

When Mayors Matter: Estimating the Impact of Mayoral Partisanship on City Policy*

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September 16th, 2009

Abstract

U.S. cities are limited in their ability to set policy. Can these constraints mute the impact of mayors' partisanship on policy outcomes? We hypothesize that mayoral discretion – and thus partisanship's influence – will be more pronounced in policy areas where there is the less shared authority between local, state, and federal governments. To test this hypothesis, we create a novel data set combining U.S. mayoral election returns from 1990 to 2006 with urban fiscal data. Using regression discontinuity design, we find that cities that elect a Democratic mayor spend less on public safety, a policy area where local discretion is high, than otherwise similar cities that elect a Republican or Independent. We find no differences on tax policy, social policy, and other areas that are characterized by significant overlapping authority. These results have important implications for political accountability: mayors may not be able to influence the full range of policies that are nominally local responsibilities.

* Previous versions of this research were presented at the 2009 Annual Meeting of the American Political Science Association (September 4, Toronto, ON), the 2009 Annual Meeting of the Midwest Political Science Association (April 4, Chicago, IL) and the 2009 Summer Meeting of the Society for Political Methodology (July 25, New Haven, CT). The authors thank Katherine McCabe for tireless research assistance and Chris Berry, Devin Caughey, Olof Folke, Zoltan Hajnal, Bryan Jones, Gabriel Lenz, Marc Meredith, Justin Phillips, and Carol Weissert for comments or assistance.

I. Introduction

America's large cities differ widely, but a contemporary observer could sum up their shared fiscal situations in one word: austerity. The current economic recession is taking a heavy toll on already stretched city budgets, leaving many cities struggling to meet their service obligations in the wake of sharply declining revenues. City revenues that derive largely from property taxes are tumbling with the collapse of the housing market and waves of foreclosures (Pagano and Hoene 2008, Hoene and Pagano 2009). State transfers to cities are plummeting as state governments deal with their own revenue shortfalls (Eaton 2009). At the same time, demand for social services is growing as unemployment numbers rise (Hubert 2008). Local officials face a great deal of pressure to balance their budgets, continue to provide high-quality services, and avoid layoffs of public employees.

In this paper, we investigate whether mayors' political preferences are likely to shape their responses to these (and other) fiscal pressures. Do Democratic mayors differ in their fiscal policies from Republicans or Independents? Does partisanship lead cities to adopt significantly different fiscal policies?

Political science research is far from clear on the matter, offering two opposing perspectives. Scholarship on U.S. national politics has demonstrated the dominance of partisan considerations in shaping policy outcomes. This body of research has shown repeatedly that the two major parties have distinct electoral coalitions and governing philosophies that lead to quite different policy outcomes, especially on issues of taxing and spending (Aldrich 1995, Gerring 1998, Poole and Rosenthal 1997, Hacker and

Pierson 2005, McCarty et al. 2006, Bartels 2008). Indeed, in national politics, partisanship appears to be a kind of theoretical “skeleton key” that is commonly invoked to explain both voter decision-making and elite policy choices (Green et al. 2002, Goren 2005, McCarty et al. 2006). Moreover, party polarization, at least among elites, has grown in recent years (Fiorina et al. 2006, McCarty et al. 2006).

By contrast, scholars of urban politics have consistently emphasized the economic, political, and legal constraints facing local policy makers (Tiebout 1956, Peterson 1981, Peterson 1995, Nivola 2002, Self 2003, Rae 2003, Leigh 2007). Indeed, given the overwhelming emphasis on constraints in past studies of urban politics, it is unclear what policy influence mayors or other local political officials can have even under normal conditions. By extension, it is also unclear that city administrations of one political party are able to govern in ways that differ from mayors of other political parties. The old adage that there is no Republican or Democratic way to collect trash, attributed to New York’s Mayor LaGuardia, appears quite compatible with the reigning theories of urban politics.

We thus have two theoretical approaches, each dominant within its domain, which make very different predictions about the impact of partisanship on local policy. Given the strength of partisanship in national politics, and given that the same two major parties compete in many local elections, we might expect partisan control of city government to strongly influence local policy. Democratic mayors might pursue increased taxes and expanded services, and Republic mayors might pursue tax cuts and service reductions, just as their national counterparts do. Alternately, if the constraints on urban policymakers are binding, the impact of mayoral partisanship might prove negligible, as

cities respond based on fiscal and economic conditions rather than political ones. This paper tests these competing possibilities. In doing so, it also tests the extent to which a prominent theoretical explanation of national-level policymaking is applicable to local policymaking.

Understanding the influence of partisanship on local policy outcomes also provides insights about the potential for democratic accountability in urban elections. Researchers commonly conclude that partisanship is the strongest available signal of a candidate's political preferences and her likely policy decisions once elected (e.g. APSA 1950, Popkin 1994, Schaffner et al. 2001, Schleicher 2007). If local partisanship cannot influence policy outcomes, voters will have a hard time linking candidates to subsequent policy decisions. It would also suggest that mayors should not be held accountable for at least some of the policy outcomes in their cities, as those policy outcomes are beyond their control.

We proceed as follows. Section II integrates theories of political partisanship and theories of urban political constraint. Past research has pointed to both formal constraints, such as legal or constitutional restrictions on what local governments can and cannot do, and informal constraints, such as the political and economic environment in which cities operate. While cities may indeed be constrained, these constraints are neither insurmountable nor universal; empirically, we do observe substantial variation across cities in at least some policy decisions. No one confused New York Mayor Rudolph Giuliani's approach to criminal justice with that of his predecessor David Dinkins. As such, we expect the constraints cities face to vary across policy areas. To the extent that cities are constrained by the division of responsibilities in the U.S. federal

system, we might expect a mayor's partisanship to more strongly influence policy in areas where there is less shared authority between federal, state, and local governments. This hypothesis suggests that local partisanship will be more influential on policing and public safety, for example, than on housing, transportation, or welfare spending.

Empirically, we test this hypothesis using a novel dataset of 134 mayoral elections in large U.S. cities from 1990 to 2006. To our knowledge, no publicly available data set provides comprehensive information about big-city elections over this period. Our data set includes both cities with partisan elections as well as non-partisan elections where the two leading candidates were known to be from different parties. Together with data from the U.S. Census of Governments and the Annual Survey of Governments databases, these new data allow us to estimate the influence of a mayor's partisanship on a wide range of tax and spending policies, as detailed in Section III. To confront concerns about the potential endogeneity of partisanship, we use regression discontinuity design (RDD), an increasingly common statistical technique that can recover the causal impact of partisanship by comparing outcomes in cities that witness a narrow Democratic victory to outcomes in cities where there was a narrow Democratic loss (Lee et al. 2004, Ferreira and Gyourko 2009, Imbens and Lemieux 2007, Leigh 2007, Trounstein 2009).

Consistent with the hypothesis that constraints vary across policy areas, Section IV finds that mayoral partisanship influences spending in some policy areas but not others. Those cities that elect a Democratic mayor by a slim margin can expect a drop in their police spending of approximately 2 percentage points in the following three years and a drop in their fire spending of approximately 1 percentage point over the same period. These are the major budget areas with the least constraint imposed by state and

federal authorities. Most local spending on public safety derives from own-source revenues, and that money is spent with comparatively little direction from state and federal mandates. The paper's empirical results prove highly robust: they do not appear in the placebo tests described below, but they do appear irrespective of the models' independent variables or the size of the window around the discontinuity. However, other spending areas and city revenue streams, over which cities have only limited discretion, show no strong partisan influence.

These findings help us understand the constraints that bind city policy. They illustrate that those constraints allow for mayoral influence in certain policy areas while severely limiting the impact of partisanship and partisan polarization on other local policy outcomes. Contemporary work on national politics would suggest that partisanship is a powerful influence in American politics. The results presented here suggest otherwise, at least for local governments. We elaborate these and other implications in Section V.

II. Theorizing Partisanship's Local Impacts

This section builds upon the large literatures on partisanship and urban politics to generate hypotheses about the impact of local government partisanship on policy outcomes. Developed to explain political processes at two different levels of government, these literatures generate contradictory expectations about the impact of local partisanship. This section seeks to integrate those literatures to develop hypotheses about when partisanship is likely to influence local policy outcomes. It suggests that we should expect the degree of constraint on local partisan officials to systematically vary by policy area.

Partisanship and Local Government

We begin with the literature on partisanship at the national level. The strong and robust conclusion of this research is that partisan differences are key factors in explaining the policy preferences of citizens and decision makers. At the level of individual citizens, partisan identification is a more stable predictor of vote choice than demographic characteristics or ideology (Campbell et al. 1960, Green et al. 2002, Goren 2005), and is thought to be a central heuristic through which voters make decisions (Popkin 1994, Schaffner et al. 2001). The partisanship of elected officials also proves an unparalleled predictor of changes in public policy at the federal level (Poole and Rosenthal 1997, Krehbiel 1998, Clinton et al. 2004, Hacker and Pierson 2005, McCarty et al. 2006, Bartels 2008). The fact that party labels are consistently associated with policy positions allows voters to differentiate candidates based on their likely actions once in office.

Yet despite the sustained attention to partisan identification, there have been few studies of its influence across the levels of the U.S. federal system (but see Niemi et al. 1987, Schleicher 2007, Ferriera and Gyourko 2009). Green et al. (2002, 44) argue that partisan identification is a social identity, and that American voters do not have separate partisan identifications at the local, state, and national levels. But does that mean that national partisan cleavages are necessarily the focus of local inter-party competition? If so, we should expect party labels in local politics to function largely as they do in national politics. Democratic mayoral candidates should be associated with increased social spending and higher, more progressive taxation. Republicans should be associated with increased spending on criminal justice, and lower, more regressive taxation.

Alternately, it is plausible that national partisan labels do not influence local elections (see also Leigh 2007), which may instead be decided using alternate cues such as a candidate's race, endorsements or personal characteristics. Certainly, the presence of Republican mayors in overwhelmingly Democratic cities provides a hint that partisanship may function differently at the local level. But exactly how partisanship influences local elections and local governance is not well understood.

Ferreira and Gyourko (2009) provide a valuable starting place in answering these questions. Their research analyzes data for 413 cities from 1950 to 2005 to estimate the impact of partisanship on local public finances. It finds no strong relationships, and attributes the null findings to the relative homogeneity of preferences within a given city. Their research draws on Tiebout (1956) by arguing that individuals sort into localities based on their preferences, meaning that there is insufficient preference diversity to generate party competition on policy grounds. The resulting prediction: mayoral partisanship should have consistently null effects across all areas of city taxes and revenues.

Cities' Constraints

Building upon Ferreira and Gyourko (2009), we develop a different hypothesis about fiscal policy outcomes by drawing on research on urban constraints. The U.S. federal system is characterized by high degrees of overlapping authority between the federal, state and local governments (Grodzins 2000). Unlike the U.S. states, American cities have no independent constitutional status; they are creatures of the states and derive

their powers and authority wholly from state constitutions and statutes (Briffault 1990).¹ Beyond these structural constraints, there are a great many areas in which authority over policy is shared between levels of government (Peterson 1995, Nivola 2002, Berman 2003, Craw 2006). Examples include direct federal and state mandates on local governments (as in the areas of national security and education); block grants (for policies such as housing, community development, and welfare); and federal-state-local partnerships (as in surface transportation policy). In addition, there are numerous state-level statutory or constitutional constraints on specific local policies, particularly in the area of taxation (Ladd and Yinger 1989, Chapter 6).² Apart from these legal and institutional constraints, cities also face well-known fiscal limitations stemming from economic competition (Peterson 1981, Ladd and Yinger 1989, Rae 2003, Bailey and Rom 2004). Given this litany of constraints, it is unsurprising that past work commonly concludes that political factors have little influence on local policy outputs (Peterson 1981, Morgan and Watson 1995, Ruhil 2003, Craw 2006; but see Wolman et al. 1996).³

By contrast, some areas of public policy are viewed more as the exclusive domain of local governments. For example, in the area of public safety, cities largely finance their public safety programs out of own-source, general fund revenues. They also

¹ Legal scholarship differentiates between two types of state-local legal relationships. In *home rule* states, cities and other local governments have relatively high degrees of autonomy in specific areas such as their structural, functional, fiscal and personnel powers (NLC 2009a), whereas in *Dillon's rule* states, local governments are limited to the functions and powers explicitly granted to them by the state (NLC 2009b). Dillon's rule is named after Judge John Forest Dillon, who as Chief Justice of the Iowa Supreme Court authored a seminal opinion (in 1868) that established the principal that was subsequently adopted by numerous state courts as their model for adjudicating disputes over the extent of local authority.

² For more on the limitations on local taxation, see especially Fisher (2003), which details the narrowing of fiscal differences across states and localities in the last decades of the 20th century. On the fiscal impact of the many tax and expenditure limitations—including California's Proposition 13, Michigan's Headlee Amendment, and Massachusetts' Proposition 2 ½—see Mullins (2003) and Wallin (2004).

³ ³

In fact, Leigh (2007) concludes that partisanship is not a major influence on state-level policy outputs.

make consequential decisions about how much to spend and how to deploy their resources across staffing, equipment, investigations and facilities, etc., largely outside the control of state or federal mandates (Peterson 1981). For the cities in our data set, state and federal inter-governmental revenues account for 78% of cities' total public welfare spending, 69% of their total spending on housing, 29% of their total spending on roads, and 24% of their total spending on health and hospitals. But the comparable shares for policing and fire are so small that they are not reported. And even if every dollar of miscellaneous intergovernmental revenue went to fire and policing, the comparable share would be no larger than 23%. In all likelihood, the true figure is considerably smaller. These spending areas retain far more local autonomy than most others.

Building on this literature on federal-state-local relations, we contend that local discretion will be higher in policy areas where there is the less shared authority between local, state and federal governments. This leads us to hypothesize that *the influence of partisanship on local policy will be stronger in areas like public safety where overlapping authority is less, and will be weaker in areas like taxation and social policy where overlapping authority is greater*. We will test this hypothesis against two alternatives. Drawing from studies at the national level, the first alternative contends that partisanship is an important determinant of outcomes in most local policy areas. The second, effectively a null hypothesis, holds that partisanship is not an important determinant of any local outcomes, and is consistent with the perspective offered by Tiebout (1956) and Ferreira and Gyourko (2009).

III. Methods and Data

This section outlines our empirical strategy and describes the data sets we employ. We begin with the assumption that in the absence of severe constraints, a mayor's partisanship is likely to be a strong determinant of her fiscal policy preferences.⁴ Yet we expect the presence of the constraints identified above to moderate this relationship. This conceptual approach implies a simple statistical model in which the mayor's partisanship affects patterns of revenues and expenditures, and constraints on a city's policy authority dampen or enhance this relationship.

However, mayoral partisanship is not randomly assigned to cities, introducing the possibility of significant endogeneity. Cities that tend to elect Democratic administrations are likely to be quite different from cities that typically elect Republican administrations in both observable and unobservable ways. In a statistical model, we can (at least in theory) control for the observable differences with the inclusion of covariates. But by definition, we cannot control for the unobserved differences, leading to the possibility that these factors will bias our estimates.

We might expect the greatest differences in mayors' policy preferences, and hence the greatest potential for policy change, just after a partisan transition when a Democratic administration replaces a Republican administration or vice versa. But empirically, such changes are rare: among the 134 elections studied here, we observe changes of party in just 15. It is common for one party to dominate local elections over long periods in a given city. And even so, party changes are not assigned randomly, and could be correlated with economic conditions, incumbency, or other confounding factors.

⁴ We focus on the partisanship of a city's mayor, since mayors (especially in large cities) tend to have significant agenda control and budgetary authority.

Our empirical approach seeks to isolate the factors that influence the degree of discretion over policy while addressing the complicating factors of endogeneity and data availability. Specifically, we employ a regression discontinuity design (RDD), an increasingly common approach to making causal inferences from observational data (Hahn et al. 2001, Imbens and Lemieux 2007, Leigh 2007, Gerber et al. 2008, Meredith 2009, Folke 2009, Mullainathan and Washington 2009, Trounstein 2009, and Warren 2009). One recent review finds that RDD approaches consistently recover experimental benchmarks (Cook et al. 2005), a strong assertion of their methodological value. Minimally, RDD should provide a lower bound on the impact of partisanship since candidates who narrowly win are likely to moderate their policy proposals in anticipation of the next election. Perhaps for that reason, this study is among the first to detect policy impacts using this method (see also Leigh 2007 and Warren 2009).

This paper follows Lee et al. (2004) by treating election results as continuous variables measuring the city's propensity to elect a Democrat. However, as Lee et al. (2004) point out, there is a critical discontinuity in election outcomes: Democrats who win 49.9% of the two-candidate vote lose the election, while Democrats that receive 50.1% of the two-candidate vote win. This paper uses close elections like these to estimate the influence of a narrow Democratic victory on subsequent policy outcomes. In other words, the RDD design allows us to compare cities that are quite similar in their probability of electing a Democrat but that differ in the actual partisanship of their mayor. By making the assumption that policy outputs are a smooth function of the propensity to elect a Democrat, we can exploit this discontinuity to recover the local average treatment effect, where the "treatment" is the election of a Democratic mayor. Using a rich set of

other independent variables, we can also rule out the possibility that our results are driven by strategic behavior or election fraud in elections near the discontinuity (see also Caughey 2009). Our RDD design allows us to test our hypotheses about how the presence of various constraints moderates the relationship between partisanship and outcomes.

Data Compilation

Testing our hypotheses requires a data set that combines information on local government policy outputs, mayoral election returns, policy characteristics, and features of the local political and policy environment. City elections (and mayoral elections in particular) occur at different times under different rules, and no comprehensive record of their results currently exists. Some cities elect mayors every two years, some do so every four years, and some forego direct mayoral elections entirely. Testing for the influence of mayoral partisanship is harder still, since the significant majority of U.S. cities use non-partisan elections. We thus collected data on a city-by-city basis, using information from election commissions, archived newspaper articles, official city websites, the International County/City Management Association, the National Conference of State Legislatures, and other sources. The resulting data set is, to our knowledge, the most comprehensive data set on direct mayoral elections for large U.S. cities from 1990 onward.

The target universe is the 130 largest U.S. cities as identified by the U.S. Census Bureau in 2007. The 130th city is Brownsville, Texas, with a 2007 population of just over 170,000 people. For each large-city mayoral election beginning in 1990, we sought

information on when the election occurred, the votes received by the top four candidates, the candidates' party affiliations, and their racial and ethnic backgrounds. We also recorded whether the city's elections were formally partisan or non-partisan, whether the winner was an incumbent, and whether city hall changed parties after the election. Since some non-partisan elections allow candidates to indicate their party affiliation on the ballot, we recorded this information as well. While only 14% of the elections in our sample took place in cities with formally partisan elections, 30% took place in cities where party labels can appear on the ballot. Where cities elect mayors through a run-off system, we included the results of the final election. Of the target universe, we recovered at least some information for 522 mayoral elections taking place in 120 cities.

However, not all of these elections are equally useful in estimating the impact of partisan composition on local fiscal policy. In 302 cases, we were not able to obtain the party affiliation of the second-place candidate. In many of these cases, such information simply does not exist, as many candidates for local office do not declare their partisanship. This leaves us with 220 elections contested in 81 cities. Of this sample, we must also drop cases where both candidates were from the same party, leaving us with 134 elections from 59 cities. Our quantity of interest—the impact of electing a Democrat over a candidate from another party—is identified only for this sub-sample.

To evaluate the representativeness of this limited sample, we compare it to the original universe of elections using logistic regression. The cities in our sample have significantly larger populations, lower population growth, higher median household incomes, faster median household income growth, larger poor populations, and fewer immigrants. Not surprisingly, the included cities are also more likely to have partisan

elections. The black populations of cities in the sample are not notably different from the larger population of big cities, and conditional on the factors above, included cities are no more likely to be in a particular region of the country. Of the races that made it into our sample, 108 were cases where a Democrat ran against a Republican, while the remaining 26 saw Democrats running against independents or minor-party candidates.

For each election in our sample, we calculate the percentage of the votes for the top two candidates that was received by the Democrat. On average, the Democrat won 57 percent of the vote. However, there are 44 cases where the Democrat lost and another 18 cases where the Democrat won with less than 55% of the vote.⁵ Table 1 provides descriptive statistics.

Table 1 Here

Measuring Local Policy

Our measures of local fiscal policy are drawn from the U.S. Census Bureau's Annual Survey of Governments and its Census of Governments, which provide detailed revenue, expenditure and employment data for medium and large-sized U.S. local governments from 1970 to 2006. By merging these data with the mayoral election data described above, we are able to observe a wide range of policies before and after the mayoral election in question.

⁵ It is important to note that the RDD approach assumes there are no systematic differences between observations on each side of the discontinuity. In our applications, this means that cities that narrowly elect Democrats are assumed to be virtually identical to those that narrowly defeat Democrats. If some cities are systematically more likely to produce close Democratic victories or losses, perhaps because of election fraud or strategic campaigning, this assumption would be wrong. In the empirical section, we consider the sensitivity of the results to violations of this and other key assumptions.

On the expenditure side, we focus on direct expenditures in key spending categories, including policing, fire, housing, healthcare, roads, parks, natural resources, libraries, sanitation, administration, and code enforcement. For each category and each year, we compute the share of the total direct expenditures devoted to that policy area. Like past researchers, we use such spending shares to measure changing policy priorities (e.g. Alesina et al. 1999, Jacoby and Schneider 2001; Hajnal and Trounstein 2005).⁶

We also consider a variety of measures of local revenue policies, including total taxes per capita, the share of local taxes that come from the sales tax, the share of local taxes that come from the property tax, and local taxes as a share of total local revenues. Together, these measures allow us to observe changes in the source and size of revenue streams. For instance, it could be that Democratic mayors try to raise revenues without raising visible taxes, and so resort to increases in users' fees. By analyzing the share of local revenues that come from taxes, we will detect such shifts. Coarsely, we will also be able to identify shifts in more progressive revenues sources (such as property taxes) as well as more regressive revenues sources (such as sales taxes).

Finally, we consider a number of policy outcomes that deal less with how cities allocate their budget dollars across policy areas, and more with how dollars are allocated to spending items within a given policy area. Specifically, we consider changes in the number of police department employees, the share of public employees who are in the police department, and changes in police employee pay as a share of total payrolls. We include these additional outcomes to investigate the possibility that even if Democratic

⁶ We exclude capital and construction expenditures, as such expenditures commonly reflect decisions made in previous years. We would not, for example, want to consider an increased construction budget under one mayor to be the result of her election if such increases were actually budgeted by her predecessor. Studying direct current expenditures allows us to capture that portion of each city's budget that is most easily shaped by the current mayor.

and Republican mayors are constrained in the amounts they spend on various policy areas, they may still differ in their approaches to public employment and personnel policies.

Table 2 presents summary statistics for the dependent variables, with spending in the top section, revenues in the middle section, and employment in the bottom section. As the table makes clear, policing receives more direct current expenditures on average than any other spending category, followed by fire protection.

Table 2 Here

IV. Results

In 1999, voters in Fort Wayne, Indiana elected a Democratic mayor by the narrowest of margins, while their counterparts in Raleigh, North Carolina chose the Republican. The two cities were nearly identical in their baseline support for the Democrat—but only one wound up with a Democratic mayor in office. In this section, we explore whether narrow victories like these result in systematic differences in urban fiscal policy. This section first establishes our baseline estimates of the relationship between local partisanship and city fiscal policy by focusing on the area of spending where we would expect the relationship to be the strongest: public safety. It then tests our core hypothesis by comparing this estimated relationship across several policy areas that vary in their degree of overlapping authority. It also provides robustness tests for the key findings, showing that they are not driven by missing data, outliers, observations far from the discontinuity, or many potentially omitted variables.

Modeling Spending on Public Safety

Cities vary in their functional responsibilities, a fact which poses significant challenges for cross-city comparisons (Peterson 1981). In part, we confront this concern by focusing on core city functions such as policing, fire protection, libraries, parks, and roads, which are common across most large cities. We also specify the dependent variables in our analyses as *changes* in spending, revenue and employment outcomes in the three years after a mayoral election, a choice which means that our analyses will not be confounded by baseline differences in cities' functional responsibilities. For all analyses, the baseline year is the fiscal year during which the election took place. The changes are continuous variables, and can reasonably be modeled using Ordinary Least Squares (OLS).

When considering regression discontinuities, the critical independent variables are the indicator for the discontinuity—in this case, whether the Democrat won the election—and the underlying continuous measure of support for the Democratic candidate. This continuous measure is known in RDD research as the “forcing” variable; it is operationalized as the winner's share of the votes received by the top two candidates. Ideally, we would focus only on observations that are very close to the discontinuity, reducing model dependence (Imbens and Lemieux 2007, 616). But given the relatively small sample size, we need to rely to some extent on observations that are more distant from the discontinuity. Our models thus need to capture the underlying functional relationship between spending and partisanship across a wide range of election outcomes. We therefore include not only a measure of the percent supporting the Democrat, but also squared and cubed measures of Democratic support to account for this potentially complex relationship.⁷ This approach reduces the chance that our results stem from mis-

⁷ The results are robust to the inclusion of quadratic terms and higher-order terms as well.

specifying the relationship between the percent Democratic and policy choices. Our main results are robust to the inclusion and exclusion of these additional terms.

Table 3 presents an initial model of the change in the share of spending devoted to police. In part, we begin with police spending because it is the largest spending category for the cities in our sample, accounting for 10% of all direct current expenditures on average. It is also a theoretically informative starting place, since it is a policy area characterized by relatively low levels of overlapping authority. If partisanship can influence any spending area, it should influence policing. The model uses 122 fully observed data points, and clusters the standard errors accordingly (Wooldridge 2003). In 25 of these cases, the opponent is an independent rather than a Republican, so we condition on an indicator variable for those cases. City fiscal years most commonly end in June, but to account for heterogeneity across cities, we condition on an additional indicator variable for the 25% of cities in our sample whose fiscal years end in December. In our initial modeling, we also condition on the city's 1990 population, its percent black, its logged median household income, and its baseline intergovernmental revenue per capita. Table 3 reports OLS estimates for this baseline model of police spending.

Table 3 Here

The critical finding from Table 3 is the coefficient of -0.022 (SE=0.007) for the variable indicating a Democratic victory. All else equal, a city where the Democrat just wins the mayoralty should expect its spending on police to drop by 2.2 percentage points three fiscal years later. This result is statistically significant, and is substantively large as well: it reflects a spending shift of 1.1 standard deviations. Figure 1 illustrates the

regression discontinuity design and reports our empirical estimates graphically. The black dots represent the observed change in police spending (on the y axis) as a function of the percentage of the vote received by the Democrat (on the x axis). The open circles show our OLS model's prediction for each city election and illustrate the magnitude of the estimated discontinuity. The figure makes it clear that there is a sharp discontinuity—a decline in police spending—when Democratic mayors narrowly win.⁸

Figure 1 Here

Table 4 reports comparable results for the change in the share of spending devoted to fire protection, the other major category of public safety. It, too, consumes a significant share of local revenues, and is relatively free of federal and state mandates. These results demonstrate a similar effect of a narrow Democratic victory. In cities where a Democrat barely wins, we can expect a 1.0 percentage point drop in spending on fire protection (SE=0.04).

Table 4 Here

To investigate the consequences of lost observations due to listwise deletion, we replicated the models using multiple imputation for missing variables (Schafer 1997, King et al. 2001). Doing so, we again estimate a coefficient of -0.022 (SE=0.005) for a Democratic victory on police protection and a coefficient of -0.010 (SE=0.004) on fire protection. Using simulation, we calculate the probability that this police spending coefficient is positive to be less than 0.01. The same is true for fire spending. As one might expect given the heterogeneity of the “independent” candidates in urban elections, these results are slightly stronger when we remove the independents from the data set,

⁸ Another way to observe the effect is to simply estimate the binned averages for the dependent variable at 5 percentage-point intervals. The results are very similar to those discussed above, with the averages under 50% (when Democrats lose) consistently above 0.8 and those above 50% (when Democrats win) always negative.

and focus only on Republican-Democratic match-ups. To ensure that the results are not driven by outliers, we then estimate the same models dropping every possible combination of two observations. For spending on the police, every one of the resulting 18,906 data sets indicates a substantively and statistically significant impact of partisanship. For fire protection, only four of the possible models produce results that just miss the bar of statistical significance at the $p < 0.10$ level (two-sided test).

Modeling Changes in Spending Shares

We then apply the same statistical methods, including multiple imputation and standard errors clustered by city, to the full set of dependent variables. Figure 2 extracts the estimated effect of a Democratic victory for each fitted model. Alongside the findings for police and fire spending, we see a few suggestive (though not statistically significant) tendencies: Democratic mayors spend less, on average, on sanitation, libraries and health, and have lower police pay and fewer police employees. Democratic mayors appear to rely less on sales taxes, property taxes, and taxes as a share of total revenues, and have lower total taxes, although again, none of these differences in revenue sources is statistically significant. These null findings are consistent with the assessment that revenue decisions are strongly limited by legal constraints (Ladd and Yinger, 1989 Ch. 6).

Figure 2 Here

Robustness Checks

We now conduct a series of robustness checks to rule out the possibility that our results are artifacts of our particular empirical approach. We first consider the possibility that partisanship matters only in places where it is highly salient, either because the elections are partisan or because party affiliations can appear on the ballot. 41% of the elections in our data set take place in cities with partisan institutions, and 60% take place in cities where candidates can indicate their partisanship on the ballot. However, we find no strong interactive effects between electing a Democrat and either variable. One might also expect that the impact of a Democratic victory would be stronger in cases where the mayor was previously a Republican. Using an interaction effect, we estimate that Democratic mayors reduce police and fire spending by more when they succeed a Republican (-0.006, SE=0.010; -0.0006, SE=0.006, respectively). Yet these results are not statistically significant, and the result for fire spending is effectively zero.⁹

Our second robustness check estimates changes from the baseline year to the second subsequent fiscal year instead of the third. Doing so largely confirms the patterns identified above, with policing (-0.015, SE=0.005) and fire (-0.010, SE=0.004) both reduced under Democrats. Since these measures cover only two years, it makes sense that the policing coefficient is smaller in size. By contrast, looking at changes over only the first fiscal year is essentially a placebo test; these budget decisions are largely made during the previous administration and so newly elected mayors have few opportunities to influence these outcomes. As expected, this placebo test produces no significant impacts of a narrow Democratic victory for any of the dependent variables.

⁹ Similarly, we investigate whether the impact of electing a Democrat is larger in cities with mayor-council institutions or with more fiscal capacity. For both police and fire spending, there is no interactive effect between a Democratic mayor and either of these independent variables.

Our third robustness check, presented in Figures 3 and 4, considers how sensitive our results are to the inclusion of observations far away from the discontinuity. In these analyses, we vary the “window” or range of observations around the discontinuity that we include in the analyses. A window size of 0.04 means that we include only those observations where the Democrat wins between 48% and 52% of the vote. Put differently, if the window size is 0.04, the winner’s share of the two-candidate vote can be no more than 4 percentage points larger than the loser’s share. We then estimate the impact of a narrow Democratic victory using the models from Tables 3 and 4, and present those estimates as a dot along with a line indicating its 95% confidence interval. As the window size increases, the confidence intervals decline since we are using more data. But the critical point is that our results are quite robust to how we specify the window, especially in the case of policing. For all possible windows, the impact of a Democrat winning on police spending is negative, and it is almost always statistically significant, even using two-sided tests. In fact, we even detect a substantively and statistically significant police spending decline of 1.9 percentage points when using the 19 observations within the 0.04 window and a model with no covariates. The impact of a Democrat winning on fire spending is negative and is nearly always significant as well.¹⁰

Figures 3 and 4 Here

As a final robustness check, we re-estimate each model conditional on each of 33 covariates, inserting each new covariate into the basic model one at a time. These

¹⁰ In another robustness check, we remove 30 observations where the winner received over 75% of the vote or less than 25% of the vote. We then re-estimate the full model for each dependent variable. For policing and fire protection, the results are again quite similar. Under this model, the election of a Democratic mayor leads to a 2.0 percentage point drop in the share of spending devoted to the police (SE=0.008), and a 1.3 percentage point drop in the share of spending devoted to fire protection (SE=0.005). In this specification, we also get a hint of where Democrats might be spending more compared to Republicans: spending on housing increases in this model by 1.9 percentage points (SE=0.008). For other spending areas, and for all revenue measures, we see no strong impacts.

variables include the crime rate, population density, residential turnover, region, percent immigrant, change in the city's population, race of the mayor, whether the election brought about a partisan change, whether the victor was an incumbent, whether the city has home rule, the strength of its mayor, and many others. These robustness checks allow us to investigate whether our initial results are confounded by dynamics such as incumbents from one party using their position to prevail in hotly contested elections (Caughey 2009), or by party machines using their control over polling stations to influence the outcome of close elections. Yet figure 5 shows how stable our estimate of a Democrats' impact on policing is to a wide range of potentially omitted variables. In no case does the inclusion of the omitted variable substantially change the estimated impact of electing a Democrat.

Figure 5 Here

V. Implications and Conclusions

In 1999, Republican Paul Coble took the mayoralty in Raleigh, North Carolina after a narrow victory. Its crime rate—7,307 crimes per 100,000 people—was just below the median among cities considered here. During his term in office, Coble increased police spending from 11.1 percent of the budget to 14.1 percent of the budget two years later. In the same year, Fort Wayne narrowly elected Democrat Graham Richard. And Mayor Richard's first term saw a decline in the share of the budget devoted to the police, from 18.1 percent to 14.4 percent of the budget over three years. The results above strongly suggest that these changes are not idiosyncratic. When Democrats narrowly win the Mayor's chair, spending on police relative to total spending commonly declines. There

might not be a Republican way to collect the trash, but there is a Republican way to spend on policing and fire protection.

The party labels are not meaningless in urban politics, but nor do they convey the same information as national party labels. This pattern of findings has important implications for questions of responsiveness and accountability. It demonstrates that local governments are quite constrained in their ability to respond to changing preferences within their cities. When the balance of political power in a city tips from one party to another, we would expect the newly empowered elites – who are responsive to different constituencies and who likely hold very different policy preferences than their partisan opponents – to seek major changes in city policy. In most policy areas, however, we do not observe systematic differences in policy outcomes following the narrow victory of a Democratic or Republican mayor, as measured by the share of a city's budget going to that particular spending or revenue category. This stability in spending and revenue patterns is consistent with our explanation that in most policy areas, the structural and political constraints imposed on local government officials largely nullify their ability to respond to the preferences of new partisan majorities in the electorate and the city administration.

From the perspective of assigning responsibility and holding elected officials accountable for policy outcomes, some observers will find these results disheartening. Even if local government officials want to change policy, it is not at all clear that they have the formal or informal powers needed to make the kinds of changes citizens might want. In a separation of powers system like the U.S., assigning responsibility is difficult and complex. When we add the kinds of ambiguity that arise from the overlapping

authorities and political constraints facing local officials, the problem of accountability becomes still more acute.

The major exception is in the area of public safety, particularly spending on police and fire protection. Here, we find that narrow Republican victories are associated with a substantial and statistically significant increase in the share of their city budgets going to these functions. In this particular policy area, the relationship between what decision makers want and the outcomes they produce is much clearer. Holding them accountable for the outcomes they produce is a reasonable goal. Whether the topics of local political campaigns match those areas that mayors can influence is a productive topic for future work.

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	Mean	SD	Min	Max
Democrat Wins	0.672	0.471	0.000	1.000
% Voting Democratic	0.573	0.175	0.185	0.946
Loser is Independent	0.194	0.397	0.000	1.000
Home Rule	0.720	0.451	0.000	1.000
Mayor-Council	0.644	0.481	0.000	1.000
Dem. Share, Lower House	0.561	0.128	0.230	0.920
Dem. Share, Upper House	0.537	0.140	0.200	0.880
Dem. Governor	0.489	0.502	0.000	1.000
Dec. Fiscal Year	0.250	0.435	0.000	1.000
Lg. Pop. 1990	13.019	0.839	11.611	15.806
Lg. Med. Hsh. Income 1990	10.194	0.203	9.737	10.939
Crime Rate 1990	10291	3047	4361	18953
% Black 1990	0.268	0.172	0.006	0.668
Population Density 1990	1.724	1.613	0.051	9.151
% Same House 1990	0.490	0.077	0.334	0.672
% on Public Assistance 1990	0.090	0.040	0.024	0.219
% on Soc. Security 1990	0.236	0.052	0.093	0.345
% Homeowner 1990	0.523	0.081	0.302	0.749
% Poor 1990	0.176	0.056	0.064	0.312
South	0.425	0.496	0.000	1.000
West	0.172	0.378	0.000	1.000
Northeast	0.104	0.307	0.000	1.000
% Hispanic 2000	0.153	0.169	0.007	0.767
% Immigrant 1990	0.086	0.094	0.010	0.597
% with BA 1990	0.242	0.074	0.081	0.528

Table 1: Descriptive Statistics, Independent Variables, 134 City Elections.

	Mean	SD	Min	Max
Policing	0.109	0.040	0.000	0.231
Fire	0.063	0.029	0.000	0.146
Roads	0.062	0.039	0.000	0.223
Parks	0.056	0.037	0.000	0.193
Housing	0.039	0.031	0.000	0.168
Sanitation	0.032	0.019	0.000	0.107
Health	0.020	0.023	0.000	0.150
Administration	0.014	0.012	0.000	0.095
Libraries	0.008	0.009	0.000	0.038
Inspection	0.007	0.007	0.000	0.038
Natural Resources	0.002	0.007	0.000	0.043
Taxes / Total Revenues	0.465	0.139	0.156	0.837
Sales Tax Share	0.189	0.222	0.000	0.796
Property Tax Share	0.476	0.248	0.050	0.912
Log, Total Taxes	12.637	1.217	8.089	17.269
Total Taxes Per Capita	772	727	18	5318
Police Employees	2,920	7,539	53	50,909
Share, Police Employees	0.166	0.056	0.019	0.312
Share, Police Pay	0.216	0.064	0.022	0.350

Table 2: Descriptive Statistics, Dependent Variables, 134 Elections.

	Estimate	Std. Error
Intercept	0.002	0.109
Democrat Wins	-0.022	0.007
Pct. Dem	-0.158	0.226
Pct. Dem Squared	0.463	0.441
Pct. Dem Cubed	-0.310	0.264
Ind. Loses	-0.001	0.005
December FY	-0.004	0.004
Log Pop 2000	-0.005	0.002
Pct. Black 1990	-0.011	0.012
Log Med. Hsh. Income 1990	0.009	0.010
Intergov't Rev	0.001	0.003

Table 3: OLS Estimates, DV=Change in the Share of City Spending on Police, 122 Fully Observed City Elections

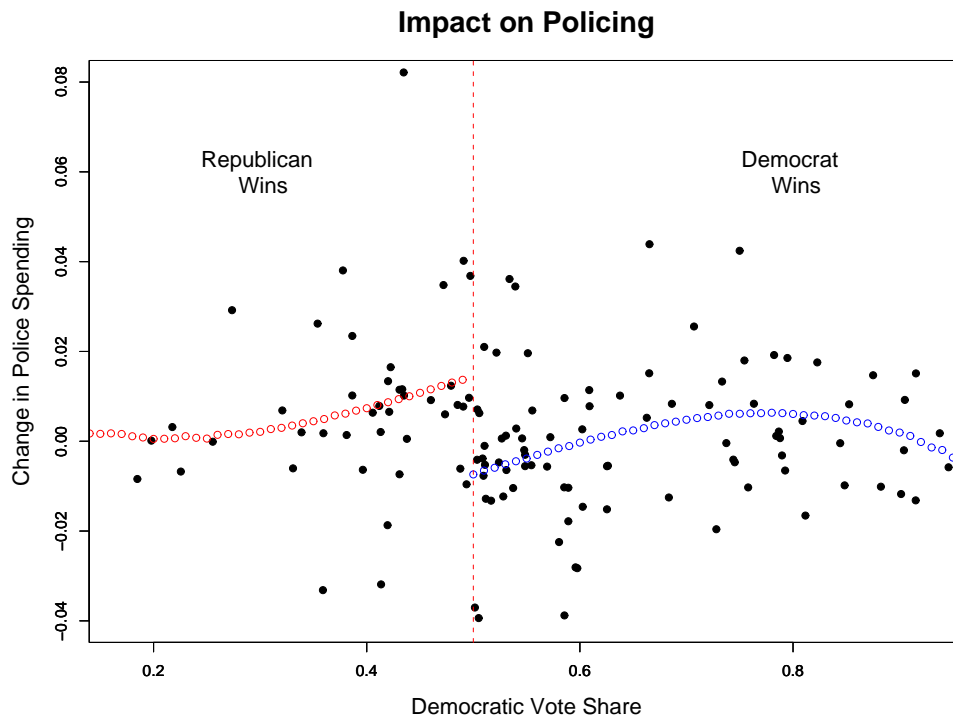


Figure 1: RDD Model and Results. *Black dots depict the bivariate relationship between each city's Democratic support and the subsequent three-year change in police spending. Open dots depict the predicted change from the baseline RDD model.*

	Estimate	Std. Error
Intercept	0.027	0.067
Democrat Wins	-0.010	0.004
Pct. Dem	-0.234	0.140
Pct. Dem Squared	0.533	0.272
Pct. Dem Cubed	-0.334	0.163
Ind. Loses	-0.001	0.003
December FY	0.002	0.003
Log Pop 2000	-0.002	0.001
Pct. Black 1990	-0.017	0.007
Log Med. Hsh. Income 1990	0.003	0.006
Intergov't Rev	0.001	0.002

Table 4: OLS Estimates, DV=Changes in the Share of Spending on Fire, 127 Fully Observed City Elections.

Effect of Democratic Win

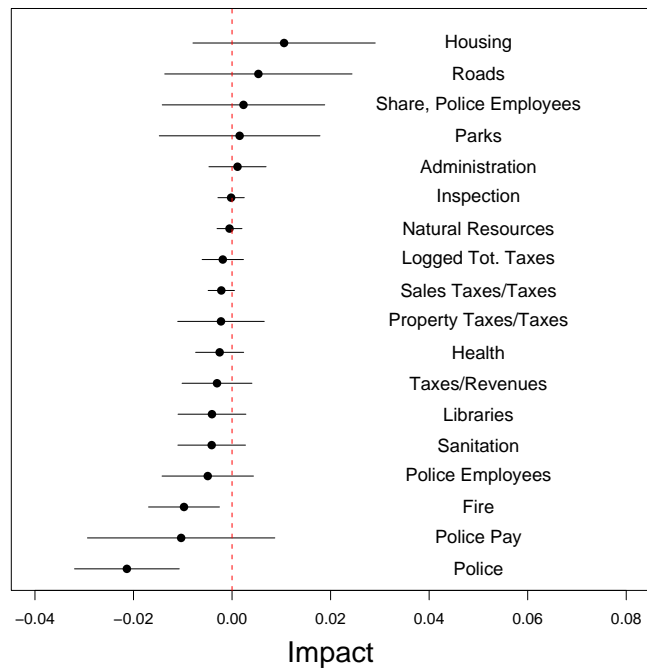


Figure 2: OLS Estimates, Effect of a Democratic Victory on Outcomes. *Conditional on covariates in Table 3, estimated on multiply imputed data sets with standard errors clustered by city.*

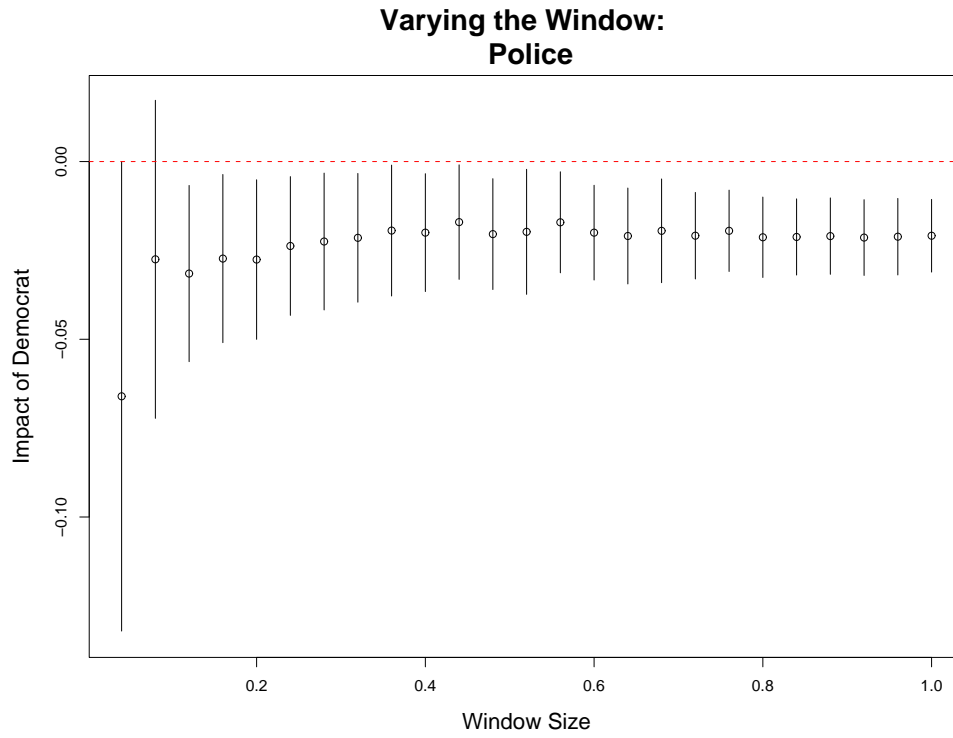


Figure 3: Effect of a Democratic Victory on Police Spending for Varying Window Size.

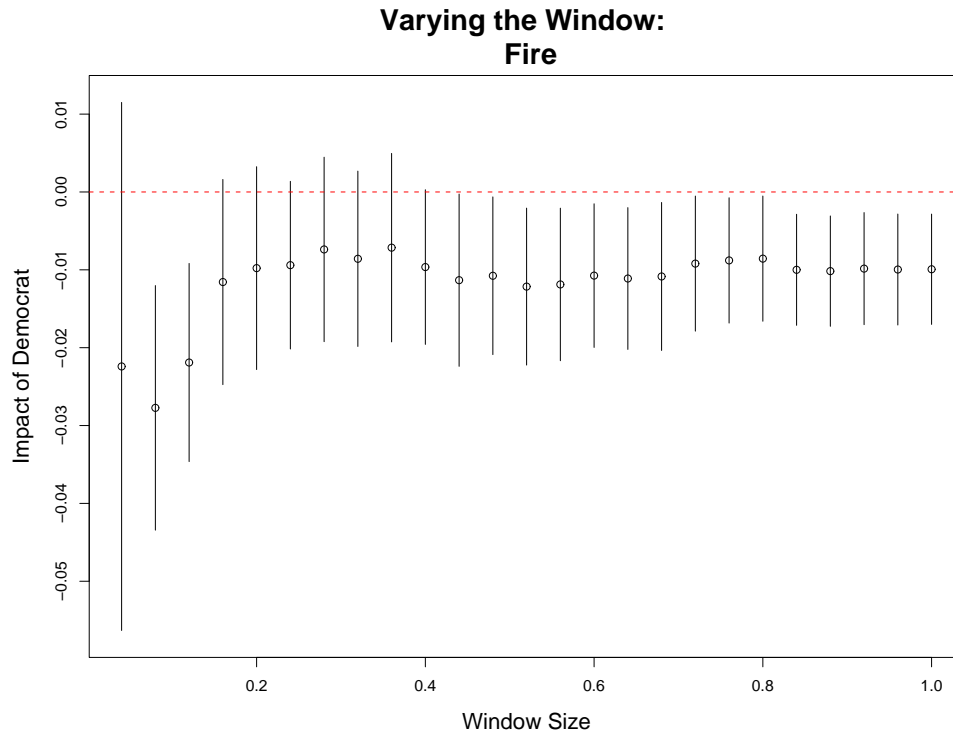


Figure 4: Effect of a Democratic Victory on Fire Spending for Varying Window Size.

Omitted Variables?

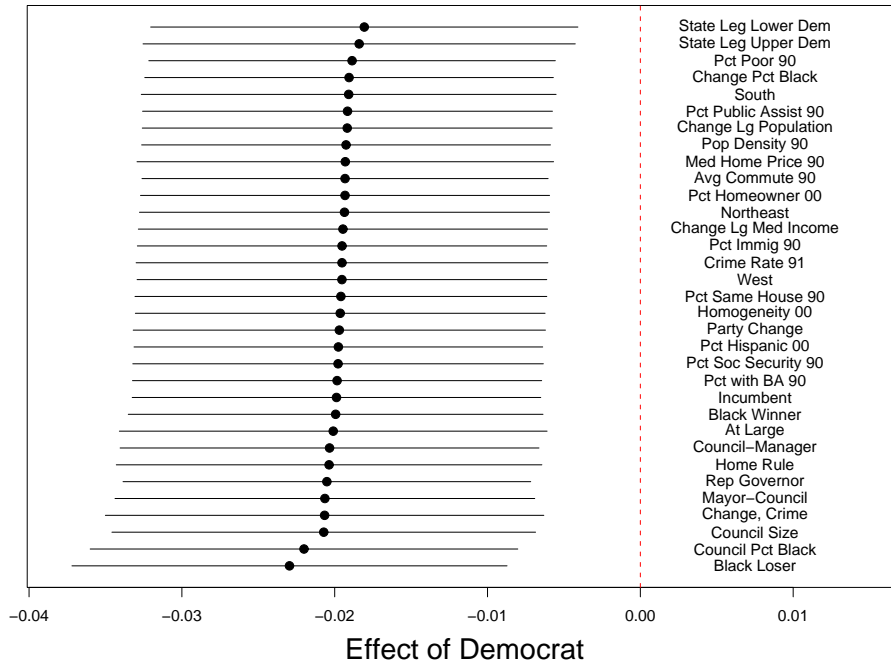


Figure 5: OLS Estimates, Effect of a Democratic Victory on Police Spending. *Conditional on the inclusion of potential confounding variables.*