

WHAT MAKES A GOOD LOCAL LEADER? EVIDENCE FROM U.S. MAYORS AND CITY MANAGERS *

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Abstract

What are the traits of a good local leader? We conduct in-depth interviews with over 300 mayors and city managers in the U.S. to learn about their backgrounds. We focus on two standard ability measures (education and prior occupation) and draw from research in public administration and economics to introduce two new dimensions of quality: public service motivation and managerial skill. We paint a comprehensive descriptive portrait of the respondents in our sample and the cities they represent, and we then ask whether these four traits predict population growth—an important metric that reflects the desirability of living in a particular city. Using a difference-in-differences design, we find that only public service motivation and managerial skill are associated with faster than average growth. These results offer a promising new approach for researchers studying political leadership and its consequences, both in the local context and beyond.

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1 Introduction

A rich body of work in comparative politics and political economy focuses on political selection, or the process by which leaders with different traits assume office (Putnam et al. 1976; Best, Cotta et al. 2000; Besley and Reynal-Querol 2011; Besley, Montalvo, and Reynal-Querol 2011; Galasso and Nannicini 2011; Carnes and Lupu 2016*b*; Dal Bó et al. 2017; Dal Bó and Finan 2018; Bhusal et al. 2020; Thompson et al. 2019). But scholars have largely focused on the selection of national leaders, particularly in countries other than the United States, and we know little about the political selection process in the context of U.S. local governments. Our study fills this gap. Municipal governments profoundly affect the day-to-day life of residents, from ensuring access to clean drinking water, to organizing garbage collection, to investing in housing and public transportation. What does it mean for city leaders to be highly qualified for office? Do different types of cities tend to select “better” leaders, and does this matter for city outcomes?

To answer these questions, we conduct an original phone survey of U.S. mayors and city managers that allows us to learn about their background characteristics and leadership traits. We draw from literature on comparative politics, public administration, and economics to study four potential measures of leader quality. Two of these measures—educational attainment and prior occupational prestige—have often been used by economists as proxies for quality (Dal Bó and Finan 2018), in part because they are relatively easy to observe. However, these measures have both theoretical and empirical problems that we discuss in the next section. To overcome some of these issues, we introduce two new benchmarks that tap into the notion of quality: public service motivation and managerial skill. We define and discuss each of these measures and their theoretical rationales in the next section.

In the first half of the paper, we paint a detailed descriptive portrait of the respondents in our sample to understand how local leaders compare on both these old and new dimensions across cities. For example, we find evidence that U.S. mayors and city managers are more

well-educated and come from more prestigious occupations than the general U.S. public. We also find that managerial skill correlates strongly with years of education and occupational prestige, but public service motivation appears to be a distinct dimension of leadership.

Next, we examine which types of cities select leaders that score highly on these four attributes. Existing research demonstrates that societies vary in their ability to select politicians with desirable traits (e.g. [Best, Cotta et al. 2000](#)). If larger or wealthier cities are more likely to select highly qualified leaders—or if those leaders are able to be more effective in those places—the political selection process might perpetuate or even exacerbate local inequality across communities. We find that more affluent cities with higher median home values and more educated residents are more likely to select mayors or managers with higher educational attainment and more prestigious occupational backgrounds. At the same time, larger cities tend to select leaders who score more highly in terms of managerial skill, and left-leaning cities are modestly more likely to select leaders with higher levels of public service motivation.

We finally turn to the question of whether these four traits matter for city outcomes. Uncovering such leadership effects is challenging because both the types of politicians chosen for office and their governing behavior are generally correlated with underlying political and economic conditions. To overcome this issue, we use a modified difference-in-differences approach in which we examine outcomes in the same cities over time as leaders with different characteristics assume office. Specifically, we focus on changes in city population, a widely used measure in urban political economy that reflects the desirability of living in a particular city. We find that when leaders with effective management styles or higher public service motivation take office, their cities gain residents at faster rates. However, years of schooling and prior occupational prestige are not predictive of population growth. After presenting these analyses, we discuss the assumptions necessary to interpret the results causally.

This paper makes three distinct contributions. First, most of what we know about the personal characteristics of local leaders comes from surveys of the mayors of only the largest

cities (e.g. Murphy 1980; Wolman, Page, and Reavley 1990; Einstein, Glick, and Palmer 2018; Kirkland 2018; Einstein et al. 2020). And yet, most municipalities in the U.S. are relatively small, with 85% having a population under 20,000. We paint a rich descriptive portrait of the leadership traits of U.S. mayors and city managers drawing from a sample of cities of all sizes. Second, we bring together theoretical insights about the study of leadership and political selection from various research agendas that have not traditionally been in conversation with each other, including work on comparative politics, public administration, and urban political economy. Finally, we contribute to a growing literature in American politics that asks what it means for public officials to be effective (Volden and Wiseman 2014; Miquel and Snyder Jr 2006). This work typically focuses on state and national politicians and defines quality in terms of outputs, such as legislative productivity. We extend these efforts to the study of local politicians and draw from different research traditions to study several potential measures of leader quality that are both prior to and distinct from governing outcomes.

The paper proceeds as follows. In Section 2, we draw from the existing literature to motivate our research questions and provide theoretical intuition for our measures of local leader quality. In Section 3, we introduce the data collected via an original survey. In Section 4, we provide a descriptive overview of the leaders in our sample and how they compare to the public and to politicians in other levels of office. In Section 5, we examine the city-level correlates of leader quality. In Section 6, we introduce a research design to uncover the effects of these leadership traits on city outcomes. Section 7 concludes.

2 Theoretical Perspectives on Political Selection and Leader Quality

When political scientists or economists refer to candidate quality, they generally have in mind the ability of politicians to do their jobs honestly and competently (e.g. Besley 2005). However, to measure the idea of quality, researchers often rely on educational attainment

and occupational background simply because these traits are relatively easy to observe and measure (Gottesman and Morey 2006; Besley, Montalvo, and Reynal-Querol 2011; Besley and Reynal-Querol 2011; Kotakorpi and Poutvaara 2011). Theoretically, both tap into the idea of human capital, and education in particular is also associated with both civic virtue and democratic participation, which might be desirable traits in leaders. However, as Dal Bó et al. (2017) point out, these measures are also problematic because they are often simply a reflection of socioeconomic status or luck. Dal Bó et al. (2017) also find that education is only weakly correlated to cognitive abilities and leadership skills. Similarly, as Carnes and Lupu (2016*b*) observe, there is very little evidence that education matters for how politicians behave in office. Exploiting as-if random leadership transitions across a variety of contexts, Carnes and Lupu confirm that leaders with more education perform no better in terms of generating economic growth or winning reelection, among a host of other outcomes.

Nevertheless, given the large body of extant research on educational attainment and occupational prestige, we begin by examining how the leaders in our sample compare on these dimensions to both Members of Congress and the general public. We then draw from literature in public administration and economics to introduce two additional measures that tap into the notion of quality: public service motivation and managerial competence. Perry and Wise (1990) define public service motivation as an individual's "predisposition to respond to motives grounded primarily or uniquely in public institutions" (368). A variety of research demonstrates that politicians and bureaucrats who are intrinsically motivated by career paths in the public sector perform at a higher level and enjoy greater job satisfaction (Naff and Crum 1999; Wright, Moynihan, and Pandey 2012; Moynihan and Pandey 2007; Paarlberg and Lavigna 2010; Ashraf, Bandiera, and Jack 2014; Gulzar and Khan 2018). While the concept of public service motivation was originally meant to explain the behavior of civil servants, recent research has also increasingly applied this concept to local politicians (e.g. Dal Bó et al. 2018), and Ritz (2015) finds that Swiss city council members who score highly on public service motivation are more likely to work longer hours and run for re-election. This

trait also has the desirable quality of being less strongly correlated with socioeconomic class compared to education or career prestige and taps into a distinct dimension of leadership.

Finally, one of the primary innovations of this paper is that we develop an original battery of survey questions to assess managerial skill, or the extent to which local leaders use the management practices associated with successful organizational performance. Economists have long been interested in why some firms are more successful than others, and recent research has uncovered evidence that the decisions of managers matter a great deal for corporate survival, productivity, and profitability (Bertrand and Schoar 2003; Bloom and Van Reenen 2007; Bertrand, Bombardini, and Trebbi 2014). In particular, the most successful firm leaders typically focus on setting clear goals, monitoring organizational performance, overseeing day-to-day operations, and appropriately incentivizing employees (Bloom and Van Reenen 2007; Di Liberto, Schivardi, and Sulis 2015; Rasul, Rogger, and Williams 2017; Rasul and Rogger 2018). These practices should be similarly important for managing local governments. We adopt methodology developed by Bloom and Van Reenen (2007) and Carreri (Forthcoming) to assess the managerial effectiveness of city leaders, and we discuss this approach in detail in the next section.

After describing how the leaders in our sample compare along the four dimensions introduced above, we examine which city characteristics correlate with the emergence of different types of leaders. The theoretical expectations are unclear. On one hand, we might expect that voters or city council members in more educated, affluent cities would be more likely to select mayors or city managers with more education or more prestigious prior occupations. On the other hand, these cities might also provide more attractive outside options in the private sector compared to smaller, less affluent cities—and these options might be particularly lucrative for well-educated leaders with successful careers. In terms of public service motivation and managerial skill, we hypothesize that these traits are less likely to correlate with city characteristics given that they are more difficult to observe. Public service motivation in particular might be a trait universally held by local leaders, in which case we shouldn't

observe differences in the types of cities where publicly motivated leaders emerge.

Finally, we ask whether it matters when cities select leaders with different types of ability measures. In general, findings on whether local leaders influence policy outcomes in the U.S. are largely mixed. Some research finds that mayoral partisanship shapes certain types of fiscal policy (Gerber and Hopkins 2011; Einstein and Kogan 2016; De Benedictis-Kessner and Warshaw 2016), as does having a background in business (Kirkland 2018; Szakonyi Forthcoming). Other work finds no difference in the policy priorities of mayors of different races or genders (Pelissero, Holian, and Tomaka 2000; Hopkins and McCabe 2012; Ferreira and Gyourko 2014), and Berry and Fowler (2018) uncover little evidence that individual mayors matter for local employment, income levels, and crime rates. However, Carreri and Payson (2020) demonstrate that city leaders who score highly on managerial competence tend to shift spending away from redistributive programs and toward developmental goals, which generates local economic growth via increased housing values and revenue generated from property taxes.

To assess whether and how the four measures of leader quality studied in this paper affect real-world outcomes in the local context, we focus on population change. While different leaders have different objectives for their time in office, maintaining or increasing the number of residents is a nearly universal goal for city officials. Population loss is often closely linked to other problems facing local communities, including rising poverty and unemployment, increased violent crime, or police brutality (Wogan 2017). On the other hand, population growth generally indicates that residents are attracted to some feature of a particular city, whether that be economic opportunity, the cost of living, the public services available, or the quality of life (e.g. Tiebout 1956; Peterson 1981). From the perspective of local officials, more residents also corresponds to greater revenue availability in the form of fees, charges, and property and sales taxes. Mayor Mike Duggan of Detroit went so far as to argue that “the single standard a mayor should be defined on is whether the population of the city is going up or going down” (Dolan 2014).

To be clear, several scholars have pointed out that population growth is not always an unambiguously good thing for cities. Increases in population do not always correspond to rising wages or less segregation, and population growth without proper planning can lead to sprawl, congestion, and the loss of open space (Gottlieb 2002; Fodor 2012). Nevertheless, it is difficult to think of a more widely studied or consequential local outcome from the perspective of both city leaders and residents. Understanding which traits of city leaders are predictive of their ability to attract residents speaks to important theoretical debates in the local political economy literature about whether and how city officials are constrained to pursue growth over other priorities (e.g. Molotch 1976; Peterson 1981; Logan and Molotch 2007). It is our hope that the patterns uncovered in this paper will serve as a starting point for researchers interested in studying the effects of local leader characteristics across a broader range of outcomes.

3 Data Collection and Survey

We contacted the universe of cities above 5,000 residents (as measured by the 2012 census) in California, Louisiana, Minnesota, North Carolina, Ohio, Washington, Florida, New York, and Indiana. We picked 5,000 residents as our population threshold because below this size the responsibilities and scope of municipal government falls dramatically, and we selected these nine states to maximize the number of municipalities, geographic diversity, and variation in form of government. The two primary forms of municipal government in the U.S. are mayor-council systems, where a mayor is elected separately from the council and maintains substantial executive power, and council-manager systems, where the city council appoints a professional city manager to oversee the budgeting and administrative process. In mayor-council systems we interview the mayor, while in council-manager systems we interview the city manager. Each of these positions roughly parallels the idea of a local executive leader, and including both types of respondents allows us to broadly generalize our results across

the two most common forms of municipal government. After conducting an interview, we always try to contact the interviewee’s predecessor in order to obtain within-city measures of leadership characteristics over time.

In total, the mayors and managers of 283 cities out of the 890 we contacted agreed to take part in our study. We were also able to secure interviews with 25 former leaders, for a total of 308 individual interviews. Our overall response rate was 32%, and additional details on recruitment and survey design can be found in Carreri and Payson (2020). To determine how representative the cities in our sample are, we compare the demographic characteristics of cities that agreed to participate in our study to those that declined, as well as to all other cities in the state. These balance tests are shown in Table A2 in the Appendix. The cities in our sample are similar in terms of size and unemployment rates compared to other cities. However, they are also wealthier—with marginally higher incomes and higher housing values—and more likely to have residents with a college degree. While the differences between the cities in our sample and the rest of the cities in each state are substantively fairly small, they should be kept in mind when generalizing the following results.

In the survey, interviewers asked a variety of questions about the personal and leadership traits of the mayor or manager. These include the four characteristics discussed in the previous section—educational attainment, occupational background, public service motivation, and managerial effectiveness—and information about respondent age, gender, years of experience in their position, and ideological leaning. We discuss the survey methodology in detail in the Appendix, including recruitment methods, response scoring, and how a double-blind survey technique helps to alleviate concerns of interviewer or interviewee bias.

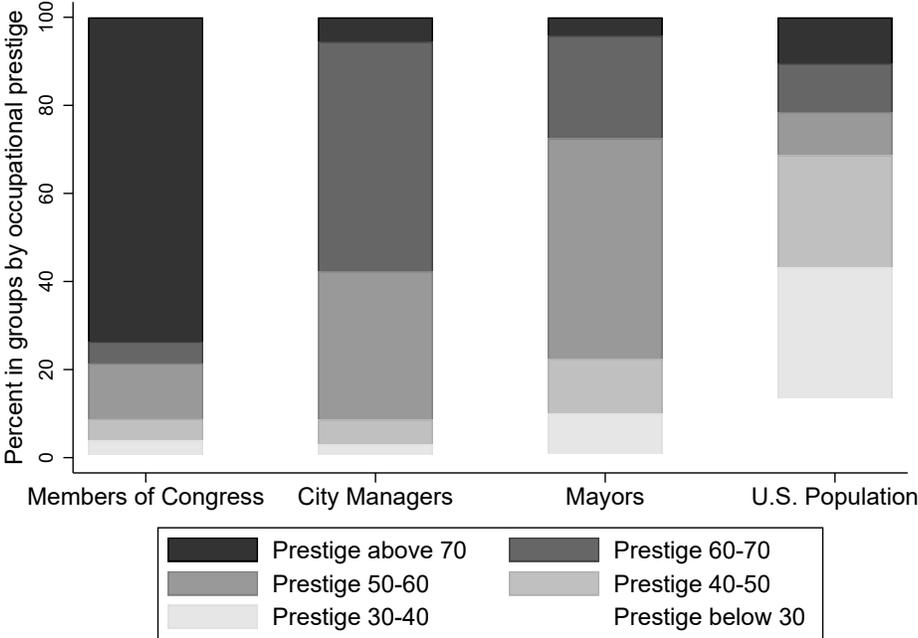
4 Descriptive Evidence on Local Political Selection

We begin by examining how the leaders in our sample compare both to the public and to Members of Congress in terms of the two classic proxies for quality often employed in

the political selection literature: occupational prestige and educational background. We calculate occupational prestige scores by classifying the prior occupation of the respondents into categories established by the Bureau of Labor Statistics and using the prestige scores for each category developed by the National Opinion Research Center (NORC) (Smith and Son 2014). Scores range from a low of 19 for a street corner drug dealer to a high of 77 for a surgeon.

Standard models of political selection predict *adverse selection* in terms of occupational background among public sector employees. In other words, the most talented individuals with more lucrative careers and higher incomes are assumed to face greater costs if they choose to enter the public sphere (Besley 2005). However, recent empirical work consistently documents *positive selection* across various political offices, meaning that elected officials typically score more highly on ability measures relative to the general population (Dal Bó et al. 2017; Thompson et al. 2019).

Figure 1: Selection as measured by occupational prestige

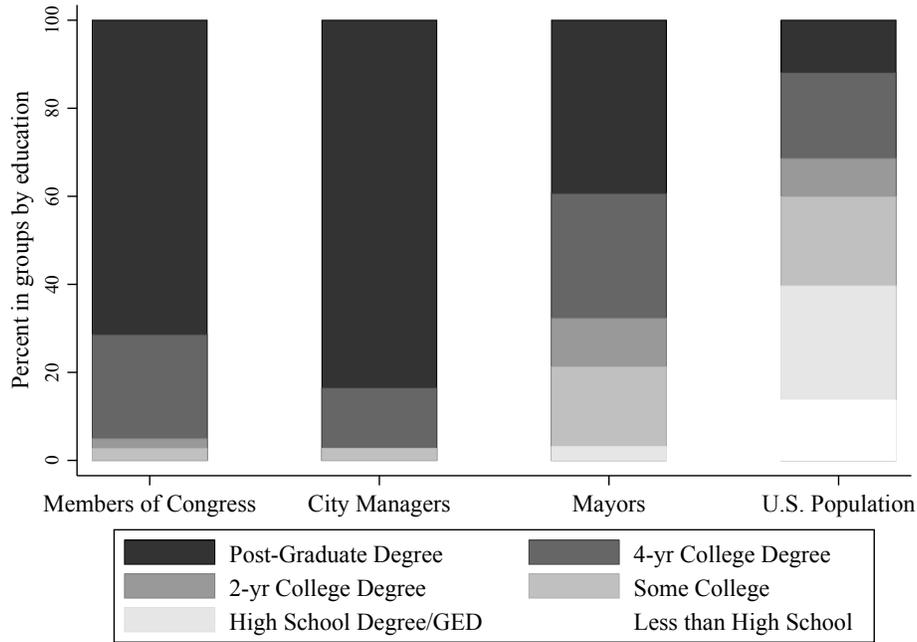


In line with this more recent research, we find that both mayors and city managers come

from previous occupations that have higher prestige scores than the general public (Figure 1). Among mayors, the most commonly represented occupational categories were business people, general and operations managers, lawyers, and marketing and sales managers, each of which have a score of 50 or above. City managers also come from prior occupations with high prestige scores, although this result is a bit mechanical because most of the respondents in our sample came from other careers in city management, i.e. assistant city managers or serving as the city manager in another city—both of which have scores over 60. However, among the city managers who had other occupations before pursuing their public career, these professions also rated fairly highly in terms of prestige, including administrative services managers (60), urban planners (55), and social and community service managers (52). On the other hand, Members of Congress are significantly more likely to come from occupations with a prestige score of 70 or above, reflecting the high number of former or current chief executive officers. This provides suggestive evidence that the returns to office at the Congressional level are high enough to lure CEOs away from the private sector positions, while this does not appear to happen as frequently at the local level.

We also find that both mayors and city managers are more likely than the U.S. population to have a 4-year college or advanced degree (Figure 2). However, managers are significantly more likely than mayors to have an advanced degree, likely reflecting the fact that city managers generally require a master’s degree in public administration or city planning. In fact, city managers are even more likely than Members of Congress to have an advanced degree. Research has already clearly established that Member of Congress are, on average, more highly educated and from more prestigious previous occupations than the general public, which are traits correlated with having an elite background (e.g. [Carnes 2012](#); [Carnes and Lupu 2016a](#); [Eggers and Klašnja 2018](#)). However, we show that these descriptive differences between politicians and voters emerge early in the political career pipeline and are present among city leaders across communities of all sizes. If the goal of our local political pipeline is to produce representatives that are well-educated and from prestigious careers, the system

Figure 2: Selection as measured by education



appears to be working fairly well.

5 Expanding Measures of Quality: Public Service Motivation and Managerial Skill

When political scientists or economists study candidate quality, they often use educational background and occupational prestige as proxies simply because these traits are relatively easy to observe and measure. However, there is a growing recognition that education and prior occupation may simply reflect social class (Dal Bó et al. 2017) and that these qualities don't seem to matter much for governing outcomes (Carnes and Lupu 2016b). In a 2018 review piece, Dal Bó and Finan (2018) call for scholars to move beyond these standard proxies in research on political selection. In our survey, we ask a series of questions that allow us to capture two additional measures of leader “quality”: public service motivation and managerial competence.

To measure public service motivation, We ask the standard abridged battery of questions comprising the Perry Index (Coursey and Pandey 2007), which are designed to identify the extent to which public officials are motivated by career paths in the public sector as opposed to pursuing potentially more lucrative careers in the private sector. While the majority of existing research on this concept has focused on bureaucrats and civil service employees (e.g. Perry and Wise 1990; Perry 1996; Naff and Crum 1999), several recent papers have demonstrated that public service motivation can predict behavior of local elected politicians as well (Ritz 2015; Ritz, Brewer, and Neumann 2016; Dal Bó et al. 2018)—although these studies tend to focus on countries other than the U.S. Respondents are asked how much they agree or disagree on a 5 point scale with statements like, “I don’t care much for politicians,” “I consider public service my civic duty,” and “I would prefer seeing public officials do what is best for the whole community even if it harmed my interests.” There are 10 questions in total, and the final public sector motivation score is the unweighted average across each item. The scale ranges from a low of 1 to a high of 5 (with higher scores indicating greater public service orientation), and the entire battery of questions can be found in Section A1 in the Appendix.

We also ask a series of original questions designed to capture the extent to which local leaders use the management practices associated with successful organizational performance. The survey methodology is inspired by Bloom and Van Reenen (2007)’s study of management approaches in firms, which has been applied to the context of local governments by Carreri (Forthcoming) and Carreri and Payson (2020).¹ The survey focuses on a set of four practices in the management of firms: target setting, performance monitoring, operations, and incentives. This set of practices should be similarly important for effectively managing local government: a good local leader needs to clearly set her goals, monitor the performance of the government in attaining these objectives, be knowledgeable of the daily operations of

¹Surveys that build on Bloom and Van Reenen (2007) have also been successfully used to evaluate the managerial performance of bureaucrats (Rasul and Rogger 2018; Rasul, Rogger, and Williams 2017) and school principals (Bloom et al. 2015; Di Liberto, Schivardi, and Sulis 2015).

Figure 3: Example of Survey Question, Scoring Grid, and Anonymized Answers

| (1) Target Inter-Connection | | | |
|------------------------------------|--|---|--|
| | a) We would like to start by learning what you think are some of the main issues currently facing your city. b) What types of goals or objectives have you set for your city and what are the practical targets related to these goals? c) How are these goals assigned or delegated down to the individual members of the government and staff? | | |
| | Score 1 | Score 3 | Score 5 |
| Scoring Grid | Objectives and targets are very loosely defined without specific targets associated with them; goals are not communicated and/or delegated to other members of the staff | Objectives are well-defined with related targets; there is some communication and/or delegation but only to certain staff or departments | Objectives are very clearly defined with specific related targets; targets are clearly and widely communicated and/or delegated to many different departments or members of staff |
| Anonymized examples | Defines the objective as “homelessness”. Does not identify practical targets | Defines the objective as “Addressing homelessness”. Identifies one practical target (establishment of homeless navigation center). Assigns responsibilities to department leaders | Defines the objective as “Creating meaningful work for the homeless”. Identifies two practical targets (teaching financial literacy, placing into entry-level work) with specific goals for numbers reached. Assigns responsibilities through one-on-one and collective weekly meetings with department leaders who delegate to staff. |

the government, and successfully administer the bureaucracy.

The survey consisted of a total of seven questions that are each scored in real time on a scale from 1 (lowest) to 5 (highest), and the overall managerial score is the unweighted average of the individual questions. By way of example, Figure 3 shows the first survey question with its associated scoring grid and three anonymized examples of answers that respectively earned a score of one, three, and five. We adopt the methodology used in Carreri (Forthcoming) and Carreri and Payson (2020), and we describe the scoring methodology in greater detail and provide the full text of the survey in the Appendix.

Figure A1 in the Appendix shows the distribution of both the Perry Index and the managerial scores. The managerial competence scores range from a low of 1.625 to a high of 5 and display substantial variation. The average score was 3.68, with a standard deviation just under 1. As an initial validity check, we compare the managerial scores of mayors and city managers. Unsurprisingly, city managers tend to receive higher average scores

than mayors, reflecting the fact that they have generally received professional training in municipal management. The Perry Index also had a possible range from 1 to 5 (with higher scores indicating greater intrinsic public service motivation), and the average was 4.2. In other words, the leaders in our sample scored quite highly in terms of their commitment to public service. As we predicted, the variation in the Perry Public Service Index was also lower than for other measures, with a standard deviation of 0.38. Both mayors and city managers appear to be highly and fairly uniformly motivated by careers in public service.

In Table 1, we show the correlations from bivariate regressions of our four measures of leader quality. Occupational prestige, education, and our managerial score are all positively and significantly correlated with each other. As predicted, the Perry Public Service Index is not strongly correlated with any of the other three traits. In particular, public service motivation appears to be almost completely orthogonal to occupational prestige. Given that the Perry Index is designed to capture motivation to pursue work outside the private sector, it makes sense that coming from a higher-earning professional background does not predict public service orientation.

Table 1: Measures of “Quality”- Correlations From Bivariate Regressions

| | Education (years) | Public Sector Motivation | Occupational Prestige |
|--------------------------|----------------------|-----------------------------|--------------------------|
| Managerial Score | 1.104* (0.192) | 0.029 (0.029) | 2.689* (0.856) |
| Occupational Prestige | 0.036* (.014) | -0.002 (0.002) | |
| Public Sector Motivation | -0.252 (0.416) | | |

Notes: * is significant at the 5 percent level.

We also examine whether these four measures correlate with ideology. While the vast majority of cities in our sample have non-partisan elections, we asked about the ideological leanings of the respondents using the standard 5 point ideology scale. Given the relatively small sample size, we collapse left and center-left responses into one category (“left”) and

right and center-right responses into one category (“right”). The correlations from bivariate regressions are shown in Table 2. Relative to right-leaning politicians (the omitted category), left-leaning and centrist politicians tend to be better educated and have higher public sector motivation and managerial scores. They also tend to come from more prestigious previous occupations, although this correlation is noisier.

Table 2: Correlation Between “Quality” and Ideology

| | (1) | (2) | (3) | (4) |
|-------------------|----------------------|-----------------------------|--------------------------------|---------------------|
| | Education (years) | Public Sector Motivation | Occupational Prestige Score | Managerial Score |
| Ideology - Left | 1.131* (0.350) | 0.184* (0.050) | 1.792 (1.527) | 0.207† (0.106) |
| Ideology - Center | 0.770* (0.359) | 0.109* (0.051) | 0.464 (1.568) | 0.156 (0.109) |
| Observations | 266 | 266 | 259 | 266 |

Notes: The excluded category is *Ideology - Right*. † is significant at the 10 percent level; * is significant at the 5 percent level.

Finally, because our managerial score represents a relatively new way to conceptualize local leader quality, we also perform an additional test to demonstrate the validity of this measure. We compare the managerial competence score to the residual from a Mincer earnings regression, an increasingly popular approach to approximate the ability or competence of politicians in the political economy literature.² The residual from a Mincer earnings regression is sometimes used as a measure of ability because it captures the difference in earnings among individuals with similar characteristics—i.e. the variation in earnings not explained by traits like individual education or age. To perform this analysis, we hand collected data on the public salaries of the leaders in our sample from a variety of sources for the most recent full year during which they were in office.³

²See Besley et al. (2017); Dal Bó et al. (2018, 2017); Bhusal et al. (2020).

³Data available from seethroughny.net, transparentcalifornia.com, and govsalaries.com.

Following Besley et al. (2017), we estimate the regression

$$Salary_i = f(Educ_i, Age_i, Experience_i) + \beta Female_i + \gamma Manager_i + \delta Population_i + \varepsilon_i, \quad (5.1)$$

where $Salary_i$ is the yearly salary earned by leader i as mayor or city manager. $Educ$ is a categorical variable recording i 's highest educational attainment (less than college, college, or more than college), and Age represents indicators for each age quintile. $Experience$ represents indicators for quintiles of years of experience in local government, $Female$ is an indicator taking value one for women, and $Manager$ is an indicator for city managers. Finally, $Population$ is the population size of the city where leader i holds office.

Function f represents the fact that we control flexibly for education, age, and years of local government experience by including an indicator for every group defined by age and education, as well as their possible double and triple interactions. This accounts, for instance, for the fact that salaries might “reward” a postgraduate education differently at different points along a leader’s life-cycle. We then calculate the correlation between the Mincer earnings residual and our managerial score, as well as the Perry Index for comparison.

Table 3: Managerial Score and wage-residual measure of ability

| | (1) | (2) |
|--|-------------------|--------------------------|
| | Managerial Score | Public Sector Motivation |
| Mincer Residual (standard deviation units) | 0.118* (0.045) | 0.007 (0.023) |
| Observations | 248 | 246 |
| R-squared | 0.031 | 0.000 |
| Mean DV | 3.701 | 4.192 |
| SD DV | 0.712 | 0.350 |

Notes: * is significant at the 5 percent level.

We find that a one standard deviation increase in the Mincer earnings residual is associated with a statistically significant increase in the managerial score of 0.11 points, shown in

Table 3.⁴ These result suggests that our managerial score is capturing some measure of quality above and beyond what can be measured by easily observable attributes like education. Interestingly, the Perry Index does not correlate with the wage-residual measure of ability. This might be explained by the fact that local officials that score highly on this dimension are not particularly driven by high wages but rather by intrinsic motivation to serve the public.

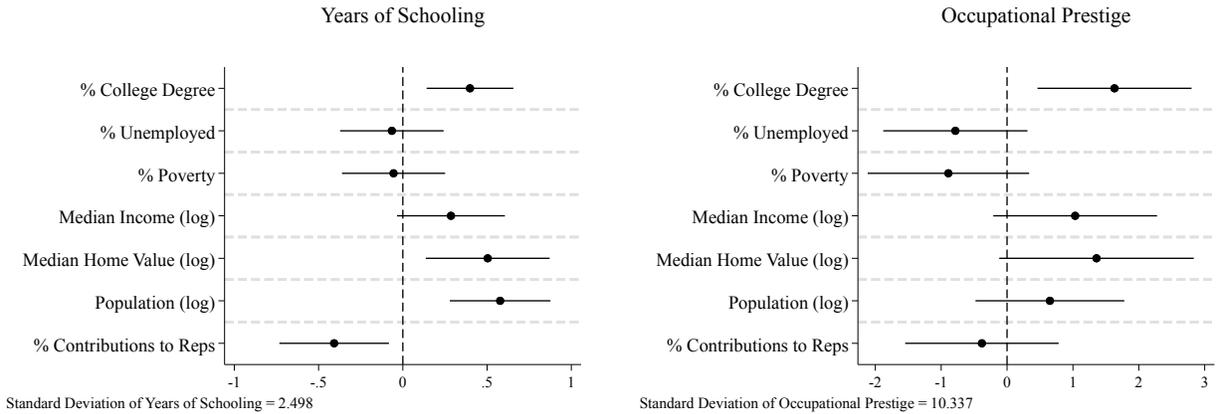
6 Where Do High Quality Leaders Emerge?

Having introduced four possible measures of leader quality, we now examine the city-level characteristics that correlate with each of the four traits. Figure 4 and Figure 5 report coefficients from bivariate regressions of each of our four measures of leader quality on a series of city characteristics with state fixed effects. We find that cities with higher incomes, higher median home values, and more residents with college degrees are more likely to select leaders with more years of schooling and with higher occupational prestige scores (Figure 4). Well-educated leaders are also particularly likely to emerge in bigger cities with larger populations. Finally, we aggregated data on political contributions from Bonica (2019) to the city level to generate a variable capturing the share of political contributions going to Republicans. As contributions to Republicans increase, cities become more likely to select leaders with fewer years of schooling.

While the finding that wealthier places tend to select leaders with higher education levels and more prestigious prior occupations might be somewhat intuitive, it was not clear ex-ante. For example, while voters or city council members in more educated, affluent communities might be particularly likely to select leaders on the basis of education or occupational prestige, it might also be the case that these cities provide particularly attractive outside options in the private sector to the same leaders who score highly on these traits. But it appears that well-educated mayors and city managers from respected careers are willing to enter the

⁴Results to calculate the Mincer residual are available in on-line replication code.

Figure 4: City Correlates of Educational Attainment and Occupational Prestige



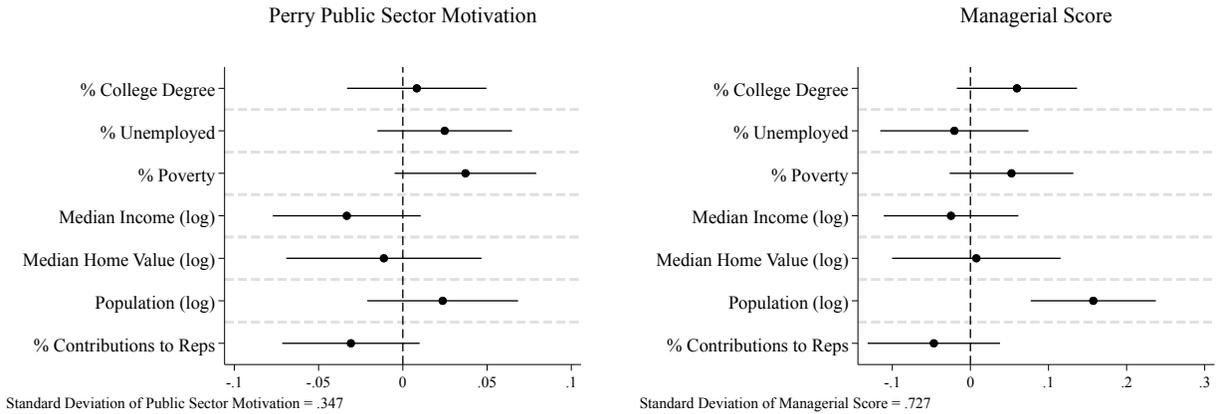
Notes: Each coefficient reported above is from a pooled regression of the educational attainment (in years of schooling) or occupational prestige (on a 0-100 scale) of the mayor or city manager of city i on one of the city characteristics represented above, standardized in standard deviation units. The standard deviation of the dependent variable is reported at the bottom of the plot. Each regression includes state fixed effects. Standard errors are clustered at the city level.

public sector in these types of communities.

A different story emerges when we look at the relationship between city characteristics and both the Perry Public Service Index and our managerial score. There are no significant correlations with the Perry Index and any of the city characteristics reported in the coefficient plot (Figure 5). Again, this further suggests that public service motivation is a fairly universal trait among public officials across different types of cities, regardless of socioeconomic status. Note, however, the suggestive negative correlation between the share of political contributions going to Republicans and the Perry Index, suggesting that public service oriented leaders are more likely to emerge in more left-leaning places.

The only significant correlation between city characteristics and our measure of managerial competence is city population (Figure 5). Leaders who use effective management practices are just as likely to emerge in high vs. low-socioeconomic status cities, and if anything, there is a modest, negative correlation between median income and the managerial score. It makes sense that more effective managers might tend to emerge in larger cities given the greater complexity of overseeing municipal governments with more departments

Figure 5: City Correlates of Leader Public Service Motivation and Managerial Skill



Notes: Each coefficient reported above is from a pooled regression of the public service motivation index or managerial score of the mayor or city manager of city i on one of the city characteristics represented above, standardized in standard deviation units. The standard deviation of the dependent variable is reported at the bottom of the plot. Each regression includes state fixed effects. Standard errors are clustered at the city level.

and responsibilities. However, it is generally more difficult to predict where leaders with high public motivation or managerial competence will emerge relative to leaders with more years of schooling and higher professional prestige. Note also that the x-axes of Figure 5 are much smaller than in Figure 4, suggesting smaller correlations overall. While education and prior occupation are likely fairly visible to voters, which allows residents of particular cities to select more well-educated leaders with more prestigious professional backgrounds, it is more difficult to observe or predict whether a leader is motivated by public service or will be an effective manager. As a result, public service oriented leaders that use effective management practices are equally likely to emerge in cities of different types (after accounting for population).

7 What Happens When Cities Select Highly Qualified Leaders?

In order to understand whether the leadership traits described in the previous sections matter for city outcomes, we focus on population change. Attracting residents is often considered a nearly universal goal for most local officials (e.g. [Peterson 1981](#)), and most studies that seek to uncover the effects of political leaders use some sort of growth metric as the outcome (e.g. [Besley 2005](#); [Carnes and Lupu 2016b](#); [Berry and Fowler 2018](#)). If particular local leaders are especially skillful at governing their cities, we would expect this to be reflected in population growth, which is an effective proxy for how desirable residents find a community ([Fischel 2009](#)). Moreover, while a majority of respondents in our sample mentioned growth as one of their main objectives during their time in office (56%), mentions of this goal were uncorrelated with each of the four leadership traits. The leaders in our sample acknowledged the importance of making their cities attractive to residents regardless of their education levels, occupational backgrounds, public service motivation, or managerial score.

As we demonstrated in the previous section, education and occupational prestige are highly correlated with city characteristics including median housing values and percent of residents with a college degree. Given this positive correlation, there is a clear selection problem which suggests that any estimated effects of these traits will be biased toward zero. Moreover, existing empirical work finds little support for the idea that more educated leaders produce better outcomes ([Carnes and Lupu 2016b](#)). However, the Perry Public Service Index and the managerial score suffer from this issue to a lesser degree. As demonstrated in the previous section, these measures of leader quality capture traits that are less visible to voters, and therefore can be used to reflect semi-exogenous changes in the quality of a city's leader. While larger cities are more likely to select leaders that score highly on our managerial competence score, we can adjust for this in a flexible way by binning cities by population and including fixed effects. While we show results for each of the four measures of leader

quality, the assumptions necessary to interpret the results causally are most plausible for public service motivation and managerial competence.

We perform a modified difference-in-differences design where we examine how the population changes in cities that select leaders that score more or less highly on each dimension of leadership. Population data as well as all city control variables come from the American Community Survey. The modified nature of the design stems from the fact that we only observe each trait after the leaders in our sample take office, while we observe city size both before and after the election/ appointment. We estimate equations of the form

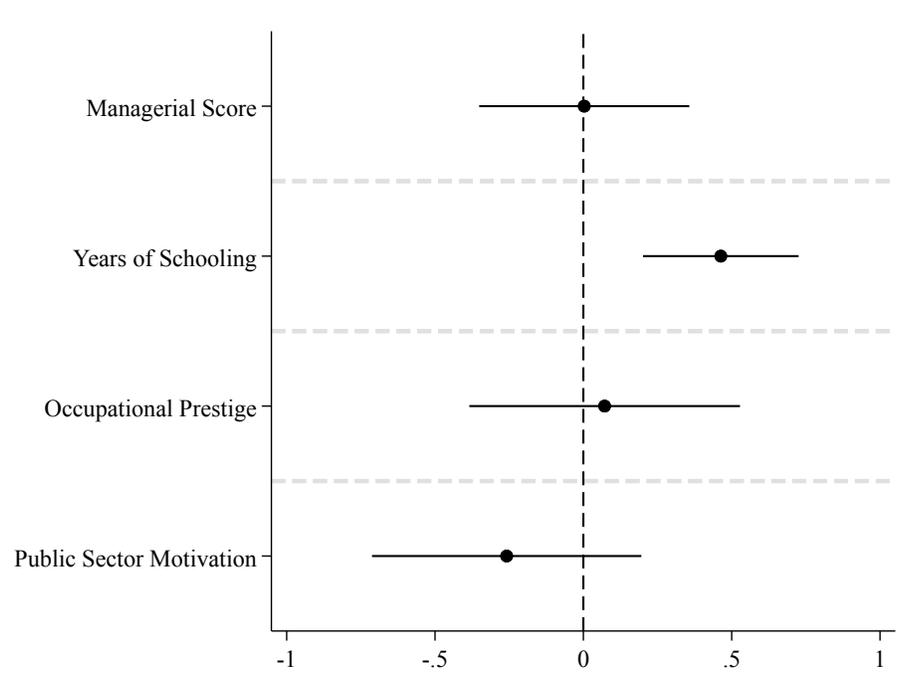
$$y_{itj} = \alpha_i + \beta_t + \gamma_j + \delta_1(LeaderTrait_i \times Post_t) + \sum_{k=1}^m \lambda_k(x_{ki} \times Post_t) + \kappa RepShare_{itj} + \varepsilon_{itj}$$

where y_{itj} represents the population in the city of leader i in year j . Normalized years are represented by t , indexing the number of years since the interviewed leader of city i took office, with $t = 0$ being the first year. City fixed effects, α_i , control for any time-invariant city-specific characteristics that might correlate with population change. Normalized year fixed effects, β_t , control for political budget cycles within each city, and calendar year fixed effects, γ_j , control for year-specific shocks, such as the housing market crash of 2008. $LeaderTrait_i$ is either years of schooling, the occupational prestige rating, the Perry Public Service Motivation Index, or our managerial score for the interviewed leader of city i . $Post_t$ is a dummy taking value one for every year after the election/appointment of the interviewed leader.

The coefficient of interest is δ_1 , which captures the average difference in population for cities with “higher quality” leaders after the official took office, relative to cities that select leaders with lower scores on each dimension. We include interviewer fixed effects as well as a series of time-invariant leader and city controls x_{ki} interacted with the $Post_t$ indicator. Leader controls include the leader’s age, gender, race, years of experience in local government, and an indicator taking value one for previous occupations in the business sector. City controls include the municipal form of government, city population quintile (based on population measured at the beginning of the sample period for each city), the city’s median

income, as well as the share of residents who are white, poor, have a college degree, and who are unemployed. Finally, in order to take into account changes in the political preferences of voters over time, we use data from Bonica (2019) to control for the share of contributions to Republican candidates in city i in year j . Standard errors are always clustered at the city level.

Figure 6: Correlation between predecessors and successors



Notes: Each coefficient reported above is from a regression of a characteristic (*Managerial Score*, *Years of Schooling*, *Occupational Prestige*, or *Public Service Motivation* for the successor on the same characteristic measured for her predecessor for the 25 cities in which we were able to interview both leaders (50 interviews).

One of the identifying assumptions for the modified difference-in-differences is that the measure of quality of the interviewed leader is uncorrelated to that of her predecessor. If there were a negative correlation, this would likely bias our estimates away from zero because we would be picking up the effect of both the former leader *leaving* office in addition to the effect of the new leader taking office. On the other hand, a positive correlation would generally bias our estimates towards zero. We leverage the 25 instances in which we were able to interview both the current and former leader of a city, allowing us to compare the within-

city measures of leadership traits over time. In Figure 6, we show evidence that education levels are correlated across leaders within the same city. In other words, if a city selects a mayor with an advanced degree in one period, it is likely to do so again in the next period. However, we find no evidence of a correlation between the managerial score and the Perry Public Sector Motivation Index of the interviewed leader and the predecessor. This exercise suggests that these two variables are particularly appropriate for the modified difference-in-differences approach, whereas the effects of education and prior occupation should be interpreted with more caution.

The other key assumption necessary for our design is that of parallel trends. In other words, we must assume that the number of residents would have evolved in parallel across cities that elect or appoint leaders with different traits had those leaders not taken office. After introducing the main results, we provide suggestive evidence of this assumption by examining the pre-treatment trends in population growth before the leaders in our sample took office.

Table 4 presents the main results for each of the four traits. Neither education nor occupational prestige appear to predict changes in city population in the period after a new leader takes office. It is difficult to know whether this is a genuine null effect or if the coefficients are instead biased towards zero because of the correlation in these traits that city leaders tend to display over time. Even as a descriptive fact, it is interesting that these two widely used proxies for leader quality are completely uncorrelated with whether or not a city gains residents. A null finding would be consistent with [Carnes and Lupu \(2016b\)](#), who find that the educational attainment of national leaders does not predict economic growth across countries.

On the other hand, higher managerial scores and public service motivation are strongly predictive of cities gaining residents when leaders who score highly on these dimensions take office. A one point increase in the Perry Index score is associated with a nearly 2% increase in a city's population. The standard deviation of the Perry Index is 0.36, so a

Table 4: Effect of Leader Traits on City Population

| | (1) | (2) | (3) | (4) |
|--|----------------------------|---------------------|---------------------|---------------------|
| | Population (log) | Population (log) | Population (log) | Population (log) |
| Public Sector Motivation \times Post | 0.017 \dagger (0.010) | | | |
| Managerial Score \times Post | | 0.016* (0.006) | | |
| Education \times Post | | | 0.001 (0.002) | |
| Occupational Prestige \times Post | | | | 0.000 (0.000) |
| Observations | 2,723 | 2,745 | 2,745 | 2,663 |
| Cities | 281 | 283 | 283 | 275 |
| Mean DV Pre | 43,906 | 45,128 | 45,128 | 45,704 |
| SD DV Pre | 76,959 | 78,508 | 78,508 | 79,471 |

Notes: The mean and standard deviation of the dependent variables (not logged) are reported for the pre-period (i.e. in the years before the interviewed mayor/manager took office). Standard errors clustered at the city level are shown in parentheses. \dagger is significant at the 10 percent level; * is significant at the 5 percent level.

one standard deviation increase in the score corresponds to an increase of just under 1%. Similarly, a one point increase in the managerial score (which is also roughly the size of one standard deviation) is associated with a 1.6% increase. While the goals of these local leaders might vary a great deal across cities, whatever they are doing while in office appears to attract residents. Table 4 shows the baseline results for each specification with city, year, interviewer, and population quintile fixed effects. In Table A4 in the Appendix, we also include each of the other three traits as control variables. The coefficients on the Perry index and managerial score are even larger when we add these additional leader controls, while the coefficients on years of schooling and occupational prestige continue to be nearly zero.

While the results in Table 7 provide strong evidence of a correlation between population growth and both managerial skill and public service motivation, it might be the case that leaders who score highly on these dimensions tend to emerge in cities that are already growing in size. To assess whether there is a plausible causal relationship between these traits and gaining residents, we examine the pre-treatment trends in city size before the leaders in our sample take office. We show these trends in graphical form for all four leadership traits in the

Appendix. Across each measure, population changes are constant in the pre-periods across cities that go on to select high vs. low scoring leaders (Figures A2 and A3). But after a leader takes office with a higher managerial score or higher Perry index score, we observe a noticeable increase in the population of that official’s city.

It is interesting to note that while public service motivation and managerial skill are only weakly correlated with each other and appear to tap into distinct dimensions of leader quality, both traits are associated with faster than average population growth compared to other cities. While leaders that excel in these areas may have different priorities for their time in office, both types of leaders appear able to effectively attract residents to their communities. Of course, population growth does not necessarily mean that cities are improving on other metrics, including social justice or income inequality. While acknowledging these issues, we emphasize that managerial skill and public service motivation are two traits that are relatively understudied in political science and that appear to do a better job than standard measures of ability when it comes to predicting which cities will grow faster than others. One of the goals of this paper is to encourage researchers to continue to search for new and better measures of leader quality and to offer a method for assessing how these characteristics affect a variety of outcomes, both in the local context and beyond.

8 Discussion

What are the traits of a good local leader? We examine how mayors and managers in cities of all sizes across the U.S. rank on four possible dimensions of ability: educational attainment, occupational prestige, public service motivation, and managerial competence. While education and occupational background have been two of the most commonly used ability measures in the context of comparative political selection, public service motivation is a concept more commonly invoked in public administration research. We also draw from literature in economics to develop an original survey that allows us to assess the managerial

skill of the local leaders in our sample—a leadership trait that has not been widely studied by political scientists.

We find that education, previous occupation, and managerial effectiveness are all positively correlated, but that the Perry Public Service Index appears to tap into a different dimension of leadership. We also find substantial evidence of positive political selection across the leaders in our sample—that is, they tend to score more highly on measures of ability than the general public. While more affluent communities tend to select local leaders that are well-educated and come from prestigious occupations, the less visible traits of public service motivation and managerial effectiveness correlated with city-level characteristics to a lesser degree.

We then performed a modified difference-in-differences design to examine how each of these four ability measures affect population growth over time. Classic literature in urban political economy posits that one of the main goals of city leaders is to attract labor and capital (e.g. [Peterson 1981](#)), and a growing population often reflects the desirability of living in a particular community. We find that neither of the two standard ability measures (education and prior occupation) predict population growth. However, leaders with higher managerial skill and great public service motivation appear to attract residents at faster rates than other cities. In this paper, we remain agnostic about the mechanism by which the choices of local officials generate this population growth. The fact that we find such similar effects for both our managerial score and the Perry Index suggests that there are a variety of ways through which “high quality” city leaders are able to increase the attractiveness of their communities in the eyes of residents. Delving into the specific choices made by effective local leaders while in office remains a topic ripe for future research.

Overall, our results offer a detailed descriptive portrait of political selection in small and mid-sized cities in the U.S. While the leaders in our sample are well-educated and come from prestigious careers, on average, we expand beyond these two traditional proxies of quality to offer researchers two promising new measures, including our original managerial competence

score. Together, the findings in this paper suggest that in order to understand patterns of growth across local governments, scholars of U.S. urban political economy need to take seriously the role of political selection.

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Appendix

What Makes A Good Local Leader? Evidence From U.S. Mayors and City Managers

Supplementary information intended for on-line publication

| | |
|--|------|
| A.1 Survey Methodology | A-1 |
| Survey Recruitment and Design | A-1 |
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A.1 Survey Methodology

Survey Recruitment and Design After identifying the universe of cities above 5,000 residents in the 9 states described in the main text, interviewers determined whether they should contact the mayor (in mayor-council systems) or the city manager (in council-manager systems). Interviewers contacted respondents by both phone and email inviting them to take part in the study and providing details of the project. To increase participation, we secured a letter of support from the National League of Cities. The body of the email and the letter are shown below. Interviewers kept contacting the mayor/manager by phone and email until the respondent either declined or agreed to participate in our study, and each respondent was contacted by one interviewer only. On average, interviewers called each mayor or manager 3 times and sent 4 emails before securing an interview, and our overall response rate was 32%.



Dear Mayor/City Manager,

We are a research team from New York University (NYU) and University California San Diego working on an academic research project on the different managerial styles and practices employed across the U.S. in its local governments. The project is directed by [Prof. Maria Carreri](#) at UCSD and [Prof. Julia Payson](#) at New York University. We believe that mayors and city managers play a fundamental role for the success of their city and the well-being of its citizens. It is based on this conviction that we are interested in understanding the different practices and managerial styles employed at the city level across the country, and your input would be extremely valuable in making this project successful. We invite you to take part in our study through a brief and confidential phone conversation revolving around your experience in city governments.

Potential benefits to you include:

- A copy of the results of our academic research prior to their publication
- An opportunity to contribute to an academic study with the potential to identify best practices across city governments
- Other mayors have enjoyed our phone conversation and have considered it a great opportunity to discuss and reflect upon their managerial practices in a completely confidential environment

The phone conversation will touch upon four macro areas related to your government practices: targets, performance monitoring, operations and people management. We will also pose a few questions on your experience and background. The conversation is expected to last 25 minutes. No compensation will be provided and neither you nor the city will incur any expense as a result of the study. The conversation will be confidential to guarantee that no risk will be associated to your participation to this academic study. Your identity and the name of the city will be kept confidential and not mentioned by name in the study. We will be delighted to answer any questions you might have at any time. We encourage you to contact Prof. Carreri or Prof. Payson, the project directors. This study (STU00208676) has been reviewed and approved by an Institutional Review Board ("IRB"). You may talk to them at (312) 503-9338 or irb@northwestern.edu.

We will be in touch by phone in the coming days. Should it be more convenient for you to contact us directly, we will be grateful to receive an email or a phone call. We look forward to hearing from you and thank you in advance for your consideration.

A handwritten signature in cursive script that reads "Maria Carreri".

Maria Carreri
9500 Gilman Dr., 0519 La Jolla, CA 92093-0519
phone: (857) 445-2367
email: maria.carreri@kellogg.northwestern.edu

A handwritten signature in cursive script that reads "Julia Payson".

Julia Payson
19 W. 4th St 220, New York, NY 10003
phone: (520) 471-2824
email: julia.payson@nyu.edu



October 10, 2018

To whom it may concern,

As Director of Research of the National League of Cities, I certify that the Dr. Maria Carreri (Northwestern University) and Professor Julia Payson (New York University) have communicated the details of their research study on U.S. the management practices of local officials. The NLC supports this academic study as it has the potential to contribute to a better understanding of city governments, to disseminate best practices, and to strengthen partnerships between local government practitioners and the academic community.

I therefore encourage you to feel free to participate in this study and to reach out to Dr. Maria Carreria (maria.carreri@kellogg.northwestern.edu) or Professor Payson (julia.payson@nyu.edu) if you have additional questions.

Best Regards,

Christiana K. McFarland
Christiana K. McFarland

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Management Survey Questions

Target Setting

| | | | |
|--|---|---|--|
| <p>1) Target Inter-Connection</p> <p>Score: 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> . <input type="checkbox"/></p> | <p>a) We would like to start by learning what you think are some of the main issues currently facing your city. b) What types of goals or objectives have you set for your city and what are the practical targets related to these goals? c) How are these goals assigned or delegated down to the individual members of the government and staff?</p> | | |
| | <p><i>Score 1: Objectives and targets are very loosely defined without specific targets associated with them; goals are not communicated and/or delegated to other members of the staff</i></p> | <p><i>Score 3: Objectives are well-defined with related targets; there is some communication and/or delegation but only to certain staff or departments</i></p> | <p><i>Score 5: Objectives are very clearly defined with specific related targets; targets are clearly and widely communicated and/or delegated to many different departments or members of staff</i></p> |
| <p>2) Time Horizon of Targets</p> <p>Score: 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> . <input type="checkbox"/></p> | <p>a) What kind of timeline are you looking at with your goals? b) Which goals receive the most emphasis? Long-term or short-term ones? c) Are the long-term and short-term goals set together or independently?</p> | | |
| | <p><i>Score 1: The main focus is on short-term targets. Or, "it varies" without any follow-up or specific discussion of timelines.</i></p> | <p><i>Score 3: There are both short and long-term goals for most areas with specific timelines, but they are not necessarily linked to each other.</i></p> | <p><i>Score 5: Long-term goals are translated into specific short-term targets so that short-term targets become a 'staircase' to reach long-term goals. An overall timeline is clearly articulated for both types of goals.</i></p> |

| Monitoring | | | | |
|--|--|--|--|--|
| <p>3) Progress Tracking</p> <p>Score: 1□ 2□ 3□ 4□ 5□ .□</p> | <p>a) So thinking more about [one of the goals or objectives just mentioned]: What kinds of indicators do you use to track the city's progress in reaching this goal? What sources of information are used to perform this tracking? b) How frequently are these indicators measured? Who gets to see this performance data?</p> | <p><i>Score 1: There are no specific indicators or measures to track if objectives are being met; tracking is an ad-hoc process (certain processes are not tracked at all)</i></p> | <p><i>Score 3: Most performance indicators are tracked formally; tracking is overseen by only a few members of the staff rather than communicated widely</i></p> | <p><i>Score 5: Progress is continuously tracked with specific, formal indicators. This tracking is communicated widely across the city government to a variety of staff.</i></p> |
| <p>4) Progress Review</p> <p>Score: 1□ 2□ 3□ 4□ 5□ .□</p> | <p>a) And how often do you review whether [Name of City] is on track to meet its goals with other members of the government or with city staff, either formally or informally? b) Can you give me an example of a recent meeting where you discussed this? c) Who is usually involved in these meetings? Who gets to see the results of this review? d) What sort of follow-up plan usually results from these meetings?</p> | <p><i>Score 1: Performance/progress is reviewed infrequently or in an un-meaningful way (e.g. only success or failure is noted)</i></p> | <p><i>Score 3: Performance is reviewed periodically with successes and failures identified; results are only communicated to a few staff members; no clear follow up/ action plan is adopted</i></p> | <p><i>Score 5: Progress is continually reviewed, based on specific indicators; tracking consistently results in follow-up plans to ensure continuous improvement; results are communicated widely to staff members</i></p> |

People Management

| | | | | |
|--|---|---|--|---|
| <p>5) Building a High-Performance Culture through Incentives and Appraisals</p> <p>Score: 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> . <input type="checkbox"/></p> | <p>a) Do you have an appraisal system to assess staff performance? Could you explain how it works? b) Are there any procedures in place to recognize or reward the best performers across different staff groups, either formally or informally? c) What types of professional development opportunities are provided for top performers?</p> | | | |
| | <table border="1" style="width: 100%;"> <tr> <td style="width: 33%;"><i>Score 1: No appraisal system, either formal or informal. No type of rewards, recognition, or professional development for top-performers</i></td> <td style="width: 33%;"><i>Score 3: There is an evaluation system which allows employees to get feedback and rewards or recognizes good performance, but the system is informal and not applied systematically</i></td> <td style="width: 33%;"><i>Score 5: There is a formal evaluation system that monitors staff performance and allows staff members to receive feedback. Rewards or recognition are given for top performers, formally or informally</i></td> </tr> </table> | <i>Score 1: No appraisal system, either formal or informal. No type of rewards, recognition, or professional development for top-performers</i> | <i>Score 3: There is an evaluation system which allows employees to get feedback and rewards or recognizes good performance, but the system is informal and not applied systematically</i> | <i>Score 5: There is a formal evaluation system that monitors staff performance and allows staff members to receive feedback. Rewards or recognition are given for top performers, formally or informally</i> |
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| | | | | |
|---|--|--|---|--|
| <p>6) Removing Poor Performers</p> <p>Score: 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> . <input type="checkbox"/></p> | <p>a) If you had a staff member who was struggling or who could not do his/ her job, what would you do? Can you give me a recent example?</p> | | | |
| | <table border="1" style="width: 100%;"> <tr> <td style="width: 33%;"><i>Score 1: Poor performance is not addressed or addressed very inconsistently; poor performers are rarely removed from their position</i></td> <td style="width: 33%;"><i>Score 3: Poor performance is addressed, but not always consistently, and usually through a limited range of methods (e.g. "encouraging the person to do better")</i></td> <td style="width: 33%;"><i>Score 5: Poor performance is frequently addressed either formally or informally and using a variety of methods and/or interventions</i></td> </tr> </table> | <i>Score 1: Poor performance is not addressed or addressed very inconsistently; poor performers are rarely removed from their position</i> | <i>Score 3: Poor performance is addressed, but not always consistently, and usually through a limited range of methods (e.g. "encouraging the person to do better")</i> | <i>Score 5: Poor performance is frequently addressed either formally or informally and using a variety of methods and/or interventions</i> |
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Operations

| | | | | |
|--|---|---|---|--|
| <p>7) Efficiency of Procurement</p> <p>Score: 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> . <input type="checkbox"/></p> | <p>a) Could you talk me through the usual process of writing either a procurement bid or RFP in your city? [RFP = Request For Proposal] b) Thinking about a typical [RFP or bid], how far ahead of time do you usually issue the announcement relative to when the service is needed? c) How standardized is this procedure across different city departments?</p> | | | |
| | <table border="1" style="width: 100%;"> <tr> <td style="width: 33%;"><i>Score 1: Mayor does not know about / there is no standardized process to issuing RFPs; RFPs are not anticipated ahead of time and are issued as needs arise.</i></td> <td style="width: 33%;"><i>Score 3: Mayor states there are common guidelines across staff groups on how to issue RFPs; RFPs are not anticipated far ahead of time and are issued as needs arise</i></td> <td style="width: 33%;"><i>Score 5: There are common official guidelines across staff groups; RFPs are anticipated in a timely manner.</i></td> </tr> </table> | <i>Score 1: Mayor does not know about / there is no standardized process to issuing RFPs; RFPs are not anticipated ahead of time and are issued as needs arise.</i> | <i>Score 3: Mayor states there are common guidelines across staff groups on how to issue RFPs; RFPs are not anticipated far ahead of time and are issued as needs arise</i> | <i>Score 5: There are common official guidelines across staff groups; RFPs are anticipated in a timely manner.</i> |
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Other measures of Leader Quality

Perry Public Service Motivation Index

I will now read another series of statements. Please tell me the extent to which you agree or disagree with each statement, using a scale from 1 to 5, where 1 is "disagree strongly" and 5 is "agree strongly".

- a) Politics is a dirty word ____
- b) The give and take of public policy-making does not appeal to me ____
- c) I don't care much for politicians ____
- d) I unselfishly contribute to my community ____
- e) Meaningful public service is very important to me ____
- f) I would prefer seeing public officials do what is best for the whole community even if it harmed my interests ____
- g) I consider public service my civic duty ____
- h) It is difficult for me to contain my feelings when I see people in distress ____
- i) I am often reminded by daily events about how dependent we are on one another ____
- l) I have little compassion for people in need who are unwilling to take the first step to help themselves ____

Education

What category best describes your level of education?

- | | |
|---|--|
| <input type="checkbox"/> Eight grade or less | <input type="checkbox"/> 4-yr College Degree |
| <input type="checkbox"/> Some High School | <input type="checkbox"/> Master's Degree |
| <input type="checkbox"/> High School degree / GED | <input type="checkbox"/> Doctoral Degree |
| <input type="checkbox"/> Some College | <input type="checkbox"/> Professional Degree (JD/MD/MBA) |
| <input type="checkbox"/> 2-yr College Degree | |

Previous Occupation

19) What job did you have either before or during your time as mayor/city manager of [city name]?

Scoring Interviews The main goal of the survey is to obtain an outcome-agnostic measure of the managerial competence of respondents (mayors or city managers). This is achieved by posing questions that do not focus on the “output” of the leaders but rather deal with the practices involved in producing said output. Managerial effectiveness is evaluated along the four dimensions (*target setting, performance monitoring, incentives, operations*), with a total of seven questions. The full survey questionnaire is included in the Appendix.

The target setting section of the survey deals with the goals that the mayor/manager has set for her time in office. Respondents are evaluated not on the content of their goals (whether that be increasing tourism, a redevelopment project, etc.) but rather on the clarity of those objectives. For example, are the goals clearly stated with associated practical targets? Do the leaders identify a mix of short and long-term goals with appropriate time horizons? Are these goals communicated to other members of the city staff, with specific subtasks delegated when appropriate? The monitoring section deals with tracking the performance of the government in attaining its goals. In particular it asks whether the progress tracking is informed by data, how often this monitoring takes place, and how the monitoring practice involves different levels or people within the city government.

The operations section investigates the respondent’s knowledge and oversight over the procurement procedures of her city (one of the most important and time consuming operations for municipal governments) and the efficiency in their implementation. Finally, the incentives section deals with assessing how well the mayor/city manager incentivizes the municipal bureaucracy, specifically by rewarding top performers and addressing or rectifying poor performance among the staff.

Each answer is evaluated in real time by the interviewer who assigns a score for each question ranging from one to five. The interviewer assigns the score based on a rubric containing the criteria that the respondent’s answer has to satisfy in order to obtain each score. The unweighted average across all individual scores assigned to each leader will be used as the measure of the mayor or city manager’s overall managerial effectiveness.

All respondents are also evaluated in terms of their oversight of anti-corruption measures in their city and are asked the standard questions associated with the Perry public sector motivation index. Interviewers also collect data on the respondents' age, birthplace, educational attainment, previous occupation, years of experience as mayor/city manager, and ideological leaning. The survey for mayors contains an additional question on the mayor's political aspirations, as well as three questions on city characteristics, measuring if the city holds partisan elections, if the city has a full-time administrator on the staff, and the extent of mayoral powers (to differentiate between strong and weak mayor-council cities). These characteristics are collected at the end of the survey in order to minimize both attrition and interviewer's bias, as described in the next section.

Collecting Unbiased Responses The managerial competence score described above is potentially subject to both interviewee and interviewer induced bias. The interviewee could answer untruthfully, systematically gearing her responses toward what she believes is the best answer. The interviewer might also systematically under or over score responses based on interviewees' characteristics and preconceptions he might have about the competence of the interviewee or about the local government in question. The use of a double-blind survey technique based on [Bloom and Van Reenen \(2007\)](#) minimizes these two biases.

Interviewee bias, or bias from self-reporting, is minimized in two ways: respondents are unaware that they are being scored,⁵ and the questions they are posed are open-ended (i.e. "What types of professional development opportunities are provided for top performers?") rather than being closed (i.e. "Do you provide professional development opportunities for top performers[yes/no]?") so as not to clearly indicate a "best" or a "worst" answer.

Interviewer bias is limited by the fact that interviews are conducted by phone, and that the interviewer has no information on the performance of the city. Finally, all interviewers go through a training workshop stressing the importance of scoring each answer separately,

⁵Respondents are de-briefed on this and all aspects of the interview via email after the interview as per the IRB protocol.

based on the scoring rubric, rather than on the overall impression of the interviewee. Each interview is recorded (conditional on the respondent's permission to record), and we validate the reliability of the procedure by having a second interviewer score the same interview based on the recording. Moreover, each interviewer will conduct a minimum of 40 interviews, allowing us to account for interviewer fixed effects in the analysis. This controls for an interviewer's general tendency to over- or under-score responses irrespective of the interviewees' characteristics.

B Appendix B

B.1 Additional Results

Table A1: Summary statistics

| Variable | Mean | Std. Dev. | Min. | Max. | N |
|---|-----------|-----------|----------|---------|------|
| <i>Panel A: Respondent Characteristics - Time Invariant</i> | | | | | |
| Managerial Score | 3.698 | 0.73 | 1.75 | 5 | 283 |
| Public Sector Motivation | 4.194 | 0.358 | 3.1 | 5 | 281 |
| Education (years) | 18.459 | 2.486 | 13 | 23 | 283 |
| Occupational Prestige Score | 57.671 | 10.325 | 22.9 | 72.2 | 275 |
| Mincer Residual (standard deviation units) | 0 | 50.365 | -142.063 | 275.216 | 251 |
| Salary (thousands of \$) | 134.327 | 90.930 | 4 | 528.442 | 251 |
| Female | 0.141 | 0.349 | 0 | 1 | 283 |
| Age | 50.212 | 9.439 | 25 | 74 | 283 |
| Years in Local Government | 11.73 | 7.931 | 1 | 40 | 283 |
| Manager | 0.58 | 0.495 | 0 | 1 | 283 |
| Interviewer 1 | 0.042 | 0.202 | 0 | 1 | 283 |
| Interviewer 2 | 0.307 | 0.462 | 0 | 1 | 283 |
| Interviewer 3 | 0.088 | 0.284 | 0 | 1 | 283 |
| Interviewer 4 | 0.187 | 0.391 | 0 | 1 | 283 |
| Interviewer 5 | 0.106 | 0.308 | 0 | 1 | 283 |
| Interviewer 6 | 0.12 | 0.326 | 0 | 1 | 283 |
| Interviewer 7 | 0.148 | 0.356 | 0 | 1 | 283 |
| <i>Panel B: City Characteristics - At Beginning of Sample</i> | | | | | |
| % White | 0.78 | 0.174 | 0.212 | 0.994 | 283 |
| % College Degree | 30.595 | 16.347 | 3.6 | 79.100 | 283 |
| % Poverty | 12.89 | 7.501 | 1.406 | 38.45 | 283 |
| % Unemployed | 8.394 | 3.442 | 1.87 | 20.97 | 283 |
| Median Income (log) | 10.861 | 0.396 | 9.822 | 12.303 | 283 |
| Median Home Value (log) | 12.264 | 0.676 | 11.123 | 13.816 | 283 |
| <i>Panel C: City Characteristics - Panel</i> | | | | | |
| Calendar Year | 2011.771 | 4.078 | 1997 | 2018 | 2746 |
| Normalized Year | -0.404 | 2.967 | -5 | 5 | 2746 |
| Population (log) | 10.043 | 1.073 | 7.397 | 13.656 | 2746 |
| Population | 45127.856 | 77711.657 | 1631 | 852144 | 2746 |
| % Contributions to Reps | 0.413 | 0.231 | 0 | 1 | 2745 |
| % Contributors to Reps | 0.522 | 0.242 | 0 | 1.747 | 2745 |

Table A2: Interviewed vs. Non-Interviewed Cities - Balance

| | Accepted Interview | Declined Interview | All Other Cities in State | Δ Accepted vs. Decline | Δ Accepted vs. All Other |
|-----------------------|--------------------|--------------------|---------------------------|-------------------------------|---------------------------------|
| Population | 10.1 | 9.9 | 9.6 | 0.13 (1.71) | 0.46 (6.14) |
| Median Income | 10.94 | 10.86 | 10.86 | 0.08 (2.66) | 0.08 (3.15) |
| Median House Value | 12.3 | 12.2 | 12.0 | 0.12 (2.58) | 0.26 (7.16) |
| Poverty | 10.7 | 12.1 | 12.0 | -1.43 (-2.69) | -1.37 (-2.75) |
| Pct. Unemployed | 4.5 | 4.7 | 4.6 | -0.24 (-1.67) | -0.088 (-0.59) |
| Pct. Bachelors Degree | 32.0 | 28.0 | 28.6 | 4.0 (3.23) | 3.4 (3.23) |
| Observations | 283 | 607 | 4,591 | | |

Notes: Shows averages of cities that appear in our sample compared to cities that declined and all other cities in the state. All values are measured in 2017. T statistics in parenthesis.

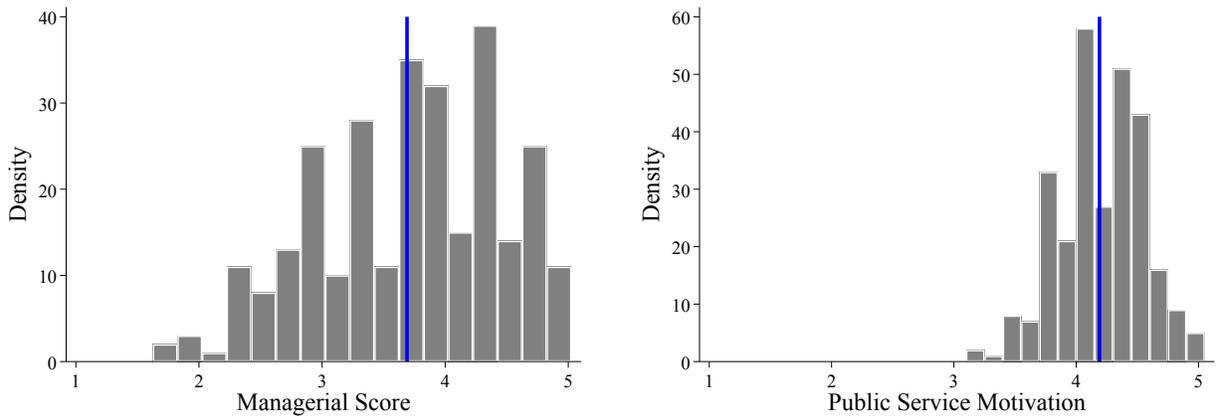
Validity of Measures of Quality Recall that the overall management score is the average of the scores that the local leaders receive across four different areas: target setting, performance monitoring, operations, and incentives. Table A3 shows the pairwise correlations across these components of the overall score. While the correlations are all positive, indicating that mayors scoring highly on one dimension are also likely to score highly on other dimensions, the fact that the correlations generally do not exceed 0.5 suggest that each component captures something distinct in terms of overall management capability. The overall management score also has a Cronbach’s alpha of 0.745.

Table A3: Reliability of Management Score: Pairwise Correlations of Components

| | Target Setting | Operations | Performance Monitoring |
|------------------------|----------------|------------|------------------------|
| Operations | .288* | | |
| Performance Monitoring | .489* | .483* | |
| Incentives | .450* | .775* | .484* |

Notes: Each coefficient reported in the table is from a regression of the variable reported in the column on the variable reported in the row and a constant term using the 237 observations in the cross-sectional dataset. * is significant at the 5 percent level.

Figure A1: Distribution of the Management Score and Public Sector Motivation



Notes: The plots above represent the distribution of the managerial score and Perry Public Service Index. The blue vertical line marks the mean.

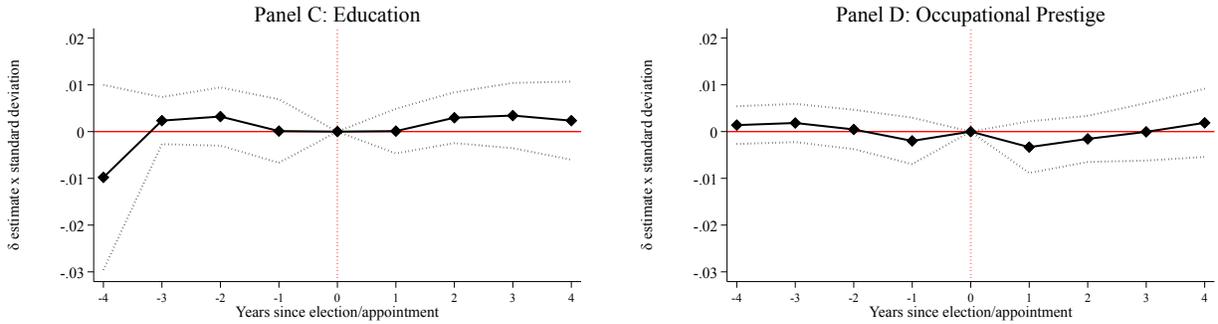
Difference-in-Differences Analysis

Table A4: Effect of Leader Traits on Population With Other Leader Traits Controls

| | (1) | (2) | (3) | (4) |
|--|------------|------------|------------|------------|
| | Population | Population | Population | Population |
| | (log) | (log) | (log) | (log) |
| Public Sector Motivation \times Post | 0.026* | | | |
| | (0.011) | | | |
| Managerial Score \times Post | | 0.015* | | |
| | | (0.006) | | |
| Education \times Post | | | 0.001 | |
| | | | (0.002) | |
| Occupational Prestige \times Post | | | | -0.000 |
| | | | | (0.000) |
| Observations | 2,641 | 2,641 | 2,641 | 2,641 |
| Cities | 273 | 273 | 273 | 273 |
| Mean DV Pre | 44,453 | 44,453 | 44,453 | 44,453 |
| SD DV Pre | 77,917 | 77,917 | 77,917 | 77,917 |

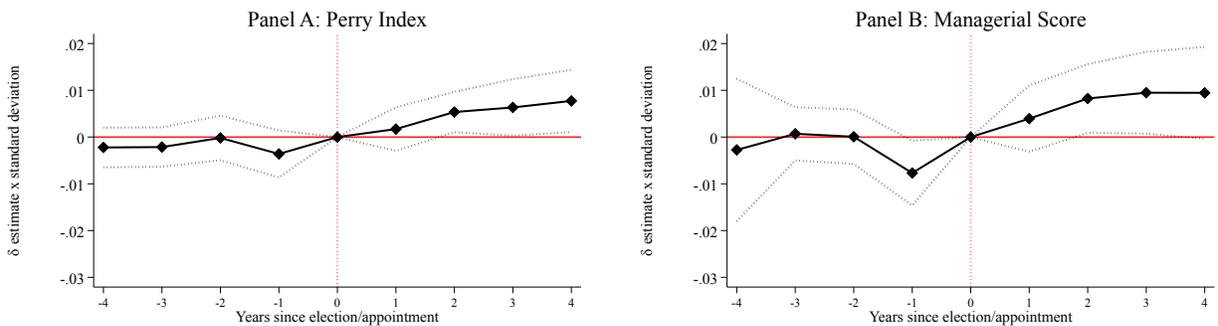
Notes: The mean and standard deviation of the dependent variable (not logged) are reported for the pre-period (i.e. in the years before the interviewed mayor/manager took office). Standard errors clustered at the city level are shown in parentheses. * is significant at the 5 percent level.

Figure A2: Effect of Education and Occupation on City Population: Parallel Trends



Notes: The coefficient plots above represent the coefficient estimates δ_t from the difference-in-differences model, multiplied by the standard deviation of the trait (years of schooling or occupational prestige). Dotted lines plot the 95 percent confidence intervals.

Figure A3: Effect of Public Service Motivation and Managerial Score on City Population: Parallel Trends



Notes: The coefficient plots above represent the coefficient estimates δ_t from the difference-in-differences model, multiplied by the standard deviation of the trait (Perry Index or managerial score). Dotted lines plot the 95 percent confidence intervals.