

Business Owners and Executives as Politicians: The Effect on Public Policy

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Abstract

When business owners and executives run for elected office, they claim their experience in business leaves them uniquely equipped to govern. Does electing a business owner or executive have an effect on public policy? With original data, including race, gender, political experience, and occupational backgrounds of 3,257 mayoral candidates from 263 cities, I document a striking lack of diversity in U.S. mayoral politics and show that business owners and executives are extraordinarily well represented in American city halls. Nearly 32% of mayors have experience as a business owner or executive, making it the most common occupation across both time and geographic region. Using a regression discontinuity design, I find that business executive mayors do shape municipal fiscal policy by shifting the allocation of expenditures, investing in infrastructure while curtailing redistributive spending. Notably, my results suggest that business executive is not simply a proxy for Republican partisanship.

Keywords: representation, mayors, local politics, municipal fiscal policy

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“[L]et’s face it: politicians are all talk and no action. My opponents have no experience in creating jobs or making deals.”¹ In November 2015, voters in Iowa heard these words in a new radio advertisement from then-presidential candidate Donald Trump. The sentiments—and to a great extent the words—are hardly remarkable. When business owners and executives run for political office they often tout the value of their business backgrounds. In fact, Mitt Romney once mused that perhaps business experience should be a qualification of the presidency to ensure that the president would understand how public policy affects businesses (Ungar 2012). No matter what political office they seek, business executive candidates campaign on their business skills and acumen. A career in business, they argue, confers expertise in leadership, negotiation, and financial management that leaves them uniquely equipped to promote economic growth, to attract jobs, and to increase the efficiency of government. Despite their familiarity, are these campaign promises anything more than empty rhetoric? Does electing a business owner or executive really lead to different policies?

Although partisanship tends to be an exceptional predictor of the ideological positions and public policy choices of elected officials (Poole and Rosenthal 1997; Clinton, Jackman and Rivers 2004; McCarty, Poole and Rosenthal 2006; Bartels 2008), politicians’ personal characteristics, such as race, gender, and social class, also seem to shape their preferences and behavior. Indeed, empirical evidence from a variety of contexts suggests that descriptive representation can have meaningful policy consequences (see e.g., Whitby 1997; Besley and Case 2003; Chattopadhyay and Duflo 2004; Carnes 2012; 2013). Much of this work has focused on race, gender, and ethnicity of legislators to analyze how increased representation in the policymaking process may allow historically underrepresented groups to influence policy. A key implication of this research is that especially when political leaders’ characteristics are linked to distinct policy preferences, descriptive representation can lead to substantive representation.

While “business” can hardly be characterized as a monolithic group, business owners and executives surely have shared interests in public policy, especially the taxes and regulations that

¹Quote comes from a radio ad entitled “Together,” which is discussed and quoted in multiple news reports, including a November 5, 2015, *Politico* article (Gass 2015).

affect their bottom lines. Businesses and trade associations are among the most active and generously funded lobbying organizations in U.S. politics (see e.g., Baumgartner and Leech 2001). Over the past 20 years, the U.S. Chamber of Commerce alone has spent more on lobbying than any other organization—nearly \$1.4 billion (Center for Responsive Politics 2017). At the same time, there is evidence to suggest that politicians with experience in business seem to hold different policy positions and behave differently than their colleagues with other types of occupational histories. Carnes (2012; 2013), for example, finds that members of Congress with backgrounds in profit-oriented professions, including business owners and executives, tend to be especially conservative relative to those who worked in not-for-profit or working-class professions. Members of Congress with backgrounds in business also exhibit more pro-business voting records and appear to have closer relationships with corporate political action committees (PACs) (Witko and Friedman 2008). Survey responses of state legislative candidates also reveal rather stark differences in the attitudes of business owners and workers on questions of welfare spending, government regulation, economic inequality, and health care (Carnes 2018). These survey data indicate that, compared to candidates who are workers, business owners prefer a much smaller role for government in these key policy areas.

In this paper, I focus primarily on politicians who have backgrounds as a business owners or executives.² Specifically, I ask whether electing a business owner or executive to serve as mayor leads to systematically different fiscal policies. To assess the impact of business executive mayors, I collected detailed data on 3,257 mayoral candidates from 263 cities across the U.S. between 1950 and 2007. With information on race, gender, political experience, and occupation of candidates, I compiled what is, to my knowledge, the most comprehensive dataset of mayoral candidates to date. Mayors preside over governments whose policies have a huge impact on the public's safety and quality of life. Local governments also account for an estimated \$1.7 trillion in spending per year—about 10% of the nation's GDP.

²Candidates with experience as an owner or corporate officer (president, vice-president, CEO, etc.) of a for-profit business are counted as business owners or executives. I use the terms business owner and business executive interchangeably.

Because municipal governments play a vital role in delivering public goods and services, we might assume that mayors are unquestionably important actors, but mayors likely present a hard test for executive influence. Cities have limited formal authority, and the need to maintain a tax base can create informal constraints because local citizens, taxpayers, and businesses can move to another city if they are dissatisfied with local public policies (Peterson 1981). Like other elected executives, mayors have limited formal legislative authority which also varies across cities. Still, case studies of American cities portray individual mayors as crucial actors with the ability to shape the fortunes of their cities (e.g., Ferman 1985; Stone 1989; DeLeon 1995; Fuchs 1992; Inman 1995). While several empirical studies examining the causal effects of mayors' partisanship, race, and gender have produced some conflicting and largely null results (Ferreira and Gyourko 2009; Gerber and Hopkins 2011; Hopkins and McCabe 2012; Ferreira and Gyourko 2014), recent work incorporates new data and methodological advances to provide perhaps the strongest evidence to date that mayoral partisanship does affect local fiscal outcomes (de Benedictis-Kessner and Warshaw 2016).

First, I show that that mayors tend to be white and male with white-collar occupational backgrounds and prior political experience. My data reveal that business owners and executives are especially well represented, accounting for about 32% of the mayors in the dataset. Business owners and executives make up the largest occupational category among U.S. mayors—both over time and across regions of the country. Next, I combine these original data with measures of municipal finances to test the effect of electing a business executive mayor on a range of fiscal outcomes. To address the possibility that factors related to how likely a city is to elect a business executive also determine policy outcomes, I adopt a regression discontinuity design (RDD). With the RDD, I leverage election results to compare outcomes in cities that narrowly elect a business executive to outcomes in cities where a business executive loses by a slim margin. Focusing on cities that are similar in propensity to elect a business executive mitigates the threat that observed or unobserved confounders could bias the results.

My results indicate that business owners and executives do produce systematically different

fiscal outcomes. The findings offer little evidence to indicate that business executives influence the size of government. However, I find that electing a business executive leads to significantly lower levels of spending on housing and community development—spending that typically is redistributive in nature. At the same time, the results indicate an increase in spending on roads in cities that elect business executives. Some suggestive evidence also signals that business executive mayors may increase revenue from local sources but likely in the form of user fees and charges rather than taxes, which would further limit the potential for redistribution. Finally, I provide additional analyses to demonstrate that experience as a business owner or executive is not simply a proxy for Republican party affiliation.

With new data and careful attention to causal identification, this paper builds on classic studies of urban politics that cast business leaders as influential actors in local politics, as well as more recent research which finds that politicians with business backgrounds may exhibit more pro-business behavior than their colleagues who lack experience in business (Witko and Friedman 2008). The results are also quite consistent with Szakonyi’s (forthcoming) findings that Russian mayors with business backgrounds increase expenditures on roads and transport but leave health and education spending unchanged. This study is not without limitations, however. Perhaps most importantly, the RDD identifies a *local* causal effect—that is, the effect of narrowly electing a business owner or executive. The focus on fiscal policy also leaves unanswered questions about the influence of mayors with business backgrounds in other key local policy domains. Still, the findings presented here contribute to the growing evidence that the overrepresentation of the affluent in U.S. political institutions has meaningful consequences for public policy and also suggest that politicians with experience as business owners and executives warrant closer attention.

Theoretical Expectations

While partisanship tends to be the strongest predictor of the behavior of both voters and elites (Campbell et al. 1960; Green, Palmquist and Schickler 2002; McCarty, Poole and Rosenthal 2006),

other attributes of leaders can shape behavior and outcomes as well. Membership and roll call voting behavior with African American members of Congress more likely to support legislation that advances group interests (e.g., Canon 1999; Whitby 1997). Assessing representation of African Americans in state legislatures, Owens (2005) finds that advances in descriptive representation lead to increased spending in policy domains important to black legislators and their constituents. Besley and Case (2003) find a positive relationship between the share of women in state legislatures and increased family assistance and stronger child-support laws. Carnes (2013) argues that the overrepresentation of the affluent in the United States generally leads to more conservative economic policy choices. Although he finds greater class diversity among politicians at the local level, compared to state legislatures or Congress, Carnes (2013) also notes that cities tend to have limited flexibility to adopt progressive economic policies.

Indeed, the formal and informal constraints on local governments imply that mayors may be unable to have policy influence comparable to politicians in other contexts. Building on Tiebout's (1956) insight that citizens can "vote with their feet," Peterson (1981) argues that competition for mobile taxpayers essentially underpins all urban policy choices. If cities fail to provide a near-optimal balance of services and taxes, high-income taxpayers will leave, undermining the city's economic vitality. As a result, the range of viable local policy options is sharply curtailed, rendering local politics largely inconsequential, Peterson claims. In contrast, Stone's (1989) regime theory implies that because of the constraints on local governments, politics is vitally important. Where local government officials and organized interests can maintain durable coalitions, informal public-private regimes can channel resources toward shaping agendas and advancing policy goals. Because of their abilities to marshal crucial resources, business leaders are often senior partners in these coalitions.

In some cases, mixed results from empirical studies of mayoral influence are consistent with the notion that constraints on cities limit the effects of local politics, but the evidence is far from conclusive. Building on earlier work, de Benedictis-Kessner and Warshaw (2016) leverage new data and methodological advances to analyze the effect of mayoral partisanship and find that

cities spend more under Democratic mayors as compared to Republicans, spending that seems to be funded by increasing municipal debt. Despite increased clarity on the effects of mayoral partisanship, prior research disagrees about the implications of descriptive representation of groups that traditionally have been underrepresented in city politics. For example, Holman (2014) argues that cities with female mayors are more likely to provide social welfare programs, although other research finds gender has no significant effect on the size of local government or the composition of spending (Ferreira and Gyourko 2014).

Studies assessing the impact of mayors' race, ethnicity and social class also leave unanswered questions. Although Karnig and Welch (1980) find that black mayors preside over increases in social welfare spending, Pelissero, Holian and Tomaka (2000) provide empirical evidence suggesting that electing an African American or Latino mayor does not lead to significant differences in fiscal policy (see also Nelson 1978). More recently, Hopkins and McCabe (2012) assess the influence of African American mayors in large U.S. cities and find that electing a black mayor leads to reductions in police staffing and payrolls but otherwise has no significant effect on the allocation of resources. Carnes (2013) provides suggestive evidence that city councils with a majority share of working-class members allocate more of the city budget to social programs compared to councils made up of more affluent members but notes that the small number of working-class majorities makes it difficult to systematically evaluate these patterns. In contrast, a recent study finds that electing a wealthy mayor has little effect on local fiscal policy but also emphasizes that identifying the effects of mayors' class backgrounds is complicated by the fact that only a very small share of candidates have working-class occupations (Kirkland 2020).

Business Owners and Executives as Politicians

Social class is a useful starting point for thinking about how politicians who are business owners and executives might influence public policy. Business owners and executives almost certainly tend to be wealthier, on average, than politicians with many other occupational backgrounds. Using occupation as a proxy for social class, Carnes (2013) finds that compared to Members of

Congress with backgrounds in not-for-profit occupations or working-class jobs, those who fall into profit-oriented professions tend to be more conservative (as measured by ideology scores), particularly on economic issues.

When business executives run for office, however, they often run on their business experience rather than explicitly conservative policy positions. When she filed papers to run for mayor of San Bernardino (CA), Judith Valles said she would use her “experience balancing multi-million dollar budgets and managing large-scale institutions to revitalize [the] city” (quoted in *Precinct Reporter*, July 17, 1997). In 2001, Republican Dennis Odle ran for mayor of Waterbury (CT) with the slogan “All Business, No Politics” (The Brass File [*The Waterbury Observer*], October 14, 2007). Similar examples abound, from Quincy, Massachusetts to Waukesha, Wisconsin and from Dallas, Texas to San Diego, California.³

Candidates’ claims echo the rhetoric of municipal reformers who maintained that the core function of city government—service provision—requires technical expertise rather than political skill. Notably, business leaders were advocates of the reform movement, which sought to shift the balance of power in city politics toward more affluent citizens (Bridges 1997). Among their priorities were quality services and amenities combined with limited redistribution to keep local taxes in check. At the local level, city finance and budgeting can have a direct impact on local business owners by determining both personal and business tax obligations as well as the quality of municipal services they receive. Broader policy implications, however, could also indirectly influence the fortunes of local businesses. For example, reliable municipal services, desirable amenities, and low taxes may make a city attractive to residents, businesses and consumers of goods and services, creating a vital local economy (Peterson 1981; Logan and Molotch 1987).⁴

³Specific examples cited here include Francis X. McCauley mayor of Quincy, Massachusetts from 1982 to 1989 (*Boston Globe* November 1, 1981); Robert J. Foley, Sr., candidate in Waukesha, WI (*Milwaukee Journal* March 30, 1994); Fred Meyer, candidate in Dallas, Texas (*Boston Globe* May 5, 1987); Bill Cleator, candidate in San Diego, California (*Los Angeles Times* May 18, 1986).

⁴While Logan and Molotch (1987) argue that maximizing real estate values and promoting growth are the primary goals that guide business interests in local politics, other accounts (perhaps most notably, Stone 1989) offer a more nuanced portrayal in which business leaders are also civic leaders who are active within informal coalitions not only to shape policy but also to solve problems. Recent work by Hanson et al. (2010) builds on this view to examine how changes in the economy have altered the civic engagement of local business executives. This work suggests that as the structure of business ownership has changed, more business executives run local branches or subsidiaries and are

Campaign rhetoric aside, however, there are compelling reasons to expect that business owners and executives likely have a distinct set of shared policy preferences. Business owners' and executives' political attitudes may be shaped or reinforced by their membership in business or trade associations that advance strong policy positions on a variety of issues (Manza and Brooks 2008). For example, the U.S. Chamber of Commerce website (<https://www.uschamber.com>) highlights their support for lower tax rates, infrastructure investment, and entitlement reform. At the same time, ideology scores indicate that members of Congress whose prior careers were defined by a profit imperative, including business owners and executives, have more conservative economic policy preferences relative to their colleagues with working-class or service-based occupational backgrounds (Carnes 2013). Survey evidence also suggests that compared to state legislative candidates who are workers, candidates who are business owners have more conservative views on questions surrounding the government's role in offering welfare programs, ameliorating economic inequality, regulating the private sector, and providing healthcare (Carnes 2018).

If business owners and executives tend to be relatively conservative with a pro-growth orientation that may also reflect, in part, the impact of local policies on the success and profitability of their own businesses, these attitudes should shape a particular approach to fiscal policymaking. Perhaps the policy preference most indelibly associated with conservatives and pro-growth advocates is support for cutting taxes. For this reason, I hypothesize that electing a business owner or executive mayor will lead to lower taxes on average. Less tax revenue implies that balancing the budget would require either spending less or turning to other sources to replace lost tax revenue, but another option is that business owners and executives advocate different types of revenue. For example, if they are wealthier, they may prefer more regressive revenue sources such as fees and charges for services or sales taxes. At the same time, they might be reluctant to raise sales taxes if higher rates could undermine local businesses. I hypothesize that electing a business owner or executive mayor will lead to a shift toward regressive revenue sources such as municipal fees

likely to be more transient and less attached to the cities in which they live, diminishing civic engagement. This notion implies that we might expect different behavior from business owners than from business executives. I do not explore these hypotheses here, however, primarily because I am unable to confidently separate business owners from business executives in my data.

and charges while limiting or lowering sales taxes. Whether or not they cut spending, it seems likely that business executive mayors will work to shape city revenue sources to reflect their policy preferences.

On spending, however, I suspect that the preferences of business owners and executives may vary across spending categories. On average, I expect electing a business executive mayor to have little or no impact on spending for basic, or so-called “housekeeping” services, such as policing, firefighting, and sanitation. Limiting the quality or quantity of essential services would likely displease voters and local businesses alike. Infrastructure projects or desirable amenities, on the other hand, may afford a city a competitive edge in its efforts to attract affluent taxpayers and businesses. Improving or adding infrastructure may facilitate growth and development, while amenities can make a city more appealing and boost property values. Thus, I anticipate that mayors with executive business experience will increase spending on infrastructure and amenities. In contrast, I hypothesize that electing a business executive mayor will lead to a decline in spending on redistributive programs, such as welfare, housing and community development, and public health. The notion that business owners and executives are, on average, especially conservative, implies that they are unlikely to support redistributive policies in general. Moreover, these policies disproportionately benefit less well-off residents at the expense of more affluent taxpayers, which may undermine the local tax base by sending businesses and affluent residents to other cities in an effort to avoid paying taxes to fund services they neither need nor want.

Although the present focus is evaluating whether and in what ways electing a business owner or executive mayor affects fiscal policy, it is worth thinking about how these mayors might bring about policy change. Mayors, like other elected executives, tend to have limited formal powers. While some play a significant role in budgeting, others do not even have veto power. In council-manager cities, a city manager oversees day-to-day policy implementation. Yet, some mayors seem to amass considerable informal power to achieve their goals (see, e.g., Ferman 1985). One possibility is that business owners and executives might excel at exerting their influence on the design and implementation of public policy.

Local fiscal policies can quite literally affect the cost of doing business in a city, so business owners and executives are likely to be keenly aware of the tradeoffs between taxes and services. Based on their exposure to local policies and their experience with broader markets, business owners and executives may think in terms quite similar to the tax-benefit ratio described by Peterson (1981). At the same time, business experience and skills might be useful for translating preferences into public policy. Besley (2005, p. 48) suggests that “political competence is probably a complex mix of skills” that likely includes analytical skills as well as leadership skills. Strong analytical skills might enable a leader to formulate policy proposals that are more likely to pass or more likely to produce their desired outcomes. Less tangible, leadership skills could involve the ability to persuade others or build coalitions necessary to pass and implement policy. Many business owners—especially successful ones—likely have considerable experience routinely setting goals, formulating plans, analyzing balance sheets, managing employees, and negotiating with customers, suppliers, and other businesses. Given the considerable constraints that local policymakers face, however, the effects of business executive mayors may be limited in scope or magnitude. Still, like leaders differentiated by other characteristics, mayors with executive business experience are likely to have an impact on local policies leading to divergent fiscal policies.

Data and Research Design

Empirical Strategy

Mayors’ attributes and experience are not randomly assigned to cities, and factors that influence local electoral choices also may affect fiscal outcomes. To address these concerns, I employ a regression discontinuity design (RDD) to estimate the effect of electing a business executive mayor. Commonly used in political science, RDDs can identify causal effects with observational data (see e.g., Lee, Moretti and Butler 2004; Lee 2008; Ferreira and Gyourko 2009; 2014; Gerber and Hopkins 2011). A quasi-experimental design, the RDD is distinguished by its reliance on a variable that determines exposure to treatment. At some threshold value of the forcing (or assignment)

variable, the probability of treatment changes discontinuously. For example, vote share captures the underlying probability of winning an election and exhibits a sharp discontinuity at 50%—the candidate whose vote share exceeds this threshold wins. As long as candidates lack precise control over their vote shares (i.e., the assignment variable), an important consequence is that near the threshold, assignment to treatment is as-if random (Lee 2008; Lee and Lemieux 2010, p. 283).

The aim of an RDD analysis is to use the observations around the threshold in the rating variable to estimate the size of the jump (or dip) at the discontinuity. A key concern, then, is determining the estimation strategy. Local polynomial methods rely only on observations that lie within a specified distance—or bandwidth—spanning the threshold of the forcing variable. Because RDD results can hinge on specification and bandwidth choices, current best practices call for the use of local linear regression combined with a data-driven approach to determining the bandwidth that minimizes the mean squared error (MSE) of the RD estimator (Calonico, Cattaneo and Titiunik 2014, see also Imbens and Kalyanaraman 2012).⁵

To estimate the effect of electing a business executive mayor, I focus on races where one candidate possesses executive business experience and the other does not (520 elections meet this criterion). In these cases, if and only if a business executive candidate wins the largest share of the vote, the city experiences a business executive mayor. The vote share margin serves as the forcing variable, and 0% is a sharp threshold that determines treatment assignment.⁶ The key explanatory (treatment) variable, is a dichotomous variable indicating whether the business executive candidate won the election. The regression coefficient for this variable is the quantity of interest, the estimate of the effect of electing a mayor with executive business experience. All local linear regression specifications also include the interaction of the forcing variable and the interaction of the forcing

⁵In practice, RDD applications have commonly relied on alternative global specifications that control for higher-order polynomials of the forcing variable. However, recent work suggests that this method may produce misleading estimates and advises use of local linear specifications (Gelman and Imbens 2019; Cattaneo, Idrobo and Titiunik 2019). One concern is that high-order polynomial specifications can heavily weight observations that lie far from the discontinuity. As a robustness check, I do estimate quadratic specifications which yield results substantively similar to the main results. These are located in the Supplemental Information.

⁶Some elections include more than 2 candidates. Margin of victory is defined as the difference in the vote shares of the top two candidates and is centered at 0.

and treatment indicator variables (Lee and Lemieux 2010).⁷

Each dependent variable is a relevant fiscal outcome measured two years after the mayoral election. Together, the Census of Governments and the Annual Survey of Governments provide detailed revenue and expenditure data for U.S. local governments from 1951 to 2012.⁸ To account for variation in population and region, all dependent variables are measured in per-capita constant (2000) dollars adjusted for differences in the cost of living across states per Berry, Fording and Hanson (2000).⁹ First, I focus on total revenues and total expenditures, as well as revenue sources and municipal debt. In addition to variables that capture the size of local government and distinguish between revenue sources, I also consider whether and how electing a business executive affects spending across policy categories. Fuchs (1992) emphasizes that budgeting is a highly political process, in which mayors play a central role. As a result, the allocation of resources across spending categories effectively reflects local leaders' policy priorities.¹⁰ Mayoral terms of office and election timing vary across cities, so outcomes measured two years after the city election allow time for a mayor to pursue policy goals while remaining within the two-year term maintained by some cities.

In the main text, present results of covariate-adjusted local linear regression models incorporating city-level characteristics that may be correlated with fiscal outcomes.¹¹ In particular, population tends to be systematically related to cities' functional obligations and thus the size of government, and a city's lagged spending and revenues are strong predictors of outcomes in subsequent years.

⁷Some recent methodological work on RDDs advocates the use of a similar estimation strategy but relies on robust bias-corrected confidence intervals for inference (Calonico, Cattaneo and Titiunik 2014; Cattaneo, Idrobo and Titiunik 2019). In the main text, I report robust standard errors, but replicating these analyses with robust bias-corrected confidence intervals produces substantively similar results (presented in the Supplemental Information (E)). Clustering standard errors at the city level also produces similar results (not included).

⁸The Census of Governments is conducted every five years, while the Annual Survey of Governments includes only a sample of local governments.

⁹Results are substantively similar with or without use of cross-state cost of living index.

¹⁰In contrast to some prior studies (see e.g., Ferreira and Gyourko 2009; 2014; Gerber and Hopkins 2011; Hajnal 2010; Hopkins and McCabe 2012; Peterson 1981), I use absolute per-capita spending to measure fiscal policy priorities rather than spending shares. Much like spending shares, absolute spending levels capture the outcome of budget negotiation and allow for straightforward interpretation of results. The results do not depend on this operationalization, and the Supplemental Information (D.1) includes an analysis of spending shares.

¹¹Specifications that produce the main results include the following covariates: the value of the dependent variable the year before the election, population, percent white, median household income, and median house value. With the exception of the percent white, covariates were transformed to logs.

Measures of population, racial composition, median household income, and median house value come from the U.S. Census.¹² Although they are not necessary for causal identification, these covariates improve the precision of treatment effect estimates (Lee and Lemieux 2010).¹³

The “no sorting” assumption is the key identifying assumption of the RDD—that potential outcomes are smooth across the threshold in the assignment variable (Lee and Lemieux 2010). In some electoral contexts, the tendency for incumbents to win close races raises concerns about potential violations of the continuity assumption (Caughey and Sekhon 2011). There is, however, little, if any, evidence of sorting in mayoral elections (Eggers et al. 2015). I investigate the validity of this assumption formally using the McCrary (2008) test of the density of the rating variable and find no indication of sorting (log difference in heights is -0.187 with SE 0.202; $p = 0.355$). A set of placebo tests incorporating a variety of covariates further indicate that the RDD is sound.¹⁴

Mayoral Candidate Data

To examine business owners and executives in office, I collected data from multiple sources to build detailed profiles of mayoral candidates from 263 U.S. cities between 1950 and 2007. I began with an existing dataset of U.S. mayoral elections and collected details about candidates and their backgrounds from several sources, most commonly from contemporary news reports, obituaries, and biographies provided by city websites and documents, the Biographical Directory of the United States Congress, and the National Governors Association.¹⁵

¹²The main analyses do not include measures of municipal institutions; however, the Supplemental Information does include separate results for mayor-council cities and council-manager cities. These estimates are substantively similar but a bit noisier—likely due in large part to small samples. Both form of government and nonpartisan electoral rules also are included in the RDD validity tests. I find no evidence of sorting on these institutional characteristics.

¹³Estimates from base models (without covariates) tend to be larger in magnitude and noisier (included in the Supplemental Information). One concern is that in these unadjusted models, extreme values from large or small cities could drive results. Other options to address this possibility and improve precision include transforming the dependent variables to logs or using the change in outcomes from one year to the next. Either approach yields substantively similar results, which are included in the Supplemental Information.

¹⁴Additional details on covariate continuity tests and other validity tests are included in the Supplemental Information (A).

¹⁵Election data were provided by Fernando Ferreira and Joseph Gyourko, who collected the data via a survey of US cities and townships with a population of more than 25,000 people as of the year 2000. These data were used in Ferreira and Gyourko (2009) as well as Ferreira and Gyourko (2014).

With race, gender, political experience, and occupational backgrounds of 3,257 mayoral candidates, these original data provide a new and detailed account of descriptive representation in U.S. cities. Some candidates' background information is missing or incomplete, however, so much of the discussion here focuses on a subset of the sample, which includes the top two candidates in 1,217 elections for which I have the most complete data. This subset includes elections and candidates from 248 U.S. cities with populations of at least 50,000 as of the 2000 U.S. Census in 44 states over the time period of 1950 to 2007. Table 1 reports measures from the 2000 Census to describe the cities included in the sample (as well as those that remain in the RD sample, i.e., cities where a business executive faces a non-business executive candidate). As a point of reference, descriptive statistics for all cities of comparable population are also provided. Overall, the cities included in my sample have noticeably larger populations. Sample cities have, on average, slightly higher shares of white residents with similar median household incomes, home ownership rates, and house values. Aside from population, however, the samples appear to be quite representative of U.S. cities with populations of at least 50,000.

Table 1: Sample of Cities

	Cities with > 50,000 Population	Current Sample— Candidate Data	Current Sample— RD Analysis
Count	602	248	190
Population	164,665 (410104.63)	217,370 (585318.48)	238,170 (663650.95)
White population	68.91% (18.47)	69.04% (18.85)	69.06% (19.25)
Unemployment rate	6.42% (2.69)	6.28% (2.53)	6.25% (2.52)
Median household income	\$43,683 (13749.16)	\$43,727 (13584.26)	\$43,833 (13638.49)
Home ownership rate	58.49% (12.44)	58.44% (11.46)	58.63% (11.55)
Median house value	\$142,978 (87431.58)	\$142,023 (78348.31)	\$139,848 (75097.68)

Descriptive statistics from the 2000 U.S. Census.

Results

Who Serves as Mayor?

Although business interests and business leaders are prominent players in canonical accounts of urban politics (see e.g., Erie 1988; Logan and Molotch 1987; Stone 1989; Bridges 1997), the details of descriptive representation in American cities have been difficult to document given significant data limitations. My original data overcome this challenge to reveal a striking snapshot of mayoral candidates from cities across the United States. Notably, nearly one third of the mayoral candidates have experience as a business owner or executive. By comparison, estimates indicate that business owners make up less than 10% of the U.S. population (The World Bank 2020) or about 16% of the labor force (Fiedler 2015).¹⁶ Figure 1 shows the most common occupations over time among mayors in the sample and suggests that business owners and executives have long been fixtures in city halls across the United States. In Figure 1, the horizontal axis is time, and the vertical axis measures the share of mayors. The portion of mayors with backgrounds as business owners or executives has fluctuated a bit over time from over 40% around 1960 to low of just under 30% in the 1980s, but business owners and executives constitute the most common occupational category consistently over time.

Table 2 summarizes political experience and demographic attributes of for all candidates in the set of complete elections. Overall, the data suggest that mayors are not very representative of the broader population in terms of race, ethnicity and gender. Only 11% of mayors are women, and 5.5% of mayors are African-American. Hispanic mayors make up 2.6% of the sample, and only 0.7% of mayors are Asian-American. As a point of reference for cities in this sample, the average share of the population that is white was 64% as of the year 2000. Turning to political experience, we see that about half of the mayors in the sample served on the city council prior to their election and about 45% were reelected as incumbents. Few mayors have experience at higher

¹⁶The World Bank (2020) data indicate that between 2001 and 2017, the share of established business owners ranged from about 5% to just over 9%. A helpful *Politifact* piece outlines challenges in estimating the share of U.S. workers who own a business and suggests business owners make up about 13-16% of the U.S. labor force (Fiedler 2015).

Figure 1: Business Executive Mayors

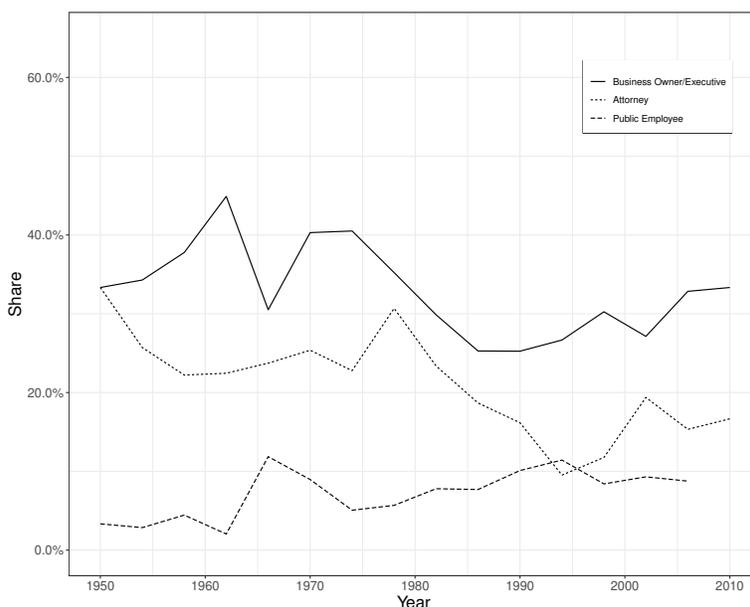


Figure 1 illustrates mayors' most common occupations over time. The horizontal axis measures time, and the vertical axis indicates the share of mayors. The solid line shows the share of business owners and executives, while the dashed and dotted lines trace the share of attorneys and public employees.

levels of government, and exceptions tend to occur in large cities or where a politician can serve in multiple offices at once. For example, mayors from both New York (John Lindsay, Ed Koch) and Los Angeles (Norris Poulson, Sam Yorty) served in Congress prior to their election.

Along with political experience and demographic attributes, occupational experience of candidates provides more detailed information about the mayors that preside over American cities. Although mayoral candidates are drawn from somewhat diverse occupational fields, notably, the most common occupations are white-collar professions. Table 3 shows the distribution of common occupations among mayoral candidates. First, we can note that the distribution of occupations is quite similar for both mayors and runners-up. Business owners and executives account for about 32% of mayors. About 20% are attorneys, and about 13% of these have experience as a prosecutor or city attorney. About 8% of mayors are public sector workers, including city, county, state, and federal employees. Other common occupations include manager or supervisor, educator, healthcare and other professionals, administrator, and homemaker. The majority of educators are school teachers,

Table 2: Experience & Attributes

	Mayors		Runners-up	
	Count	Share	Count	Share
Race & Ethnicity				
White	1110	91.2%	1117	91.8%
Black	67	5.5%	63	5.2%
Latino	32	2.6%	30	2.5%
Asian	8	0.7%	7	0.6%
Gender				
Men	1088	89.4%	1086	89.2%
Women	129	10.6%	131	10.8%
Political Experience				
No Experience	254	20.9%	437	35.9%
City Council	638	52.4%	560	46%
Mayor	607	49.9%	322	26.5%
Incumbent	550	45.2%	239	19.6%
State Legislator	111	9.1%	83	6.8%
County Legislator	34	2.8%	37	3%
US Legislator	15	1.2%	10	0.8%
<i>n</i> = 2434				

The table provides details on the political experience and attributes of all mayoral candidates in the set of complete elections. Some mayors have multiple types of prior political experience, so the sum of the share of candidates with all types of experience exceeds 100%.

and the other professional category is dominated by engineers and accountants, along with several architects and urban planners. Most of the administrators work in either education or the nonprofit sector. Among the occupational outliers are a florist and a baseball scout.

Table 3: Occupational Backgrounds

Occupation	Mayors		Runners-up	
	Count	Share	Count	Share
Business owner/executive	386	31.7%	397	32.6%
Attorney	240	19.7%	203	16.7%
Public employee	96	7.9%	114	9.4%
Manager/supervisor	75	6.2%	70	5.8%
Sales	69	5.7%	61	5%
Educator	66	5.4%	55	4.5%
Administrator	39	3.2%	40	3.3%
Other professional	33	2.7%	38	3.1%
Healthcare professional	20	1.6%	24	2%
Homemaker	18	1.5%	15	1.2%
Other occupations	175	14.4%	200	16.4%
<i>n</i> = 2434				

The table provides details on the occupational experience of all mayoral candidates in the set of complete elections. The occupations included above are the most common among candidates and mayors in the sample.

Candidates and mayors with business executive experience are individuals described as owners or corporate officers (CEO, COO, president, vice-president, treasurer, etc.) of a business or firm engaged in the sale or provision of goods or services for profit. Among the business executive

mayors, several, including Michael Bloomberg, ran large businesses. For example, the so-called “Onion King,” Othel Brand, who was mayor of McAllen, Texas for 20 years, was also co-founder and chairman of Griffin & Brand, Incorporated, a produce processing company and one of the world’s largest onion producers (Bell and Pipitone 2009). John M. Belk, four-term mayor of Charlotte, North Carolina, was the president and CEO of the Belk family’s chain of department stores (Belk n.d.). However, many candidates with executive business experience own or run much smaller local businesses. Common examples include restaurants and food service businesses, real estate and development firms, insurance agencies, and a number of funeral homes.

Although we might tend to think of business owners as Republicans, there are a fair share of Democrats. Because nonpartisan elections are so common, party affiliation is available for only about 69% of all candidates. Among the business owners and executives with known party affiliations, more than 41% are Democrats while about 50% are Republicans. Overall, these new data demonstrate that business owners and executives are exceptionally well represented over time and across cities that vary in region and population.

RDD Results

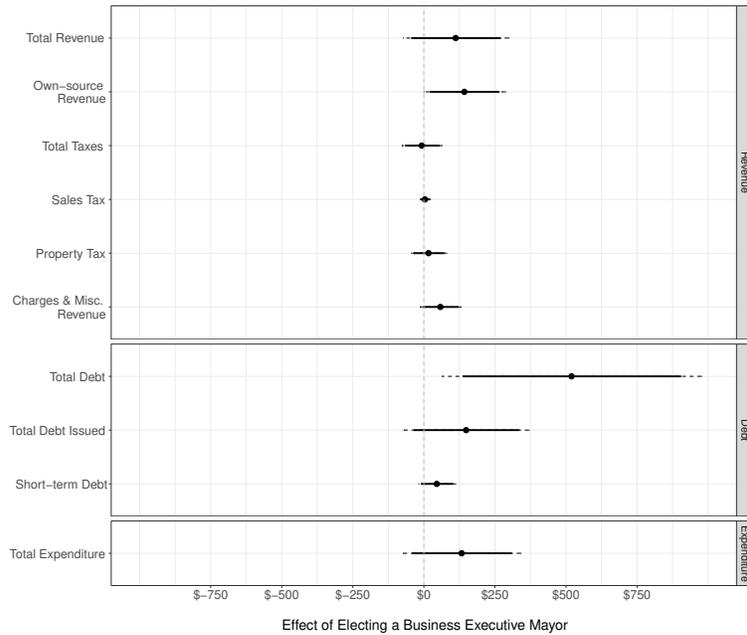
To more rigorously evaluate the effect of electing a business executive on the size of government, I estimate several local linear regression models. Figure 2 presents the results.¹⁷ The horizontal axis is the effect of electing a business executive in per capita dollars, and the vertical axis lists the dependent variables. The dots indicate point estimates from covariate-adjusted local linear regression models that use the optimal bandwidth calculated per Calonico, Cattaneo and Titiunik (2014).¹⁸ The solid bars show 90% confidence intervals, while the dashed extensions show the 95% confidence intervals. I find that electing a business owner or executive has no distinguishable effect

¹⁷Main results are presented in constant dollars and are available in table format in the Supplemental Information (B, C). The Supplemental Information also includes analogous results using dependent variables transformed to logs and measured as differences along with detailed results for multiple RD specifications.

¹⁸Covariates include the value of the dependent variable the year before the election, as well as city-level characteristics (population, racial composition, median household income, and median house value) that may be correlated with fiscal outcomes.

on total revenue or total expenditure. Although the point estimates for both total revenue (\$111.87 per capita, standard error = 94.62) and total expenditure (\$132.87, standard error = 107.15) are positive, neither of these estimates is statistically significant.

Figure 2: Business Executive Mayors & Size of Government



Results of covariate-adjusted local linear regression models using the CCT optimal bandwidths. Covariates include the lagged dependent variable, population, percent of the population that is white, median household income, and median house value. The horizontal axis denotes the effect size in dollars per capita, and the vertical axis lists the dependent variables. Dots represent point estimates, and solid bars illustrate 90% confidence intervals. Dashed extensions indicate the 95% confidence intervals

A perennial promise of business executive candidates, a decrease in taxes is also a central hypothesis drawn from prior studies of urban politics as well as issue positions of prominent business interests. The results presented in Figure 2, however, do not support the expectation that electing a business executive leads to lower taxes. Although the point estimate for total taxes is negative (-\$7.46, standard error = 35.79), it is neither statistically nor substantively significant. Similarly, results for both property taxes (\$16.43, standard error = 31.68) and sales taxes (\$3.64, standard error = 8.96) are small in magnitude and fail to even approach statistical significance. Given these null results, it is surprising to note that Figure 2 also includes an increase in own-source revenue (\$142.39, standard error = 73.15) that is statistically significant at the 10% level ($p =$

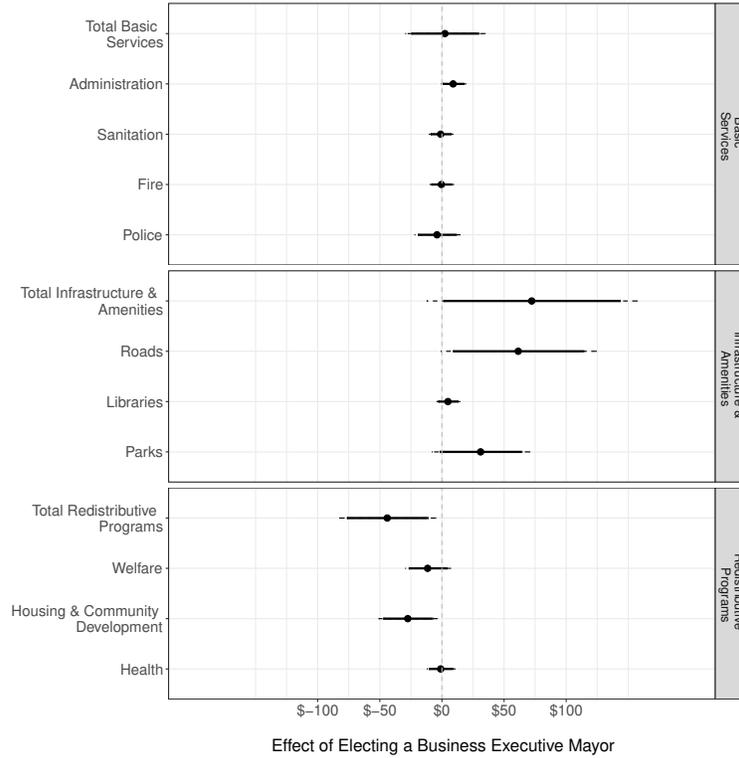
0.053). How could locally raised revenues increase without raising taxes? There is some evidence to suggest that this additional local revenue might come from charges and miscellaneous revenue, which includes charges and user fees for municipal services and facilities. I find an increase of \$58.03 per capita in charges and miscellaneous revenue, an estimate that falls just short of conventional levels of statistical significance (standard error = 36.76, $p = 0.117$). In some alternative specifications (presented in the Supplemental Information, section E), the increase in charges and miscellaneous revenue is statistically significant at the 10% level.

Perhaps the most striking result presented in Figure 2 involves increasing municipal debt. Electing a business owner or executive mayor leads to an increase of \$519.40 (standard error = 232.51) per capita in total debt. This estimate is very large in magnitude and statistically significant; however, a closer examination suggests the result is likely driven by a small number of cities with particularly large values (including New York, NY). Alternative specifications in which the dependent variable is operationalized as change in total debt per capita yield similar results, but when the level of debt per capita is transformed to its log, the estimate falls far short of statistical significance. Estimates for all specifications can be found in the Supplemental Information along with RD plots and additional details. Because this result is not robust across specifications, it should be interpreted with caution. Across specifications, results for all debt measures provide little evidence to suggest that business owners and executives reduce municipal debt.

Figure 3 plots RDD estimates of the effect of electing a business owner or executive mayor (horizontal axis) on city spending across a number of categories (vertical axis).¹⁹ Results in the top panel indicate that electing a business executive mayor has little effect on spending for essential services such as police, fire, and sanitation or for the total of spending on these basic services. These results are consistent with the expectation that business executives will maintain essential services; however, I do find an increase of \$9.00 (standard error = 5.04) per capita in spending on financial administration. While this estimate is statistically significant at the 10%

¹⁹Note that each panel in Figure 3 includes the total spending for its class (Total Basic Services, Total Infrastructure and Amenities, and Total Redistributive Programs). Unlike the Total Revenue and Total Expenditure variables in Figure 2, these variables are not provided with the municipal finance data. Instead, the value of each is equal to the sum of of the spending categories within it.

Figure 3: Business Executive Mayors & Spending by Policy Area



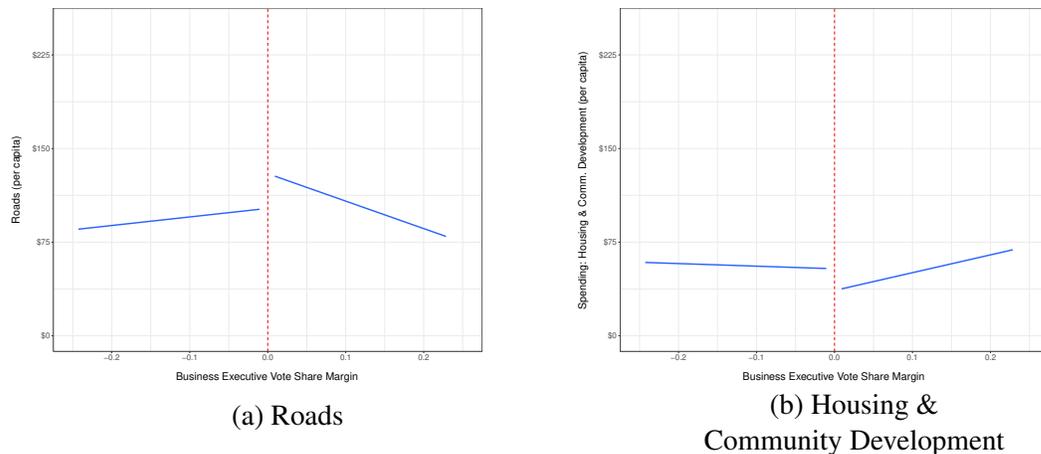
Results of covariate-adjusted local linear regression models using the CCT optimal bandwidths. Covariates include the lagged dependent variable, population, percent of the population that is white, median household income, and median house value. The horizontal axis denotes the effect size in dollars per capita, and the vertical axis lists the dependent variables. Dots represent point estimates, and solid bars illustrate 90% confidence intervals. Dashed extensions indicate the 95% confidence intervals

level, this relatively small effect is somewhat sensitive to the choice of RD specification (see the Supplemental Information for details).

The middle panel of Figure 3 offers evidence consistent with the expectation that business owners and executives will invest in infrastructure and amenities. Electing a business owner or executive leads to an increase of about \$72 per capita in spending on infrastructure and amenities. This result, which is statistically significant at the 10% level, seems mainly to reflect an increase of \$61.39 (standard error = 31.85, p -value = 0.055) in spending on roads. This relationship is evident in Figure 4(a), which plots per-capita roads spending against the executive vote-share margin. The dashed vertical line at 0 on the x -axis marks the threshold in the forcing variable. Observations to the left of this cutpoint are cases where the business executive candidate lost (i.e.,

had a negative vote margin), and observations with positive values of the forcing variable are cities that elected a business executive. The points show binned averages values of total revenue measured in constant per capita dollars. Linear regression lines plot the relationship between the forcing variable and total revenue on either side of the threshold. These results provide some suggestive evidence that business owners and executives may increase spending on parks as well (by about \$31 per capita, standard error 20.03). While the results for parks are somewhat sensitive to the choice of specification, similar results provide more robust evidence that electing a business executive leads to increased spending directed to roads. A small increase in spending on libraries fails to approach conventional levels of statistical significance. Spending on highways and roads can improve transportation and accessibility, attracting residents and businesses and generating economic benefits while parks and recreation can provide amenities that make a community more attractive, perhaps even contributing to a stronger tax base (Peterson 1981).

Figure 4: Spending by Category



Graphs plot the relationship between the dependent variable and the forcing variable. The x -axis is business executive vote-share margin, and the y -axis is the value of the dependent variable in dollars per capita. Points are binned averages (bin size = 0.02).

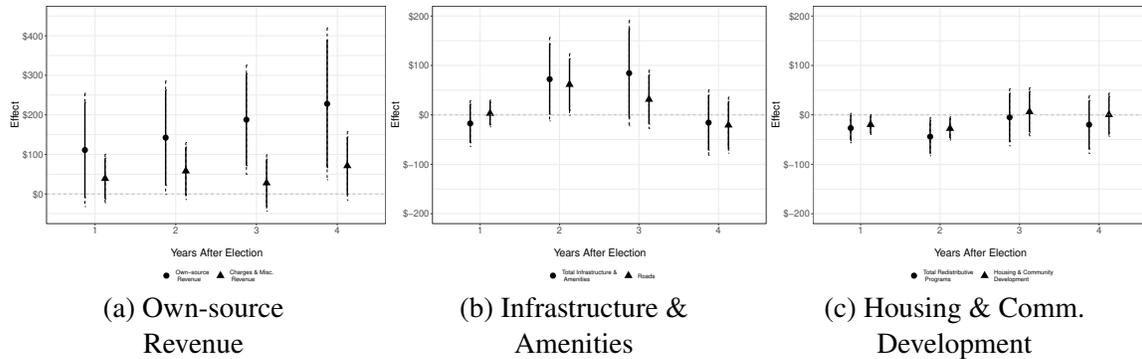
In contrast to increasing spending on infrastructure and amenities, the estimates of the effect of electing a business executive on redistributive policies are uniformly negative, largely consistent with policy choices we would expect from business owners and executives. I find a significant decrease in spending on housing and community development, which can include spending on

public housing, as well as economic development projects, community centers, homeowner assistance, and other initiatives to assist low-income residents. Along with public health and welfare expenditures, housing and community development spending is typically redistributive in nature (Peterson 1981; Hajnal 2010). Electing a business executive mayor leads to a decrease of \$27.51 per capita in total spending allocated to housing and community development (standard error = 11.95). Illustrated by Figure 4(b), which plots per-capita spending on housing against the executive vote-share margin, this relationship is robust across a range of alternative specifications. Electing a business executive mayor appears to have no statistically significant effect on health or welfare spending, yet expenditures in these categories also are quite small relative to spending in other policy areas (in the sample, the mean total expenditures allocated to health is \$21 per capita and mean spending on welfare is \$22 per capita, compared to \$52 per-capita for housing). Notably, electing a business owner or executive mayor does lead to a decrease in total spending on these redistributive programs.

Overall, I find no indication that business executive mayors reduce the overall size of government, but the RDD results provide strong and consistent evidence that business executive mayors are associated with lower levels of spending allocated to housing and community development. Moreover, the results of the spending analysis suggest that decreases in this redistributive category are accompanied by increased expenditures for infrastructure and amenities, such as roads and parks. These results are consistent with the notion that business executives prefer lower taxes and limited redistribution along with high-quality services and amenities that can make a city attractive to businesses and residents. With evidence of an increase in local revenue driven in part by fees and charges, these findings also comport with the hypothesis that business executives will pursue policy preferences for regressive revenue sources and restricting tax increases without compromising core municipal services and amenities. Interestingly, the increase in own-source revenue seems to be the most durable effect of electing a business owner or executive mayor. Figure 5 shows estimates of treatment effects in the four years following an election. The first panel indicates that higher levels of own-source revenue emerge early and persist over time. In contrast, decreases in redistributive spending seem to fade in the third year after electing a business owner or executive mayor while

increases in infrastructure are evident only in the second or third year after the election of a business owner or executive.

Figure 5: Effects Over Time



Results of covariate-adjusted local linear regression models using the CCT optimal bandwidths. Covariates include the lagged dependent variable, population, percent of the population that is white, median household income, and median house value. The horizontal axis denotes year after the election, and the vertical axis indicates the effect size in dollars per capita. Dots represent point estimates, and solid bars illustrate 90% confidence intervals. Dashed extensions indicate the 95% confidence intervals

The Role of Party

One potential concern about these results is the possibility that the effects of electing a business executive reflect mayors' political party affiliations rather than their experience in business. Though it is true that more business owners and executives in the sample are Republicans, many Democrats also own or operate businesses. In the overall sample of 2,434 candidates, there are 790 business owners and executives. Of these, 33.5% are Republicans (compared to 25% among candidates without experience as a business owner or executive), 28% are Democrats (compared to 40% among others), 6% are independent or affiliated with other parties (compared to 5% among others), and for the remainder (32.5% among business executives, 30% among other candidates) no party affiliation is unobserved. Comparing business owners and executives to candidates with other occupational backgrounds, the distribution of candidates across the party categories is systematically different ($\chi^2 = 40.002, p = < 0.001$).

Evidence of a statistically significant link between partisanship and owning or running a business suggests that it may not be possible to fully disentangle the effect of owning a business from party

identification. This challenge is further complicated in two ways by the nonpartisan electoral institutions so common at the local level. First, party affiliation is unobserved for more than 30% of candidates in the dataset because party labels do not appear on the ballot—i.e., not because these candidates have no party affiliation. Indeed, in some nonpartisan elections, partisanship is observed, which leads to the second wrinkle, which is that some races (about 17%) feature two candidates of the same party.

Although it may not be feasible to isolate the effect of a business executive background from partisanship, I can offer evidence which suggests that the effects of electing a business owner or executive are not equivalent to the effects of electing a Republican. To do so, I estimate the effect of electing a Republican mayor on the same fiscal outcomes analyzed above. Republicans tend to be more conservative than Democrats generally in terms of ideology scores (e.g. Poole and Rosenthal 1997; McCarty, Poole and Rosenthal 2006; Shor and McCarty 2011) and also specifically in terms of preferences over municipal fiscal policy (Einstein and Glick 2018). In cities, de Benedictis-Kessner and Warshaw (2016) find that electing a Democrat instead of a Republican mayor leads to an increase in the size of government that seems to be spread across spending in a variety of policy areas. Based on prior research, we should expect that Republican mayors likely shrink the size of government—or at least prevent its growth. Lower revenues and lower total expenditures, in turn, suggest that Republican mayors also may decrease spending in some areas.

To identify the effect of electing a Republican, I use nearly identical local linear specifications (using the same dependent variables and covariates), but the forcing variable is the Republican candidate's vote margin with a sharp threshold at 0. In this analysis, I include elections based on candidates' partisanship regardless of their occupational backgrounds. Figure 6 presents the results in coefficient plots analogous to those above with dependent variables listed on the vertical axes. Here, the horizontal axes measure the effect of electing a Republican (instead of a Democrat). The dots are point estimates for the subset of the data that includes elections where a Republican faced a Democrat, and the error bars indicate 90% confidence intervals with dashed lines to show

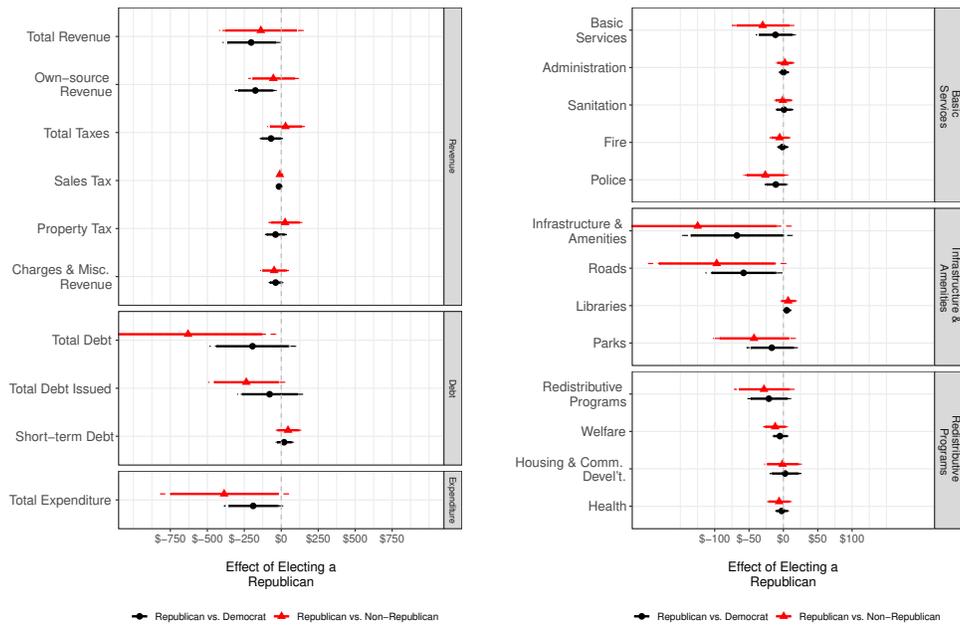
95% confidence intervals. These these results look quite different from the estimates of the effect of electing a business owner or executive. Indeed, they are quite consistent overall with findings from de Benedictis-Kessner and Warshaw (2016). These results suggest that Republican mayors do, in fact, shrink the size of government, decreasing both revenues and expenditures. They also appear to cut spending on roads while changes in housing and community development are quite small and not statistically significant.

Figure 6 also reports a second set of coefficients, generated by the same local linear specifications but including all elections in which a Republican faced a candidate who is not identified as a Republican (i.e., affiliated with another party, independent, or party unknown). These results are quite similar if a bit noisier than those from a subsample restricted to two-party races. Additional details on these results and alternative specifications are included in the Supplemental Information (F). Although I cannot rule out the possibility that my estimates of the effect of electing a business executive also reflect the influence of partisanship, these analyses substantially mitigate concerns that the effects attributed to business executives simply capture the influence of political party.

Conclusion

In June, 2004, the city council of Wilmington, North Carolina, approved a \$122 million budget that included a property tax rate cut. At the time, city council member Katherine Moore “commended the mayor [Spence Broadhurst] for putting together a budget that offers the citizens a tax break without remarkable cuts in services or capital projects” (Gannon 2004). To offset the lost revenue, the spending plan increased a range of fees and charges, including water and sewer fees, municipal golf course fees, parking rates, and junk vehicle fees. Increasing municipal fees and charges is hardly unusual. Indeed, the National League of Cities, in 2013, reported that “for much of the past two decades, regardless of the state of national, regional, or local economies, the most common action taken to boost city revenues has been to increase the amount of fees charged for services” (Pagano and Hoene 2008). A tradeoff between fees and taxes may be less common, although

Figure 6: Republicans



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Matusaka (2004) finds that direct democracy, at both the state and city levels, is associated with a similar shift in revenue sources—from taxes to user fees and charges. The analysis presented here provides some suggestive evidence that mayors with executive business experience also may be more likely to shape policies that resemble those of Wilmington, decreasing or maintaining local taxes and increasing municipal fees and charges to bolster revenues from local sources.

With original data on mayoral candidates backgrounds, this study sheds new light on the mayors who serve in America’s city halls. These data reveal that mayors are not a very diverse group. They tend to be white and male with white-collar occupations. Business executives are especially well represented, accounting for about 32% of mayors in a sample of 248 U.S. cities. Leveraging the “as-if random” treatment assignment that arises from close elections, I estimate the causal effect of narrowly electing a mayor with executive business experience on a number of local fiscal outcomes. I find that business executive mayors do not cut total revenues

or total expenditures. Business executive mayors do, however, preside over systematic changes in spending. Electing a business executive mayor leads to a lower levels of spending allocated to housing and community development and greater city spending on roads.

As we might expect given the formal and informal constraints they face, business executive mayors do not dramatically influence the overall size of local government. Yet, like political leaders in other contexts, mayors with executive business experience do shape municipal fiscal policy in important and measurable ways by shifting spending priorities. Notably, these policy changes have implications for the distribution of both costs and benefits of local government. To the extent that cities increase their reliance on regressive fees and charges and decrease spending on housing programs, they limit the potential for redistribution. Although allocating additional funds to roads and parks may benefit citizens broadly, cuts to housing and community development likely affect poor and working-class residents disproportionately. That is, spending cuts may have the greatest impact on those who have the fewest resources to “vote with their feet” and move to another city that provides more or different services and programs.

Electing a business owner or executive to the office of mayor leads to changes in fiscal policy consistent with the types of policy choices that Peterson (1981) suggests are necessary to attract businesses and high-income taxpayers. Such policies should promote economic vitality and strengthen the local tax base. Future research might examine the downstream effects of business executive mayors. Is there evidence of greater economic growth or a stronger tax base? What are the implications of these policy changes for low-income residents? Some survey evidence indicates that at the local level, the public prefers service-based charges to taxes (Matsusaka 2004). At the same time, reliance on revenue from fees and charges as opposed to taxes also may have implications for fiscal management and health because restrictions on the use of fee-based revenue may limit local leaders discretion and flexibility in managing a city’s fiscal affairs and exacerbate fiscal challenges (Erie, Kogan and MacKenzie 2011). Is there a link between who serves as mayor and cities’ fiscal health? Finally, this study challenges the notion that local leaders and local politics are largely inconsequential and should encourage researchers to further consider how the leaders

voters select matter to policy choices and outcomes—even at the local level.

Although this study is, to my knowledge, the first to identify the causal effect of electing a business owner or executive, the magnitude of the impact may seem relatively small in absolute terms. The office of mayor, however, is just one avenue of influence for business owners and executives. For example, Carnes (2013) finds lower levels of spending on social welfare programs in cities where business owners and executives make up the majority of city council. Beyond the local level, business owners and executive commonly serve as state legislators and governors, though current data limitations make it difficult to assess fully their numbers or their effect on public policy. We know more about members of Congress— about 31% of the Members of Congress who served during the 106th to 110th congresses had experience as a business owner or executive (per CLASS Dataset, Carnes (2016)), but there are still many open questions. Perhaps most notably, a careful focus on causality and a shift to other policy areas might advance our understanding of the consequences of electing so many business owners and executives. My findings, however, certainly suggest that business owners and executives in elected office warrant additional to better understand not only their influence but also why they run and why voters elect them.

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Supplemental Information
Business Owners and Executives as Politicians: The
Effect on Public Policy

September 21, 2019

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A Validity of the RDD

The “no sorting” assumption is the key identifying assumption of the RDD—that potential outcomes are smooth across the discontinuity. I tested the validity of the assumption in several ways. After examining the distribution of the rating variable, which is displayed in Figure A.1, I tested the density of the rating variable at the threshold per McCrary (2008) and failed to reject the null hypothesis of no sorting (log difference in heights is -0.187 with SE 0.202 ; $p = 0.355$). An alternative local polynomial density technique from Cattaneo, Jansson and Ma (2019) also yields no evidence of manipulation around the cutpoint ($p = 0.187$). Finally, I also conducted a series of placebo tests. I used local linear regression models similar to those described in the main text but substituted several pre-treatment covariates as dependent variables to check for a discontinuity at the cutpoint in the rating variable. Covariates include population, the percent of the population that is white, the level of unemployment, the home ownership rate, median household income and an indicator for mayor-council form of government. I also analyze several lagged dependent variables. The results are displayed in Tables A.1 and A.2 and provide support for the validity of the RDD. In each model, the coefficient for Executive Mayor fails to reach statistical significance, suggesting covariates are not discontinuous at the threshold.

Figure A.1: Distribution of Rating Variable

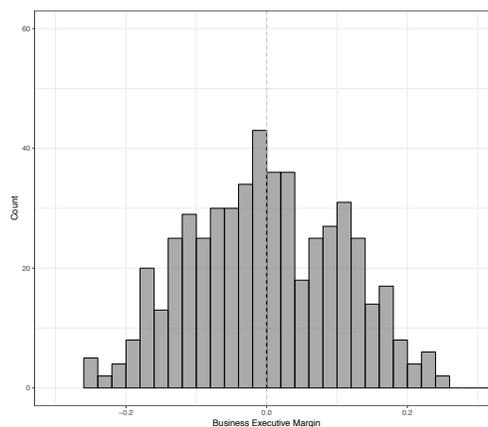


Table A.1: Placebo Tests

	Coefficient	Std. Error	<i>p</i> -value	Bandwidth
Optimal Bandwidth				
Total Revenue (per-capita, lagged)	217.254	(316.562)	0.493	0.104
Total Expenditures (per-capita, lagged)	320.576	(347.274)	0.357	0.101
Total Taxes (per-capita, lagged)	97.527	(102.129)	0.341	0.094
Municipal Form	0.157	(0.122)	0.198	0.090
Population (in thousands)	109.463	(213.204)	0.608	0.105
Percent White	4.980	(4.269)	0.245	0.078
Unemployment Rate	-0.585	(0.603)	0.333	0.076
Home-ownership Rate	-1.155	(3.169)	0.716	0.049
Median Household Income	-7.909	(3197.434)	0.998	0.077
Median House Value (\$ in thousands)	-25.351	(16.484)	0.125	0.091
5% Bandwidth				
Total Revenue (per-capita, lagged)	520.887	(454.980)	0.254	0.050
Total Expenditures (per-capita, lagged)	692.504	(506.563)	0.174	0.050
Total Taxes (per-capita, lagged)	183.662	(122.274)	0.135	0.050
Municipal Form	0.169	(0.158)	0.288	0.050
Population (in thousands)	183.134	(207.415)	0.379	0.050
Percent White	4.462	(5.243)	0.396	0.050
Unemployment Rate	-0.408	(0.742)	0.583	0.050
Home-ownership Rate	-1.088	(3.161)	0.731	0.050
Median Household Income	708.835	(3920.196)	0.857	0.050
Median House Value (\$ in thousands)	-30.508	(22.090)	0.169	0.050

Note: Estimated using local linear regression. Robust standard errors reported. Optimal bandwidths calculated per Calonico, Cattaneo and Titiunik (2014) using `rdrobust`.

Table A.2: Placebo Tests
with Robust Bias-Corrected Confidence Intervals

	Coefficient	Confidence Interval	<i>p</i> -value	Bandwidth
Total Revenue (per-capita, lagged)	217.256	[-496.226, 1058.050]	0.479	0.104
Total Expenditures (per-capita, lagged)	320.601	[-454.283, 1263.252]	0.356	0.101
Total Taxes (per-capita, lagged)	97.495	[-132.082, 366.792]	0.356	0.094
Municipal Form	0.157	[-0.081, 0.453]	0.173	0.090
Population (in thousands)	109.446	[-332.252, 605.219]	0.568	0.105
Percent White	4.979	[-3.025, 14.363]	0.201	0.078
Unemployment Rate	-0.585	[-1.930, 0.727]	0.375	0.076
Home-ownership Rate	-1.160	[-10.123, 4.890]	0.494	0.049
Median Household Income	-8.266	[-7864.180, 7552.968]	0.968	0.077
Median House Value (\$ in thousands)	-25.346	[-70.351, 11.315]	0.157	0.091

Note: Estimated using local linear regression. Optimal bandwidth and robust confidence intervals calculated with `rdrobust`.

B Results

Table B.3 provides details of the results depicted in Figure 3 of the main text, and Table B.4 provides details of the results presented in Figure 4. Dependent variables are measured in constant (2000) per-capita dollars, and the effects of electing a business executive mayor are estimated using local linear regression, the optimal bandwidth calculated per Calonico, Cattaneo and Titiunik (2014), and several covariates (population, racial composition, median household income, median house value, and the lagged dependent variable).

Table B.3: Size of Government (Figure 3 of the main text)

	Coefficient	Std. Error	<i>p</i> -value	Bandwidth	<i>n</i>
Total Revenue	124.05	101.650	0.224	0.066	183
Own-Source Revenue	151.68	80.850	0.063	0.056	154
Total Taxes	-11.98	35.730	0.738	0.083	213
Sales Taxes	1.95	9.230	0.833	0.053	148
Property Taxes	14.37	31.320	0.647	0.074	198
Charges & Misc. Revenue	56.05	36.930	0.131	0.057	155
Total Debt	279.77	547.630	0.610	0.084	214
Debt Issued	142.33	108.330	0.190	0.074	198
Short-Term Debt	47.95	31.500	0.130	0.062	167
Total Expenditure	135.42	107.150	0.208	0.093	236

Note: Estimated using local linear regression with covariates. Robust standard errors. Dependent variables are measured in dollars per-capita; *n* is the number of observations within the optimal bandwidth.

Table B.4: Spending by Category (Figure 4 of the main text)

	Coefficient	Std. Error	<i>p</i> -value	Bandwidth	<i>n</i>
Police	-5.47	9.950	0.583	0.074	198
Fire	-1.33	5.030	0.792	0.083	213
Sanitation	-1.12	5.050	0.825	0.076	195
Administration	8.33	4.930	0.093	0.074	182
Roads	62.30	31.790	0.052	0.079	202
Parks	35.81	22.010	0.105	0.082	211
Libraries	4.68	4.620	0.313	0.047	128
Health	-1.27	5.860	0.829	0.063	168
Welfare	-5.39	6.150	0.382	0.107	268
Housing	-26.04	11.290	0.023	0.055	150

Note: Estimated using local linear regression with covariates. Robust standard errors. Dependent variables are measured in dollars per-capita; *n* is the number of observations within the optimal bandwidth.

C Size of Government: Alternative Specifications

In the Results section of the main text, all dependent variables are measured in constant per capita dollars, and the effects of electing a business executive mayor are estimated using local linear regression with the optimal bandwidth. Tables C.5, C.6, C.7 present the results of several alternative specifications. These include “base models” with no covariates estimated using the optimal bandwidth and with a 5% bandwidth (models 1 and 2, respectively), as well as covariate-adjusted models using both the optimal bandwidth and a bandwidth of 5% (models 3 and 4, respectively). As expected, including covariates consistently produces more precise estimates.

Table C.5: Effect of Electing a Business Executive on Size of Government

Dependent Variable	Mean & Std. Dev.	(1)	(2)	(3)	(4)
Total Expenditures	1,506.89 (1,053.30)	532.35 (373.63)	856.72 (548.11)	135.42 (107.14)	102.56 (158.14)
Bandwidth Observations		0.099 266	0.050 151	0.093 236	0.050 143
Total Revenues	1,495.28 (995.39)	400.29 (334.30)	649.83 (454.73)	124.05 (101.62)	108.54 (108.81)
Bandwidth Observations		0.092 251	0.050 151	0.066 184	0.050 143
Total Debt	1,765.33 (1,478.05)	245.03 (542.59)	404.17 (731.95)	279.79 (547.65)	374.27 (754.69)
Bandwidth Observations		0.082 227	0.050 151	0.084 214	0.050 143
Covariates		No	No	Yes	Yes

Note: The table presents results of local linear regression models with robust standard errors. Models 1 and 2 include the treatment variable, forcing variable, and the interaction of the two. Models 2 and 4 add pre-treatment covariates. Models 2 and 4 use a bandwidth of 0.05 while models 1 and 3 use the optimal bandwidth calculated per Calonico, Cattaneo and Titiunik (2014) (noted for each dependent variable). All dependent variables are measured in constant per-capita dollars. *p<0.1; **p<0.05

Table C.6: Effect of Electing a Business Executive on Municipal Revenue

Dependent Variable	Mean & Std. Dev.	(1)	(2)	(3)	(4)
Own-source Revenues	1,169.35 (748.06)	196.35 (222.21)	361.58 (277.90)	151.64* (80.83)	158.45* (83.75)
Bandwidth		0.081	0.050	0.056	0.050
Observations		222	151	154	143
Total Taxes	556.18 (383.23)	110.75 (102.81)	195.85 (126.29)	-11.97 (35.72)	-12.29 (47.97)
Bandwidth		0.093	0.050	0.083	0.050
Observations		252	151	213	143
Property Taxes	371.26 (357.42)	197.44** (88.13)	278.41*** (106.54)	14.37 (31.31)	22.38 (38.13)
Bandwidth		0.080	0.050	0.074	0.050
Observations		219	151	198	143
Sales Taxes	126.95 (132.27)	-40.74 (32.31)	-45.35 (35.86)	1.94 (9.23)	1.27 (9.27)
Bandwidth		0.073	0.050	0.053	0.050
Observations		210	151	148	143
Charges & Misc. Revenue	315.62 (261.18)	108.54 (100.78)	177.72 (127.24)	56.04 (36.93)	62.60 (38.52)
Bandwidth		0.071	0.050	0.057	0.050
Observations		207	151	155	143
Covariates		No	No	Yes	Yes

Note: The table presents results of local linear regression models with robust standard errors. Models 1 and 2 include the treatment variable, forcing variable, and the interaction of the two. Models 2 and 4 add pre-treatment covariates. Models 2 and 4 use a bandwidth of 0.05 while models 1 and 3 use the optimal bandwidth calculated per Calonico, Cattaneo and Titiunik (2014) (noted for each dependent variable). All dependent variables are measured in constant per-capita dollars. *p<0.1; **p<0.05

Table C.7: Effect of Electing a Business Executive on Municipal Debt

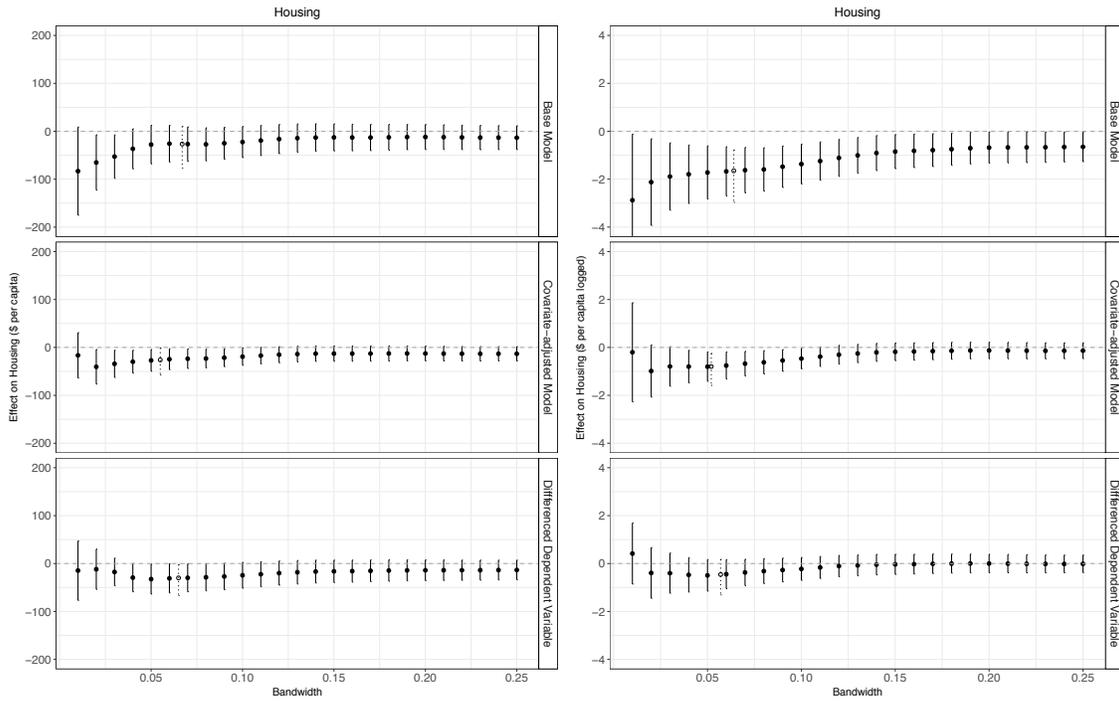
Dependent Variable	Mean & Std. Dev.	(1)	(2)	(3)	(4)
Debt Issued	251.45 (370.93)	208.69 (149.25)	212.66 (201.01)	142.34 (108.33)	94.64 (123.65)
Bandwidth		0.083	0.050	0.074	0.050
Observations		229	151	198	143
Short-term Debt	60.68 (194.71)	35.28 (46.06)	86.05* (45.92)	47.97 (31.51)	58.96* (33.67)
Bandwidth		0.080	0.050	0.062	0.050
Observations		220	151	167	143
Covariates		No	No	Yes	Yes

Note: The table presents results of local linear regression models with robust standard errors. Models 1 and 2 include the treatment variable, forcing variable, and the interaction of the two. Models 2 and 4 add pre-treatment covariates. Models 2 and 4 use a bandwidth of 0.05 while models 1 and 3 use the optimal bandwidth calculated per Calonico, Cattaneo and Titiunik (2014) (noted for each dependent variable). All dependent variables are measured in constant per-capita dollars. *p<0.1; **p<0.05

D Spending: Sensitivity to Bandwidth and Alternative Specifications

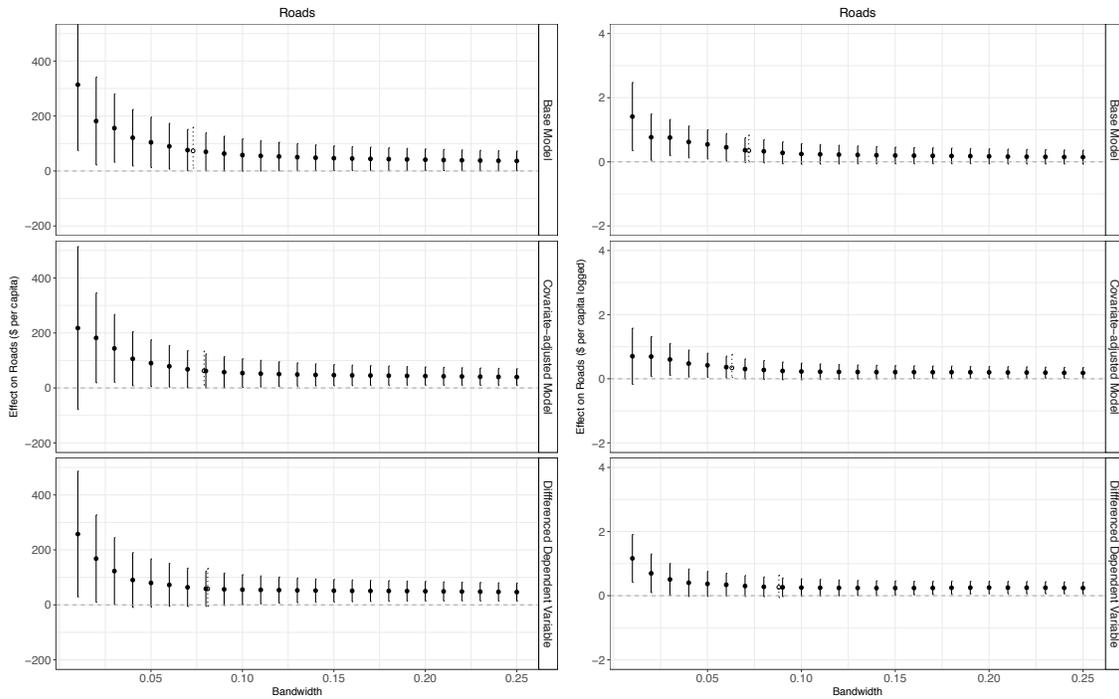
Figures D.2 and D.3 present estimates of the effects of electing a business executive on spending at multiple bandwidths using different operationalizations of the dependent variables. These figures includes point estimates with 95% confidence intervals constructed using robust standard errors for housing (D.2(a) and D.2(b)), roads (D.2(c) and D.2(d)), administration (D.3(a) and D.3(b)), and parks (D.3(c) and D.3(d)). For each dependent variable, the first column includes three panels containing an unadjusted basic model, a covariate adjusted model, and a differenced dependent variable model. The second column contains similar specifications using logs of all fiscal outcomes. In each plot, the open point and dotted lines represent the point estimate and robust bias-corrected confidence interval at the MSE-optimal bandwidth (estimated per Calonico, Cattaneo and Titiunik (2014) using the `rdrobust` package in R). At narrower bandwidths, the estimates tend to be larger and noisier, but as the bandwidth increases the estimates are quite stable. Note that the finding presented in the Results section of the main text are quite robust to alternative specifications.

Figure D.2: RD Estimates at Multiple Bandwidths



(a) Housing
Spending—per-capita dollars

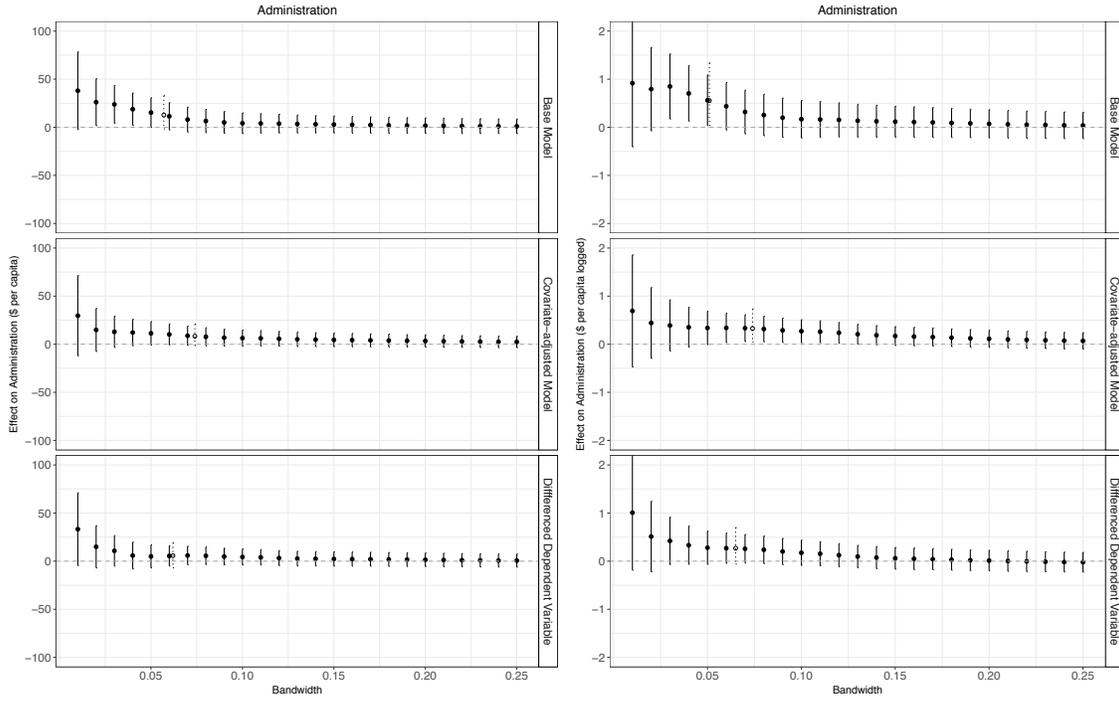
(b) Housing
Spending—log of per-capita dollars



(c) Roads
Spending—per-capita dollars

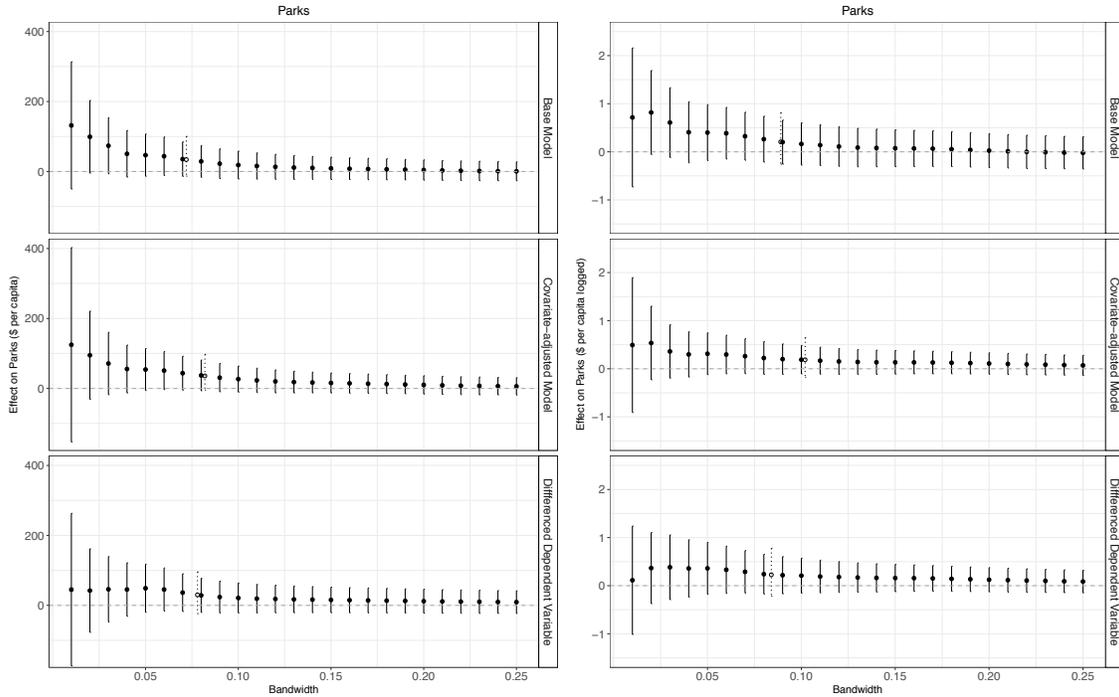
(d) Roads
Spending—log of per-capita dollars

Figure D.3: RD Estimates at Multiple Bandwidths



(a) Administration
Spending—per-capita dollars

(b) Administration
Spending—log of per-capita dollars



(c) Parks
Spending—per-capita dollars

(d) Parks
Spending—log of per-capita dollars

D.1 Spending Shares

While I use absolute per-capita spending to measure fiscal policy priorities, an alternative operationalization of spending is as a share of total expenditures. Table includes the results of an RD analysis in which the spending dependent variables are operationalized as shares. The decrease in the share of spending allocated to housing seems especially robust, but for roads and parks, note that statistical significance varies across models. Overall, however, the findings presented here are largely consistent with the main results

Table D.8: Spending Shares

	Coefficient	Std. Error	<i>p</i> -value	Bandwidth	Specification
Police	-0.045	0.018	0.015	0.05	Base Model
Police	-0.010	0.009	0.275	0.05	Covariate-adjusted
Police	-0.007	0.009	0.466	0.05	Differenced DV
Fire	-0.007	0.014	0.613	0.05	Base Model
Fire	-0.004	0.005	0.372	0.05	Covariate-adjusted
Fire	-0.005	0.006	0.424	0.05	Differenced DV
Administration	0.003	0.005	0.611	0.05	Base Model
Administration	0.007	0.005	0.171	0.05	Covariate-adjusted
Administration	0.007	0.007	0.294	0.05	Differenced DV
Sanitation	-0.005	0.008	0.559	0.05	Base Model
Sanitation	-0.000	0.006	0.964	0.05	Covariate-adjusted
Sanitation	-0.001	0.008	0.911	0.05	Differenced DV
Roads	0.011	0.024	0.639	0.05	Base Model
Roads	0.028	0.022	0.203	0.05	Covariate-adjusted
Roads	0.042	0.021	0.045	0.05	Differenced DV
Parks	-0.001	0.015	0.928	0.05	Base Model
Parks	0.011	0.014	0.438	0.05	Covariate-adjusted
Parks	0.024	0.014	0.081	0.05	Differenced DV
Libraries	0.001	0.003	0.680	0.05	Base Model
Libraries	-0.000	0.003	0.930	0.05	Covariate-adjusted
Libraries	-0.002	0.003	0.420	0.05	Differenced DV
Health	-0.004	0.005	0.426	0.05	Base Model
Health	-0.000	0.002	0.917	0.05	Covariate-adjusted
Health	-0.000	0.002	0.893	0.05	Differenced DV
Housing	-0.039	0.018	0.034	0.05	Base Model
Housing	-0.028	0.010	0.006	0.05	Covariate-adjusted
Housing	-0.026	0.010	0.014	0.05	Differenced DV
Welfare	0.006	0.006	0.279	0.05	Base Model
Welfare	-0.003	0.003	0.444	0.05	Covariate-adjusted
Welfare	-0.006	0.006	0.347	0.05	Differenced DV

Note: Estimated using local linear regression with bandwidth of 0.05 and robust standard errors. Dependent variables measured as their share of total expenditures.

E Alternative Estimation Strategy

Among the most recent studies and RDD guides, some advocate the use of robust bias-corrected confidence intervals in combination with local linear regression and MSE-optimal bandwidths (For a discussion of using robust bias-corrected confidence intervals for inference, see Calonico, Cattaneo and Titiunik (2014) or Cattaneo, Idrobo and Titiunik (2019), or for a recent application see de Benedictis-Kessner and Warshaw (2016)). In the main text, I opt to present conventional robust standard errors partly because this approach seems better suited to presenting results at multiple bandwidths. However, I have conducted comparable analyses that incorporate robust bias-corrected confidence intervals, and the results are substantively similar. To facilitate comparison, the results presented in Tables E.9 and E.10 were estimated using the same covariates used in the main analyses (population, racial diversity, median household income, median house value, and the lagged dependent variable). Note the marginal increases in own-source revenue as well as charges and miscellaneous revenue. When it comes to spending, an increase in spending on roads is accompanied by a decrease in spending for housing and community development, and increases in spending on parks and administration are statistically significant at the 10% level.

Table E.9: Size of Government

with Robust Bias-Corrected Confidence Intervals

	Coefficient	Robust Confidence Interval	<i>p</i> -value	Bandwidth	<i>N</i>	Mean	Standard Deviation
Total Revenue	124.05	[-122.79, 388.29]	0.309	0.066	181	1495.28	995.39
Total Own-Source Revenue	151.68	[-3.69, 362.54]	0.055	0.056	154	1169.35	748.06
Total Taxes	-11.98	[-104.00, 82.39]	0.820	0.083	213	556.18	383.23
Sales Taxes	1.95	[-17.38, 21.89]	0.822	0.053	148	126.95	132.27
Property Taxes	14.37	[-62.57, 102.94]	0.633	0.074	197	371.26	357.42
Charges & Misc. Revenue	56.05	[-8.64, 142.63]	0.083	0.057	155	315.62	261.18
Total Debt	279.77	[-705.35, 1569.02]	0.457	0.084	214	1765.33	1478.05
Debt Issued	142.33	[-145.95, 463.36]	0.307	0.074	197	251.45	370.93
Short-term Debt	47.95	[-14.97, 133.82]	0.117	0.062	168	60.68	194.71
Total Expenditures	135.42	[-127.08, 430.05]	0.287	0.093	234	1506.89	1053.30

Note: Estimated using local linear regression with covariates. Optimal bandwidth and robust confidence intervals calculated with `rdrrobust`. Dependent variables are measured in dollars per-capita; *n* is the number of observations within the optimal bandwidth.

F The Role of Party

In the Results section of the main text, I consider the possibility that what I describe as the effect of electing a business executive is actually the effect of electing a Republican mayor. To address this

Table E.10: Spending by Category
with Robust Bias-Corrected Confidence Intervals

	Coefficient	Robust Confidence Interval	<i>p</i> -value	Bandwidth	<i>N</i>	Mean	Standard Deviation
Roads	62.30	[10.87, 133.63]	0.021	0.079	202	103.30	73.65
Parks	35.81	[-4.70, 97.19]	0.075	0.082	210	72.74	71.27
Administration	8.33	[-1.37, 20.93]	0.086	0.074	182	27.32	21.32
Libraries	4.68	[-3.20, 15.30]	0.200	0.047	129	17.12	20.78
Health	-1.27	[-17.40, 11.02]	0.660	0.063	167	21.03	60.62
Fire	-1.33	[-11.91, 12.74]	0.947	0.083	213	95.24	48.21
Sanitation	-1.12	[-12.49, 12.65]	0.990	0.076	195	41.49	32.10
Welfare	-5.39	[-23.88, 10.76]	0.458	0.107	268	22.18	76.94
Police	-5.47	[-30.08, 18.27]	0.632	0.074	197	144.96	74.69
Housing	-26.04	[-57.44, -1.23]	0.041	0.055	151	51.51	75.92

Note: Estimated using local linear regression with covariates. Optimal bandwidth and robust confidence intervals calculated with `rdrobust`. Dependent variables are measured in dollars per-capita; *n* is the number of observations within the optimal bandwidth.

concern, I focus on the subset of elections where both candidates' party affiliations are observed and different. Using this subset, I replicate my main RD analyses to estimate the effect of electing a business executive. I display selected results in the main text, but the full results are presented below.

F.1 Effect of Electing a Business Executive

Tables F.11, F.12, F.13, and F.14 include the full results of an RD analysis of the effect of electing a business executive. Note that the number of observations is quite small, which leads to rather noisy estimates. However, the increase in spending on roads and decrease in spending on housing and community development are still apparent.

Table F.11: Size of Government—Two-party Subset

Dependent Variable	Mean & Std. Dev.	(1)	(2)	(3)	(4)
Total Revenues	1,591.96 (1,133.07)	444.88 (525.25)	532.30 (676.95)	8.41 (142.59)	2.10 (153.16)
Bandwidth		0.089	0.050	0.058	0.050
Observations		103	72	72	69
Total Debt	1,836.07 (1,421.27)	115.30 (761.70)	121.68 (1,084.12)	2.57 (867.78)	73.91 (1,122.46)
Bandwidth		0.095	0.050	0.073	0.050
Observations		109	72	90	69
Total Expenditures	1,622.32 (1,246.84)	655.52 (599.94)	849.61 (812.65)	121.67 (195.59)	148.85 (252.72)
Bandwidth		0.097	0.050	0.071	0.050
Observations		109	72	86	69

Note: Estimated using local linear regression with robust standard errors.
 Dependent variables measured in per-capita dollars. *p<0.1; **p<0.05

Table F.12: Municipal Revenue—Two-party Subset

Dependent Variable	Mean & Std. Dev.	(1)	(2)	(3)	(4)
Own-source Revenues	1,214.06 (797.08)	97.03 (341.23)	110.34 (421.55)	47.80 (90.50)	45.77 (90.08)
Bandwidth Observations		0.077 93	0.050 72	0.049 67	0.050 69
Total Taxes	632.40 (473.12)	86.31 (161.15)	171.94 (171.59)	-81.28 (66.47)	-95.74 (77.33)
Bandwidth Observations		0.076 93	0.050 72	0.067 84	0.050 69
Property Taxes	438.61 (429.80)	310.75** (133.98)	314.91** (136.20)	-15.53 (51.06)	-19.47 (55.93)
Bandwidth Observations		0.054 74	0.050 72	0.067 84	0.050 69
Sales Taxes	117.10 (146.29)	-50.12 (47.93)	-63.90 (54.73)	-2.33 (12.70)	-7.77 (12.48)
Bandwidth Observations		0.084 100	0.050 72	0.063 76	0.050 69
Charges and Misc. Revenue	307.87 (258.95)	144.95 (130.07)	169.59 (181.20)	64.29 (48.21)	69.20 (56.18)
Bandwidth Observations		0.091 106	0.050 72	0.064 78	0.050 69

Note: Estimated using local linear regression with robust standard errors.
 Dependent variables measured in per-capita dollars. *p<0.1; **p<0.05

Table F.13: Municipal Debt—Two-party Subset

Dependent Variable	Mean & Std. Dev.	(1)	(2)	(3)	(4)
Debt Issued	269.52 (402.44)	264.70 (242.03)	266.88 (287.93)	-16.46 (120.27)	-18.08 (121.97)
Bandwidth		0.073	0.050	0.052	0.050
Observations		93	72	69	69
Short-term Debt	110.22 (283.92)	140.06* (76.36)	131.24* (77.09)	45.82 (44.66)	69.79 (48.47)
Bandwidth		0.058	0.050	0.070	0.050
Observations		75	72	86	69

Note: Estimated using local linear regression with robust standard errors.

Dependent variables measured in per-capita dollars. *p<0.1; **p<0.05

Table F.14: Spending by Category—Two-party Subset

	Coefficient	Std. Error	p-value	Bandwidth	N
Police	-5.19	15.990	0.746	0.071	87
Fire	-9.71	8.430	0.253	0.077	90
Sanitation	-5.00	7.620	0.514	0.072	87
Administration	2.66	7.240	0.715	0.065	72
Roads	137.64	58.690	0.022	0.057	72
Parks	43.44	38.330	0.261	0.066	81
Libraries	4.46	7.670	0.563	0.036	52
Health	-4.42	8.770	0.616	0.067	82
Welfare	-2.43	9.980	0.808	0.078	90
Housing	-39.13	17.830	0.032	0.055	71

Note: Estimated using local linear regression with robust standard errors.

Dependent variables measured in per-capita dollars.

F.2 Effect of Electing a Republican

Tables F.15, F.16, F.17, and F.18 include the full results of an RD analysis of the effect of electing a Republican mayor. Note again that the number of observations is quite small, which leads to rather noisy estimates. Although most of the results are null, there is no evidence to suggest that the effect of electing a business executive is instead capturing the effect of electing a Republican. Indeed, the coefficient on spending for roads is negative and barely significant at the 10% level, while most of the results are null.

Table F.15: Size of Government—Effect of Electing a Republican

Dependent Variable	Mean & Std. Dev.	(1)	(2)	(3)	(4)
Total Revenues	1,591.96 (1,133.07)	302.76 (578.62)	18.05 (711.62)	-66.44 (147.75)	-61.10 (159.33)
Bandwidth		0.075	0.050	0.058	0.050
Observations		93	72	72	69
Total Debt	1,836.07 (1,421.27)	762.87 (717.58)	458.96 (1,116.80)	497.91 (1,011.83)	385.28 (1,134.29)
Bandwidth		0.113	0.050	0.062	0.050
Observations		132	72	75	69
Total Expenditures	1,622.32 (1,246.84)	40.35 (671.67)	-365.11 (848.63)	-334.70 (208.15)	-346.91 (258.48)
Bandwidth		0.078	0.050	0.069	0.050
Observations		93	72	85	69

Note: Estimated using local linear regression with robust standard errors.
Dependent variables measured in per-capita dollars. *p<0.1; **p<0.05

Table F.16: Municipal Revenue—Effect of Electing a Republican

Dependent Variable	Mean & Std. Dev.	(1)	(2)	(3)	(4)
Own-source Revenues	1,214.06 (797.08)	318.28 (393.48)	220.19 (435.21)	3.89 (85.90)	4.91 (85.07)
Bandwidth Observations		0.064 81	0.050 72	0.049 67	0.050 69
Total Taxes	632.40 (473.12)	233.54 (182.71)	193.82 (198.42)	54.43 (58.41)	71.13 (88.95)
Bandwidth Observations		0.075 93	0.050 72	0.103 112	0.050 69
Property Taxes	438.61 (429.80)	114.94 (148.47)	100.03 (157.08)	36.26 (54.01)	40.95 (69.35)
Bandwidth Observations		0.063 79	0.050 72	0.074 90	0.050 69
Sales Taxes	117.10 (146.29)	54.53 (52.48)	28.51 (55.92)	-12.06 (8.54)	-13.60 (9.82)
Bandwidth Observations		0.072 92	0.050 72	0.069 85	0.050 69
Charges and Misc. Revenue	307.87 (258.95)	-29.55 (115.18)	-116.07 (183.07)	-43.65 (53.94)	-49.23 (58.04)
Bandwidth Observations		0.104 119	0.050 72	0.057 72	0.050 69

Note: Estimated using local linear regression with robust standard errors. Dependent variables measured in per-capita dollars. *p<0.1; **p<0.05

Table F.17: Municipal Debt—Effect of Electing a Republican

Dependent Variable	Mean & Std. Dev.	(1)	(2)	(3)	(4)
Debt Issued	269.52 (402.44)	-183.74 (260.41)	-280.39 (291.94)	-364.54** (160.81)	-342.31** (154.21)
Bandwidth Observations		0.063 81	0.050 72	0.046 65	0.050 69
Short-term Debt	110.22 (283.92)	60.57 (75.28)	97.22 (80.67)	77.26 (56.44)	82.38 (58.11)
Bandwidth Observations		0.066 84	0.050 72	0.057 72	0.050 69

Note: Estimated using local linear regression with robust standard errors. Dependent variables measured in per-capita dollars. *p<0.1; **p<0.05

Table F.18: Spending by Category—Effect of Electing a Republican

	Coefficient	Std. Error	<i>p</i> -value	Bandwidth	<i>N</i>
Police	-25.16	19.500	0.201	0.065	80
Fire	-0.61	9.530	0.949	0.065	79
Sanitation	0.99	7.720	0.898	0.064	77
Administration	8.59	7.470	0.255	0.062	68
Roads	-86.34	53.360	0.110	0.063	78
Parks	-31.27	38.050	0.414	0.058	72
Libraries	8.68	6.530	0.190	0.043	57
Health	-8.84	8.580	0.306	0.064	77
Welfare	-8.01	10.500	0.448	0.058	72
Housing	-3.29	16.120	0.839	0.053	69

Note: Estimated using local linear regression with robust standard errors.
 Dependent variables measured in per-capita dollars.

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