate the impact of party affiliation on spending when Southern states are excluded from the sample. Results presented in Table 9 show qualitatively similar results to Table 4. Democratic governors spend more on health/hospitals and education.

Tables 10 and 11 present RD estimates for lame-duck and re-electable governors, respectively. Both lame-duck and re-electable Democratic governors present a higher share of spending on education and public safety, but only re-electable Democrats spend higher on health/hospitals. Higher shares for education and public safety from both re-electable and lame-duck governors highlights the importance of these expenditures for Democrats. Appendix Table A.3 investigate the dynamics of spending within a term. Table A.3 points out that the impact of Democratic governors on health and education spending is stronger in earlier years in the term. We investigate in Appendix Table A.4 the impact of party affiliation on spending allocation when both

governors and legislatures are from the same party. It can be argued that governors are more likely to make a difference when they are matched with legislatures that are of the same party. Our analysis yields similar results.

Table 9
Table 10
Table 11

V. Conclusion

This paper investigates the partisan impact of the governor on budgetary spending. The importance of this paper lies in using RDD and the long period from 1960 to 2012 to investigate partisan differences in budgetary decisions at the state level. Using a Regression Discontinuity Design, we overcome the endogeneity problem due to voters' preferences, state economic, and demographic characteristics. We find that shares of spending on education and health/hospitals are respectively about 2.6 and 4.3 percentage points higher under Democratic governors. This is important because higher spending in education and health/hospitals can have considerable benefits (e.g. Barro, 1991 ; Cellini et al, 2010 ; Martin et al, 2012 ; Gupta et al., 2002). Our results are consistent and robust to using a wide range of controls and RD specifications.

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Table 1. Number of Gubernatorial Elections and Years in Office

| Years in Office | 1960-2012 | 1960-1979 | 1980-2000 | 2001-2012 |
|--------------------------------|-----------|-----------|-----------|-----------|
| All governors | 2343 | 865 | 930 | 548 |
| Democratic governor | 1269 | 514 | 481 | 274 |
| Republican governor | 1074 | 351 | 449 | 274 |
| Percentage Democratic governor | 54 | 59 | 51 | 50 |
| Number of Elections | | | | |
| All elections | 660 | 268 | 247 | 145 |
| Democratic governor elected | 365 | 157 | 136 | 72 |
| Republican governor elected | 295 | 111 | 111 | 73 |

Note: Years in office and number of elections won for Democrats and Republicans by sub-intervals of years.

Sources: ICPSR 7757 (1995) and Atlas of U.S. Presidential Elections (2011).

Table 2. Numbers of Years in Office at Different Values of Margin of Victory

| Years in Office | Margin of Victory 5 % | Margin of Victory 10 % | Margin of Victory 15 % |
|---------------------|--------------------------|---------------------------|---------------------------|
| All governors | 540 | 1025 | 1425 |
| Democratic governor | 257 | 519 | 706 |
| Republican governor | 283 | 506 | 719 |

Note: Margin of victory is the difference between the percentage of vote cast for the winner and the candidate who finished second. Small values of margin of victory are representative of close elections. This table shows the balance of the number of Democratic and Republican governors at different values of margin of victory.

Source: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

Table 3. Summary Statistics

| Variables | Mean | S.d. | Min | Max |
|--------------------------------------|---------|---------|---------|----------|
| Share of spending on Education | 0.3312 | 0.06813 | 0.1135 | 0.5328 |
| Share of spending on Health/Hospital | 0.06370 | 0.0189 | 0.01715 | 0.1273 |
| Share of spending on Public Safety | 0.0303 | 0.01082 | 0.00926 | 0.0731 |
| Share of spending on Social Welfare | 0.1561 | 0.0645 | 0.0262 | 0.3870 |
| Share of spending on Other | 0.4187 | 0.0895 | 0.2156 | 0.7170 |
| Population | 5117.88 | 111.59 | 291 | 38062.78 |

Note: Share of spending on Education, Health/ Hospital, Public Safety, Welfare and Other are the outcome variables. Population is expressed in thousands.

Source: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011), and U.S. Census Bureau.

Table 4: Parametric Regression Discontinuity Estimates for Share of Spending

| | (1) Education | (2) Health/ Hospital | (3) Public Safety | (4) Social Welfare | (5) Other |
|----------------------------------|------------------------|----------------------------|-------------------------|--------------------------|------------------------|
| Democratic Governor (no control) | 0.0264*** (0.00944) | 0.0434* (0.0232) | 0.0360* (0.0187) | -0.0157 (0.0218) | -0.0217** (0.00893) |
| Adding controls: | | | | | |
| + population | 0.0250** (0.0093) | 0.0460** (0.0227) | 0.0373* (0.0189) | -0.0156 (0.0215) | -0.0210** (0.0089) |
| + upper & lower house majority | 0.0225** (0.0090) | 0.0465** (0.0228) | 0.0364* (0.0182) | -0.0157 (0.0215) | -0.0203** (0.0089) |
| + both majority | 0.0237** (0.0095) | 0.0494** (0.0244) | 0.0402** (0.0188) | -0.0176 (0.0225) | -0.0226** (0.0094) |
| + lame duck | 0.0231** (0.00905) | 0.0493* (0.0245) | 0.0399** (0.0189) | -0.0166 (0.0220) | -0.0226** (0.0095) |
| + south | 0.0231** (0.00905) | 0.0493* (0.0245) | 0.0399** (0.0189) | -0.0166 (0.0220) | -0.0226** (0.0095) |
| + female governor | 0.0235** (0.0094) | 0.0488** (0.0241) | 0.0384* (0.0193) | -0.0177 (0.0225) | -0.0233** (0.0096) |

Note: Outcome variables are the log of the share of spending on education, health and hospitals, public safety, social welfare and other sectors. In the adding control part, we add control variables cumulatively. Upper and lower house majority are two dummies illustrating whether the majority of the state legislators in the Senate or House are Democrats or Republicans. Values of one indicate that the majority of the state legislators is Democrat and values of zero show that the majority is Republican. Both majority is a dummy variable with a value of one if the majority of both upper house and lower house are Democrat and zero otherwise. Female governor is a dummy variable taking value of one if the governor is female. Lame duck is a dummy variable taking value of one if the governor is in his/her last term. South is a dummy variable taking value of one if the state is located in the south region. Standard errors are in parentheses and are clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

Table 5: Robustness check: Regression Discontinuity Estimates for Predetermined Characteristics of the States and Governors

| Outcome Variables | (1) 1st degree polynomial | (2) 2nd degree polynomial | (3) 3rd degree polynomial | (4) 4th degree polynomial |
|----------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Population | -202.0 (142.8) | -111.2 (112.9) | -98.59 (121.4) | -149.5 (125.3) |
| Upper house majority | 0.0423 (0.0292) | 0.0241 (0.0301) | 0.0426 (0.0310) | 0.0139 (0.0399) |
| Lower house majority | 0.0071 (0.0359) | -0.0082 (0.0369) | -0.0006 (0.0400) | -0.0197 (0.0416) |
| Both houses majority | 0.0028 (0.0349) | -0.0080 (0.0349) | 0.0051 (0.0357) | -0.0152 (0.0427) |
| Female governor | 0.0397 (0.0246) | 0.0422 (0.0256) | 0.0410 (0.0278) | 0.0410 (0.0292) |

Note: In this table, control variables regarding state characteristics (i.e. demographic and political characteristics of the states) are used as outcome variables. The explanatory variable is gubernatorial party of the governor. Standard errors are in parentheses and are clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

Table 6: RD estimates for spending Using Different Order of Polynomials

| | (1) Education | (2) Health/ Hospital | (3) Public Safety | (4) Social Welfare | (5) Other |
|-----------------------------------|-----------------------|----------------------------|-------------------------|--------------------------|-------------------------|
| 1 st degree polynomial | 0.0230** (0.00860) | 0.0498** (0.0218) | 0.0329 (0.0197) | -0.0148 (0.0236) | -0.0244*** (0.00811) |
| 2 nd degree polynomial | 0.0235** (0.00935) | 0.0488** (0.0241) | 0.0384* (0.0193) | -0.0177 (0.0225) | -0.0233** (0.00961) |
| 3 rd degree polynomial | 0.0295*** (0.0107) | 0.0490* (0.0284) | 0.0276 (0.0199) | -0.00919 (0.0258) | -0.0303** (0.0116) |
| 4 th degree polynomial | 0.0276** (0.0105) | 0.0549* (0.0274) | 0.0381* (0.0223) | -0.00956 (0.0260) | -0.0309** (0.0115) |
| <i>Controls</i> | yes | yes | yes | yes | yes |

Note: Outcome variables are the log of the share of spending on Education, Health/ Hospital, Public Safety, Social Welfare and other sectors. Standard errors are in parentheses and are clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

Table 7: Non-Parametric Regression Discontinuity Estimations for Shares of Spending Using Optimal Bandwidth

| | (1) Education | (2) Health/ Hospital | (3) Public Safety | (4) Social Welfare | (5) Other |
|-----|------------------------------------|------------------------------------|------------------------------------|----------------------------------|-------------------------------------|
| IK | 0.0251** (0.0110) BW= 13.032 | 0.0693** (0.0330) BW= 12.076 | 0.0451** (0.0200) BW= 15.201 | 0.0169 (0.0379) BW= .7520 | -0.0311** (0.0137) BW= 9.437 |
| CCT | 0.0250** (0.0103) BW=14.260 | 0.0876** (0.0411) BW= 9.414 | 0.0403** (0.0203) BW= 14.776 | 0.0229 (0.0295) BW= 11.914 | -0.0295** (0.0110) BW= 17.728 |

Note: Outcome variables are the log of the share of spending on education, health and hospitals, public safety, social welfare and other sectors. There are 1297 and 1367 observations for IK and CCT optimal bandwidth for RD estimates for Education. Number of observations for RD estimated for health and hospitals using bandwidth of IK and CCT are 1181 and 943 respectively. Number of observations for RD estimated for Public Spending using bandwidth of IK and CCT are 1433 and 1396 respectively and 815 and 1222 for Social Welfare and 976 and 1597 for Other. Standard errors are in parentheses and are clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

Table 8: Placebo RD Test: Regression Discontinuity Estimates on Outcome variables at Previous Term

| | (1) Education | (2) Health/ Hospital | (3) Public Safety | (4) Social Welfare | (5) Other |
|-----------------------------------|---------------------|----------------------------|-------------------------|--------------------------|---------------------|
| 1 st degree polynomial | 0.0050 (0.0296) | -0.0256 (0.0543) | -0.0256 (0.0543) | -0.0256 (0.0543) | -0.0256 (0.0543) |
| 2 nd degree polynomial | -0.0024 (0.0326) | -0.0231 (0.0474) | -0.0231 (0.0474) | -0.0231 (0.0474) | -0.0231 (0.0474) |
| 3 rd degree polynomial | -0.0008 (0.0385) | -0.0715 (0.0571) | -0.0715 (0.0571) | -0.0715 (0.0571) | -0.0715 (0.0571) |
| 4 th degree polynomial | -0.0031 (0.0427) | -0.0924 (0.0609) | -0.0924 (0.0609) | -0.0924 (0.0609) | -0.0924 (0.0609) |

Note: Outcome variables are the log of the share of spending on education, health and hospitals, public safety, social welfare, and other sectors at previous term. In all specifications, we used state and year fixed effects. Standard errors are in parentheses and are clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

Table 9: RD Estimates for Spending (Non-Southern states)

| | (1) Education | (2) Health/ Hospital | (3) Public Safety | (4) Social Welfare | (5) Other |
|----------------------|----------------------|----------------------------|-------------------------|--------------------------|-----------------------|
| A. No Controls | | | | | |
| Democratic Governor | 0.0263** (0.0105) | 0.0656* (0.0314) | 0.0401** (0.0192) | -0.0377 (0.0295) | -0.0146 (0.00889) |
| B. With All Controls | | | | | |
| Democratic Governor | 0.0258** (0.0104) | 0.0679* (0.0333) | 0.0398* (0.0199) | -0.0363 (0.0299) | -0.0187* (0.00944) |

Note: Outcome variables are the log of the share of spending on education, health and hospitals, public safety, social welfare, and other sectors. Non-Southern states are the states that are not located in the south region. Standard errors are in parentheses and are clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

Table 10: RD Estimates for Spending (Lame-duck Governors)

| | (1) Education | (2) Health/ Hospital | (3) Public Safety | (4) Social Welfare | (5) Other |
|----------------------|----------------------|----------------------------|-------------------------|--------------------------|---------------------|
| A. No Controls | | | | | |
| Democratic governor | 0.0346** (0.0167) | -0.0064 (0.0304) | 0.1010*** (0.0369) | -0.0430 (0.0456) | -0.0261 (0.0208) |
| B. With All Controls | | | | | |
| Democratic governor | 0.0368** (0.0173) | 0.0114 (0.0317) | 0.0844** (0.0395) | -0.0330 (0.0447) | -0.0294 (0.0199) |

Note: Outcome variables are the log of the share of spending on education, health and hospitals, public safety, social welfare, and other sectors. Lame-duck governors are in their last term and are not eligible for re-election. Standard errors are in parentheses and are clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

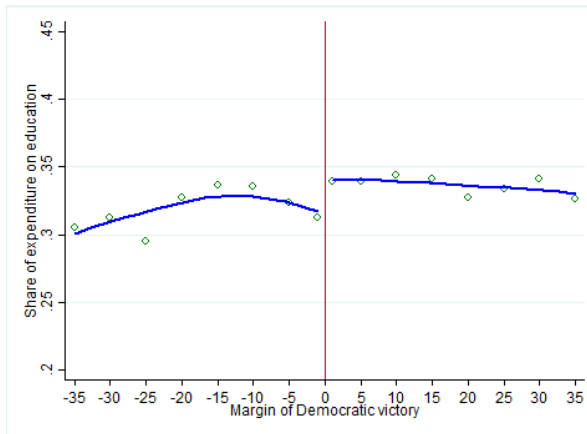
Table 11: RD Estimates for Spending (Re-electable Governors)

| | (1) Education | (2) Health/ Hospital | (3) Public Safety | (4) Social Welfare | (5) Other |
|---------------------|----------------------|----------------------------|-------------------------|--------------------------|-------------------------|
| A. No Controls | | | | | |
| Democratic governor | 0.0241** (0.0107) | 0.0569** (0.0240) | 0.0331* (0.0172) | 0.0047 (0.0251) | -0.0259*** (0.00958) |
| B. With Controls | | | | | |
| Democratic governor | 0.0222** (0.0099) | 0.0603** (0.0251) | 0.0339** (0.0172) | -0.00939 (0.0268) | -0.0267*** (0.0099) |

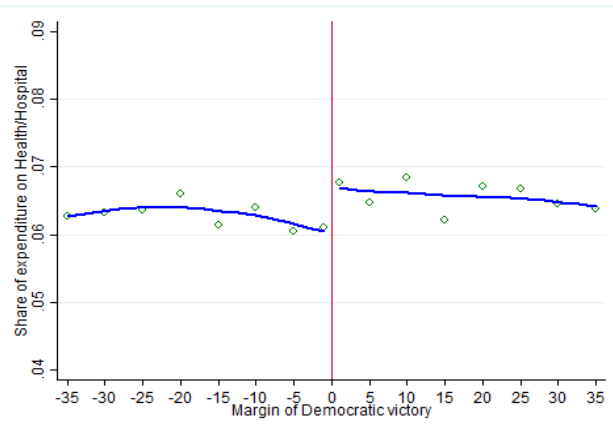
Note: Outcome variables are the log of the share of spending on education, health and hospitals, public safety, social welfare, and other sectors. Re-electable governors are not in their last term and are eligible for re-election. Standard errors are in parentheses and are clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

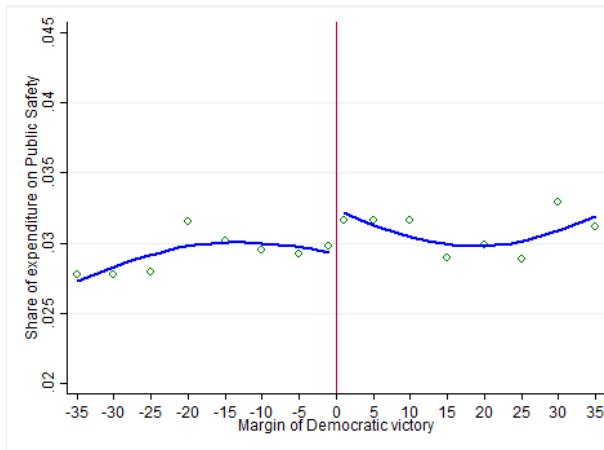
A – Education



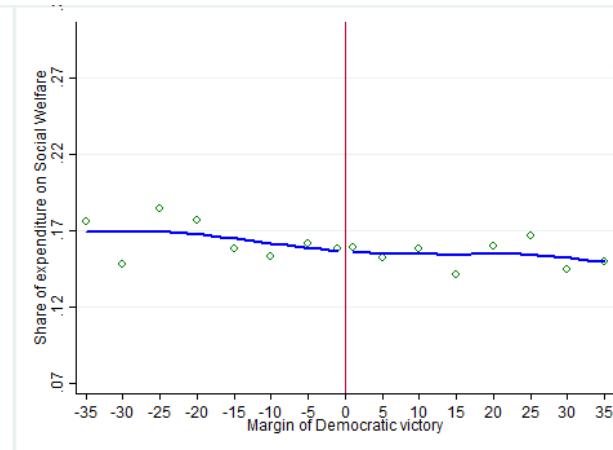
B- Health/Hospital



C- Public Safety



D – Social Welfare



E- Others

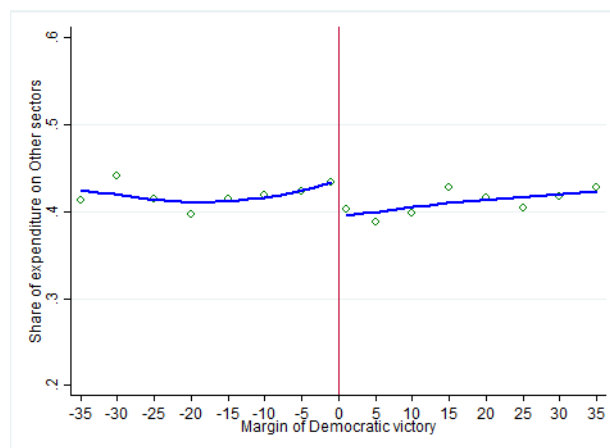


Figure 1: Margin of Victory and share of Spending on Education (A-top left), Health/Hospital (B-top right), share of Spending on Public Safety (C-middle left), share of Spending on Social Safety (D-middle left) and share of Spending on Other (E-bottom)

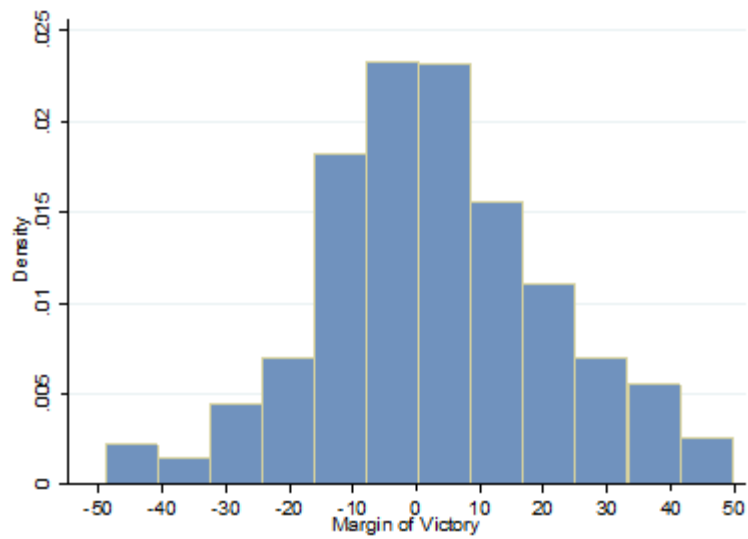


Figure 2: Histogram of Margin of Victory

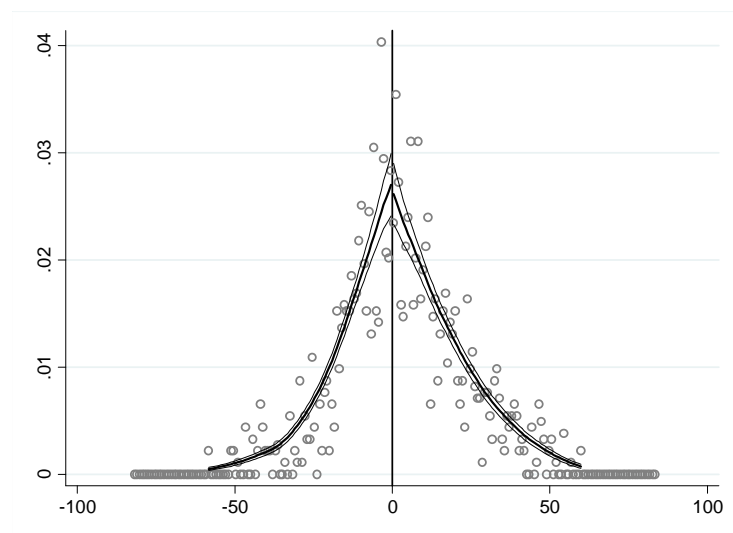


Figure 3: McCrory Density of Margin of Victory

Appendix

Table A.1: RD Estimates for Total Spending

| | (1) | (2) | (3) | (4) |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 1st degree polynomial | 2nd degree polynomial | 3rd degree polynomial | 4th degree polynomial |
| Democratic Governor (no control) | -0.0234 (0.0133) | -0.0365 (0.0229) | -0.0109 (0.0245) | 0.0109 (0.0289) |
| Adding controls: | | | | |
| + population | -0.0134 (0.0124) | -0.0327 (0.0208) | -0.00777 (0.0230) | 0.00875 (0.0255) |
| + upper & lower house majority | -0.0122 (0.0128) | -0.0327 (0.0214) | -0.00879 (0.0235) | 0.00777 (0.0256) |
| + both majority | -0.0126 (0.0132) | -0.0342 (0.0225) | -0.00818 (0.0250) | 0.00774 (0.0275) |
| + lame duck | -0.0123 (0.0129) | -0.0341 (0.0223) | -0.00860 (0.0251) | 0.00755 (0.0275) |
| + south | -0.0123 (0.0129) | -0.0341 (0.0223) | -0.00860 (0.0251) | 0.00755 (0.0275) |
| + female governor | -0.0123 (0.0128) | -0.0341 (0.0222) | -0.00861 (0.0252) | 0.00753 (0.0275) |

Note: Outcome variables are the log of total spending. Standard errors are in parentheses and are clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

Table A.2: RD Estimates for Total Spending

| | (1) | (2) | (3) |
|---------------------|--------------|-----------|--------------|
| | Non-southern | Lame-duck | Re-electable |
| | | Governors | Governors |
| A. No Controls | | | |
| Democratic Governor | -0.0341 | -0.0466 | -0.0606 |
| | (0.0222) | (0.0326) | (0.0363) |
| B. With Controls | | | |
| Democratic Governor | -0.0466 | -0.0606 | -0.0268 |
| | (0.0326) | (0.0363) | (0.0246) |

Note: Outcome variables are the log of total spending. Non-southern states are the states that are not located in the south region. Lame-duck governors are in their last term and are not eligible for re-election. Re-electable governors are not in their last term and are eligible for re-election. Standard errors are in parentheses and are clustered at the state level. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

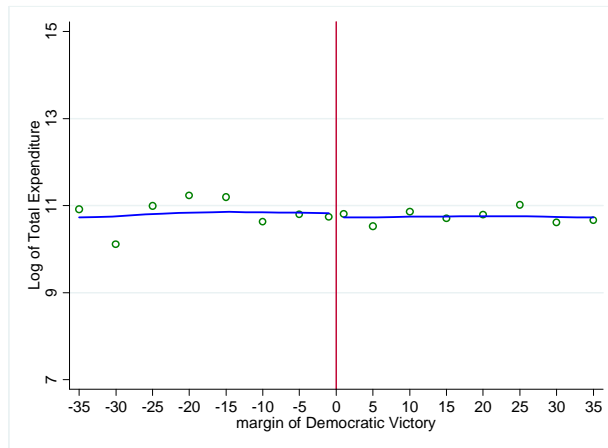


Figure A.1: Margin of Victory and log of Total Expenditure in a state.

Table A.3: RD estimates for Dynamics of Spending within a Term

| | (1) Education | (2) Health/ Hospital | (3) Public Safety | (4) Social Welfare | (5) Other |
|--|----------------------|----------------------------|-------------------------|--------------------------|-----------------------|
| Democratic Governor 1 st & 2 nd year in power | 0.0378** (0.0176) | 0.0601* (0.0364) | 0.0237 (0.0275) | -0.000386 (0.0403) | -0.0395** (0.0170) |
| Democratic Governor 3 rd & 4 th year in power | 0.00314 (0.00834) | 0.00397 (0.0134) | 0.00881 (0.0129) | -0.0165 (0.0148) | 0.000374 (0.00696) |

Note: Outcome variables are the log of the share of spending on education, health and hospitals, public safety, social welfare, and other sectors. This table shows the dynamics of spending within a term. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.

Table A.4: RD estimates for Non-divided Governments (Governors, state house and state legislators same party)

| | (1) Education | (2) Health/ Hospital | (3) Public Safety | (4) Social Welfare | (5) Other |
|---------------------|--------------------|----------------------------|-------------------------|--------------------------|---------------------|
| Democratic Governor | 0.0526** 0.0203 | 0.0311 0.0445 | 0.0000512 0.0284 | 0.00939 0.0361 | -0.0482** 0.0196 |

Note: Outcome variables are the log of the share of spending on education, health and hospitals, public safety, social welfare, and other sectors. This table shows the estimates for the non-divided governments when governor is democrat and majority of the state legislators in senate and house are democrats too. * $p < 0.10$, ** $p < 0.05$, *** $p < .01$

Sources: ICPSR 7757 (1995), Atlas of U.S. Presidential Elections (2011) and U.S. Census Bureau.