

Does It Matter That Politicians Are Older Than Their Constituents? Yes.

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Abstract

Does it matter that politicians are older than their constituents? While there is significant evidence that characteristics such as gender, race, class, and sexual orientation influence the behavior of elected officials, we lack research on whether age has a similar effect. To address this gap, I examine how the age of mayors affects municipal spending with an original dataset of over 10,000 mayoral candidates in Japan (2004–2017). Using a regression discontinuity design, I find that electing a younger mayor leads municipalities to change the age orientation of their social welfare programs: increasing expenditures on child welfare relative to elderly welfare. Mechanism tests suggest the effects are driven by the longer time horizons and electoral incentives of younger mayors, and not political selection or prior personal experience with child welfare. The findings provide evidence that the age bias of political institutions can have important consequences for political representation and public policy.

Young people are under-represented in most political institutions. Over half of the world's voters are under 40, compared to just 14% of members of parliament. In countries such as the United States and Japan, this disparity is even greater: just 5% and 7%, respectively, of legislators are under 40, compared to more than a third of the voting age population (Inter-Parliamentary Union 2018). This phenomenon is not limited to national legislatures. Local politicians play a critical role in the provision of government services, yet they too tend to be older than most of the constituents they represent. In Japan, the average elected official at the municipal level is over 60 years old, and just 6% are under 40.¹

While the age bias of political institutions may be well known, past studies have for the most part neglected whether the age of politicians has consequences for political representation. Yet, the shortage of younger people across all levels of public office should be concerning for a number of reasons. There are many issues that disproportionately affect the young, from policies on education to those addressing unemployment, childcare, military service, and newer technologies. Younger people will also be more affected by longer-term issues such as climate change and social welfare reform. Without the greater presence of young people in political institutions, the laws passed by older politicians may be detrimental to both the short- and long-term interests of younger generations.

The absence of a broader discussion on how the age of politicians affects representation is surprising given that there are well developed literatures on how other characteristics such as race, gender, class, and sexual orientation can influence the attitudes and behavior of elected officials (e.g., Butler and Broockman 2011; Chattopadhyay and Duflo 2004; Carnes 2012; Reynolds 2013). Moreover, studies of mass political behavior have long recognized the connection between a person's age and their political preferences and participation (Campbell et al. 1960; Wattenberg 2007; Dalton 2008). Taken together, these studies suggest that scholars should be paying more attention to the influence of a politician's age on the policies they promote in office.

¹Based on data collected by the author from Japanese election websites and newspaper archives.

I theorize and test four mechanisms as to why younger politicians may differ from older politicians. First, younger politicians have a longer time horizon, both as younger citizens and as individuals with potentially longer political careers ahead of them. This may drive younger politicians to care more about long-term policies and long-term relationships with their constituents than older politicians because they have a greater stake in future outcomes. Second, younger politicians may promote different policies because they bring different personal experiences into public office with them than older politicians, based on their different stages in the life cycle and membership in generational cohorts. Third, politicians may have electoral incentives to devote greater effort to policies that are more important to members of their own age group. Finally, there may be different selection effects by age in the decision to run for political office that also affect policy preferences.

In this article, I examine how age affects substantive representation in local government in Japan. More specifically, I focus on the relationship between the age of mayors and the extent to which the social welfare policies they implement in office transfer resources between age groups. Japan makes for a good case because it confronts a long-term demographic crisis that makes age-related social welfare a salient policy issue. The combination of a longer life expectancy and declining birthrate have turned Japan into the world's oldest country, one that faces the challenge of how a declining work force and shrinking population will be able to bear the economic burden of an increasing number of retirees in the future. This setting thus allows us to test how the age of politicians affects how they allocate government resources between competing demands for social welfare: encouraging younger people to have more children to address depopulation and supporting an aging population.

One reason for the relative absence of past work on age may be that studying its effect on the behavior of political elites presents challenges for identification. Younger and older mayors are not randomly distributed across Japanese municipalities. Cities that elect younger mayors may differ significantly from those with older mayors both in their attitudes toward the age of politicians and their policy preferences concerning social welfare. To address these

concerns, I use a regression discontinuity design (RDD) in the context of close elections between younger and older candidates for mayor. In these races, cities that narrowly elect the younger candidate should on average be similar to those that narrowly elect the older candidate. This allows us to estimate the causal effect of a city electing a younger mayor (over an older mayor) on social welfare outcomes, while holding city characteristics constant.

Focusing on mayors instead of other elected officials offers further advantages for identifying the link between age and social welfare. While most studies of social welfare in Japan and other advanced democracies focus on national politics (e.g., Lynch 2006; Estevez-Abe 2008), it is typically local political actors that take the primary role in administering social welfare programs to citizens. Mayors also have executive powers that can help them translate their policy preferences into the allocation of resources for social welfare. Legislators, by comparison, have to work with other representatives and often the executive to enact social welfare legislation. This makes it difficult to estimate the impact that a single additional younger or older legislator has on social welfare outcomes.

Another challenge for identification has been the lack of data. While the Japanese government publishes detailed data on local expenditures, there is no publicly available dataset on local election outcomes. To address this gap, I use web scraping to construct the first large-scale dataset on mayoral elections, covering the near universe of candidates who ran for mayor from 2004 to 2017. This includes data on candidate names, age, gender, incumbency, partisanship, and vote totals for over 10,000 candidates running in 5,770 elections. For the subset of elections between younger and older candidates, I further collect information on each candidate's educational background, family structure, level of party support during elections, and prior political and professional experience. I then supplement the findings from this new dataset by drawing on personal interviews conducted with fifteen Japanese mayors as well as local bureaucrats working inside social welfare departments.

I find that the election of a younger mayor greatly changes the age orientation of social welfare spending in cities. Younger mayors increase spending on child welfare—services that

benefit younger parents by making it easier for them to raise children while working—both in absolute terms and relative to elderly welfare. Additional analyses suggest that time horizons are an important mechanism: much of the difference between younger and older mayors is driven by the greater likelihood of younger mayors to make long-term investments in child welfare. The effect is concentrated in younger municipalities, suggesting younger mayors face greater electoral incentives to represent the interests of younger constituents. By contrast, there is less evidence of political selection or the personal experience of having children as explanatory factors. Robustness checks further show that these results are not driven by incumbency effects, city size, municipal mergers, or national policy changes.

Overall, the findings provide evidence that age matters for the behavior of elected officials. The results further suggest that the unequal representation of younger people in public office may have important consequences for social welfare policy. This is especially important given that younger people can be thought of as a disadvantaged group. Younger citizens typically have less wealth, fewer connections, and vote at lower rates than older citizens (Wattenberg 2007; Dalton 2008). Many elected officials may choose to ignore younger people to focus their energy on more elderly constituents who are wealthier, more likely to contribute to their campaigns, and vote much more often. The descriptive representation of younger citizens in public office may therefore be a necessary condition for their substantive representation, the degree to which their preferences are considered in the policymaking process.

Theoretical Perspectives

To date, most research on young people in politics has focused on age gaps in voter participation (Franklin 2004; Wattenberg 2007; Dalton 2008; Holbein and Hillygus 2015) as opposed to gaps in representation. A few studies have begun to analyze the age bias of national legislatures (Inter-Parliamentary Union 2018; Stockemer and Sundstrom 2018), as well as the normative arguments for youth quotas (Bidadanure 2015; Tremmel et al. 2015), but not the consequences of youth under-representation in political institutions for policy

outcomes.² Similarly, existing explanations for why governments differ in the age orientation of their social welfare programs point to factors such as the historical structure of welfare states, public education, and electoral systems (Lynch 2006; Garfinkel, Smeeding and Rainwater 2010; Wacker and Roberto 2011), rather than the age of elected officials. As a result, no prior work has theorized the link between the age of politicians and the social welfare policies they enact in office.

Drawing on several literatures, I hypothesize and test four mechanisms as to why Japanese younger mayors may be more likely than older mayors to increase municipal expenditures on child welfare relative to elderly welfare.

Time Horizons

First, younger mayors may devote greater resources to child welfare than older mayors because they have longer time horizons. As younger citizens themselves, younger mayors may care more about long-term issues that will have a greater impact on younger generations. If government policies are unable to reverse the trend of Japan's declining birthrate, such as through expanded support for child welfare services, then it will be the shrinking population of younger workers who bear most of the economic burden for the growing number of elderly retirees in the future.

Younger mayors may also have a longer political career ahead of them, including more ambition to run for higher office at the prefectural or national level (Schlesinger 1966). These mayors may therefore see an incentive to invest in long-term relationships with many of their younger constituents who can continue to support them for decades to come. Several studies have found that politicians with longer time horizons invest more in public policies with longer term payoffs. These studies typically focus on the expected tenure of politicians in office by analyzing the effects of term limits (Kousser 2010), term lengths (Titunik 2016;

²The closest work is that of Curry and Haydon (2018), who show that older members of Congress are more likely to introduce legislation that is important to seniors. Other studies consider aspects of younger candidates running for political office such as political ambition (Lawless and Fox 2015; Shames 2017), turnout (Pomante and Schraufnagel 2015), or voter biases (Webster and Pierce 2019; Horiuchi, Smith and Yamamoto 2018), but not the representational behavior of younger people in public office.

Dal Bó and Rossi 2011), safe seats (Kato 1994), seniority systems (Simmons 2016), and autocratic institutions (Olson 1993). While the age of politicians is not the main focus of these studies, the implication is that younger politicians—particularly in legislative settings—will have shorter time horizons because they are more junior and less certain about their ability to win reelection. I argue the opposite: My expectation is that younger mayors will have longer time horizons than older mayors because their longer lifespan and political careers mean that they have a greater stake in the long-term consequences of their policy choices. If time horizons are an important mechanism, then I expect younger mayors will be more likely to favor long-term investments in child welfare than older mayors.

Personal Experience

Second, younger mayors may spend more on child welfare because they bring to office different personal experiences than older mayors. Past work on mass political behavior suggests that a person’s age can shape their political preferences, with younger people tending to favor greater public spending on child welfare because they are more likely to be parents of young children (Goerres 2009; Grossman and Helpman 1998; Bertocchi et al. 2017). Age may have a similar life-cycle effect on elite preferences. Younger politicians are more likely to have younger children themselves, which may give them personal insights into the issues that are most important to younger constituents. Generational differences in raising children may also be important—older mayors may have had young children in the past, but younger mayors with children are raising them now in the context of Japan’s declining birthrate crisis.

While mayors, as political elites, may be insulated from some of the problems facing younger parents, studies in other contexts have found that the experience of having children can change elite perspectives on child-related policy issues (Burden 2007; Washington 2008). In Japan, there is similarly evidence that elected officials are affected by the struggle to balance work with family and raising children.³ If personal experience is a major driver of a

³See for example “Japanese Lawmaker’s Paternity Leave Clashes With Men-Stay-At-Work Mindset,” *The*

mayor's social welfare policies, then we might expect younger mayors with children to spend more on child welfare than mayors without children.

Electoral Incentives

Third, even if younger mayors do not hold the same personal views as younger voters, they may still have greater electoral incentives to devote effort to issues important to younger constituents than older mayors. Elected officials often build support groups with subsets of their constituency with whom they share a certain affinity, such as a shared social identity (Fenno 1978). Whether they have direct personal experience or not, younger mayors may be more likely to have friends and peers who face issues in Japan such as long waitlists for public daycare centers, rising education expenses, and limited parental leave—difficulties that tend to be borne more by younger people.

Younger mayors may be more likely to pursue these issues because they are more familiar with them, via their social group, or because they feel they have a comparative advantage in reaching out to younger voters. Particularly when younger candidates face off against older opponents in elections, their age may give them a strategic edge in making credible appeals to younger voters on age-salient issues. Some studies of voting behavior further suggest that voters use age as a heuristic in elections: younger people are more likely to turn out and support candidates who are closer to themselves in age (Pomante and Schraufnagel 2015; Webster and Pierce 2019). If electoral incentives are important, then we might expect younger mayors to spend more on child welfare in municipalities where there are more young constituents to support them.

Political Selection

A final way that a politician's age may affect social welfare policy is through political selection. There may be differences across generations in the types of people that choose political

Japan Times, Feb. 9, 2016 and "Female Lawmakers In Japan Still Disparaged Over Pregnancy, Maternity Leave," *The Mainichi Shimbun*, July 28, 2017.

careers and the pathways that politicians take to the mayor's office. These different backgrounds could affect the preferences of mayors toward social welfare policy as well as their capacity to enact their preferred policies in office. Four possibilities come to mind.

First, the age of mayors may be correlated with their gender. There is a large literature on how the gender of politicians can affect social welfare policy, with women being more likely than men to focus on child welfare issues (Chattopadhyay and Duflo 2004; Gerrity, Osborn and Mendez 2007). Second, younger and older mayors may have differing levels of education. If younger mayors are more educated than older mayors, then this may affect both their social welfare preferences and their efficacy as mayors. Third, there may be a relationship between a mayor's age and their political party. While nearly all mayors run for office as independents in Japan, parties still exert some influence over local politics. Finally, age is perhaps most directly connected to experience. Within Japanese local politics, strong ties to the central government have historically been viewed as critical components to a mayor's success in office (Scheiner 2006). Even if younger mayors prefer greater spending on child welfare, they may lack the necessary political experience and connections to secure funds for their municipality to improve child welfare services. If political selection is a dominant factor, then we should see evidence that differences in background characteristics are the main drivers of any divergent behavior between younger and older mayors.

Japanese Mayors and Social Welfare Policy

Local governments in Japan provide an ideal setting in which to test the effect of age on social welfare policy. Government spending on social welfare is one of the most salient issues in Japanese politics, mayors have significant discretion over the welfare budget, and there is variation across municipalities in the amount and content of welfare services. Focusing on politicians in executive, rather than legislative offices also allows for better measurement of the direct effect of age on welfare expenditures. Younger members of parliament may hold similar preferences as younger mayors, but their typical positions as party backbenchers gives

them less direct influence over social welfare policy than more senior parliamentarians. By studying Japanese mayors, we can thus analyze the preferred welfare policies of younger and older politicians in a context where these policies are not simply cheap talk, but involve the real transfer of government resources between age groups.

Japan's government is organized into three tiers: the national territory consists of 47 prefectures, which are further divided into 1,741 municipalities (as of April 1, 2019): 791 cities, 744 towns, 183 villages, and 23 special wards in Tokyo. Municipalities differ significantly in size, from Yokohama with a population over 3.7 million to Aogashima with about 200 residents, and age demographics, from the oldest village of Iitate with a median age of 89 to the youngest city of Nagakute with a median age of 38.⁴ The number of municipalities has also decreased substantially since 1999, when there used to be more than 3,200 municipalities, as a result of municipal mergers.

Japan's national-level government is a parliamentary system, but prefectural and municipal governments use a presidential system in which chief executives (governors and mayors) are directly elected by voters. All prefectural and municipal assemblies are unicameral. Mayors are elected in single-member plurality districts, whereas assembly members are elected via the single non-transferable vote system.⁵ Most mayors stand as independents during elections, and are later backed by local and national parties.⁶ Elections are held every four years and there are no term limits.

The conventional wisdom for many years was that local governments in Japan did not hold much influence over policy outcomes (Horiuchi 2009). Scholars historically stressed the national government's influence over local politics through fiscal transfers, administrative oversight by central bureaucracies, and strong relationships between national and local politicians. Since the early 2000s, however, a series of important changes taking place at the local level have sparked renewed interest in local politics. Yet, most empirical work still pri-

⁴Ministry of Internal Affairs and Communication, "2015 Population Census," 2015.

⁵This system was also used by Japan's House of Representatives until 1993.

⁶It is not uncommon for mayors to receive support from parties that are rivals at the national level.

marily links local developments back to the national level, such as how changes affect central government disbursements to municipalities (Catalinac, Bueno de Mesquita and Smith 2019; Hirano 2011) and local support bases for national parties (Shimizu 2012; Horiuchi, Saito and Yamada 2015).

As a result, we know less about the role of local government actors in public service provision, despite an ongoing trend in recent years to devolve authority from the central government to municipalities. In particular, local governments have increasingly gained authority over social welfare administration. While the national government continues to administer pensions, municipalities have played a significant role in social welfare services for the elderly since the Gold Plan of the late 1980s, and for children since the Angel Plan of the mid-1990s. A series of reforms in the late 1990s and early 2000s further decentralized authority from the central government, weakening administrative oversight and clarifying municipalities as the tier of government primarily in charge of social welfare. Municipalities can now fund welfare services through ordinary revenues and can create action plans to support younger generations (Tsuji 2017). As autonomy has grown, so has variation in welfare services across municipalities depending on the policies and financial situation of municipal governments (Bessho 2012).

Reforms to give municipalities greater control over social welfare are in part a response to Japan's rapidly aging population. Since the 1970s, people who are 65 and over have increased fourfold and now account for a quarter of Japan's population. By comparison, the number of children under 15 has fallen by half from 24% to 13% over the same period.⁷ An aging population creates needs for both child and elderly welfare: increased spending in child welfare can encourage younger workers to have more children, while greater nursing and care services can assist the growing elderly population. However, Japan's social welfare policy to date has been heavily biased toward elderly-oriented spending, even accounting for differences in population demographics. In her study of 20 OECD countries, Lynch (2006)

⁷Ministry of Internal Affairs and Communication, "Japan Statistical Yearbook 2018," 2018.

found that Japan had the most elderly-biased social welfare program.

Municipal officials are thus now at the forefront of dealing with perceived generational inequalities in social welfare services. Younger citizens are demanding expanded government support for education, parental leave, and childcare centers. The shortage of publicly available daycare in particular has become a major issue for child welfare in recent years. While the Japanese government estimates that about 30,000 children are on waitlists for daycare, this number does not include parents who have given up waiting. The actual waiting list including all those children, according to some estimates, is between 600,000 and 850,000.⁸

The problem of insufficient daycare may seem surprising given Japan's declining birthrate. However, it is indicative of the government's approach to childcare policy, which has tended to favor spending on subsidies over investment. Most policies aimed at encouraging younger people to have more children take the form of monthly allowances to families for each child and assistance to lower the cost of daycare services. The low cost and high quality of public daycare, coupled with a greater number of women entering the work force, has greatly driven up demand for spots. However, many local governments have lagged far behind demand in investing the necessary effort and resources to build infrastructure and hire more daycare teachers, creating long waiting lists. Parents unable to find a spot in publicly funded daycare can sometimes find openings in unsubsidized private facilities, but these facilities have fewer regulations and cost much more, raising significant concerns about standards and safety.⁹

In this setting, mayors have significant powers vis-à-vis local assemblies to implement their agenda for social welfare policy. Mayors can introduce legislation to the assembly and have the exclusive right to draft and submit the annual budget. In cases where there are disagreements over policy, mayors can veto assembly resolutions, forcing the assembly to reconsider and seek a two-thirds vote to override the mayor. Assemblies do have the power to remove the mayor via a vote of no-confidence, but the threshold is quite high at three-

⁸Minami Funakoshi, "Japan Cries Out for Daycare," *The Wall Street Journal*, Apr. 7, 2013.

⁹Motoko Rich, "Japan Desperately Needs More Daycare Workers. New Mothers Need Not Apply." *New York Times*. June 9, 2019.

quarters in favor with a quorum of two-thirds of members in attendance.¹⁰ The mayor is further protected because they can respond to no-confidence votes by instead dissolving the assembly and calling a snap election. Mayors can also exercise powers normally held by the assembly—such as modifying budgets—when the assembly is not in session or fails to act on a matter requiring its attention.¹¹ Thus, while mayors and assemblies share authority over policymaking in principle, several studies document how both formal and informal rules favor the policy direction of the mayor (Tsuji 2017).

Data

Municipal Elections

One challenge to the study of local politics in Japan has been the lack of centralized, publicly available data on either candidates or outcomes in local elections. While Japan scholars have long benefited from candidate-level datasets for prefectural assemblies (Horiuchi and Natori 2019), the House of Representatives (Reed and Smith 2018), and the House of Councillors (Maeda 2016), a comparable dataset does not exist for municipal elections. This absence of systematic data on local politicians makes it impossible for researchers to answer questions such as whether the age of mayors has an impact on social welfare policy.

In this project, I fill in this gap by building an original dataset of mayoral elections held between 2004 and 2017. To assemble this dataset, I first use web scraping to collect information from online platforms in Japan that aggregate data from newspapers, election returns, and individual users on candidates for local, prefectural, and national elections.¹² I then supplement this information by searching through newspaper archives as well as candidate and municipal websites to correct errors and further fill out the demographic information of candidates.¹³

¹⁰In Japan’s national parliament, as in many parliamentary systems, only a majority vote is needed to remove the executive (prime minister).

¹¹Council of Local Authorities for International Relations, “Local Government in Japan,” 2008.

¹²The two main websites used are go2senkyo.com and seiji-yama.jp.

¹³Newspaper archives include those of the *Asahi Shimbun*, *Yomiuri Shimbun*, and *Nikkei Shimbun*.

The final dataset covers all 5,770 elections held in Japan's 1,741 municipalities during this period.¹⁴ The dataset includes information on candidate names, age, gender, incumbency, partisanship, and vote totals for over 10,000 candidates. As discussed later in the article, I further compile biographical information for a subset of politicians who competed in close races between younger and older candidates for mayor, including their education, family structure, level of party support, and prior experience in politics, government, or other professional fields. While I focus on the effect of electing younger mayors in this article, future work could use this dataset to study other aspects of local elections, such as the incumbency advantage of mayors. I have also collected data for every municipal assembly candidate from 2004 to 2017, although this paper only considers the mayoral data.

Younger and Older Mayors

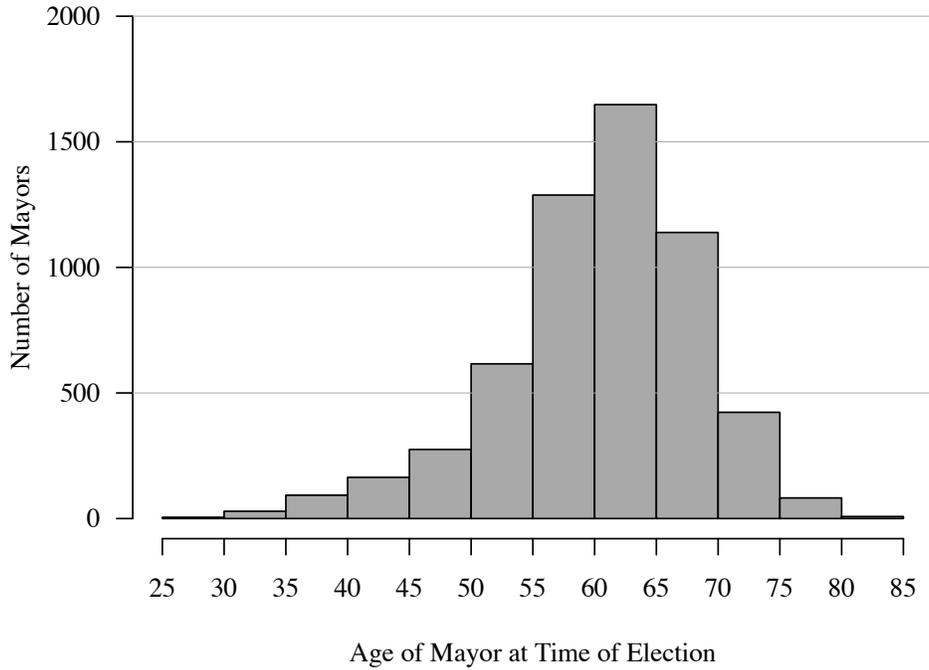
Figure 1 shows the age distribution of mayors elected in Japan from 2004 to 2017. To run for mayor, an individual must be at least 25 years of age and eligible to vote in the municipality. Mayors elected during this period range in age from 28 to 84, although most are much older than the minimum age requirement. The average mayor is 62 and over 90% are over 50. Mayors in Japan are also almost entirely men (over 98%).

Mayors in Japan thus tend to be older than most of their constituents, whose median age is 45. Younger mayors are relatively rare, with most mayors entering office between the ages of 55 and 70. Over this period, the number of mayors elected between the ages of 60 and 65 (1,648) was more than 300 times greater than the number elected between 25 and 30 (5) and 16 times greater than the number elected under 40 (101). Less than 5% of Japanese mayors are under 45, compared to nearly 40% of the voting age population.

Where do younger candidates choose to run for mayor in Japan? Municipality and election characteristics with and without a candidate under 45 are shown in Table 1. Of

¹⁴One challenge for the dataset is how to handle municipal mergers. I take two approaches. First, to have a full set of expenditures data, I focus only on the 1,741 municipalities that existed during the entire 2004-2017 period. Second, to be conservative I show that my results are robust if I limit my main analysis to only those municipalities that did not experience any mergers since the late 1990s. More than 70% of municipalities are in this category, and only a handful of the elections in my analysis occur close to a municipal merger.

Figure 1: Age Distribution of Mayors in Japan, 2004–2017



Notes: Data was collected by the author from Japanese election websites and newspaper archives.

the 5,770 elections held from 2004 to 2017, 501 (8.7%) feature at least one person under 45 as one of the top-two candidates. Much of Japan has seen at least one younger candidate during this period, including 46 of 47 prefectures and 357 (20.5%) of 1,741 municipalities.

On average, elections with a younger candidate are more likely to take place in larger municipalities with slightly younger populations. Nearly 70% of these elections occur in cities compared to 45% of elections without younger candidates. Candidates under 45 are also more likely to contest mayoral seats in the more densely populated Kanto and Kansai regions, which contain the major metropolitan areas of Tokyo and Osaka, respectively, compared to the less densely populated northern areas of Japan (Tohoku and Hokkaido). Elections with younger top-two candidates are more likely to be competitive, although the average vote share of the winning candidate is about the same across the two groups in competitive

Table 1: Mayoral Elections With and Without Younger Candidates, 2004–2017

	At Least One Candidate Under 45				Difference in Means	
	Yes		No		A–B	SE(A–B)
	A	SD(A)	B	SD(B)		
Municipality						
Population (thousands)	171.8	(351.8)	66.9	(170.8)	104.9***	(FIX)
% Under 15	.128	(.022)	.124	(.024)	.004***	(.001)
% 15–64	.607	(.050)	.588	(.054)	.019***	(.002)
% 65 and Over	.265	(.065)	.287	(.072)	-.022***	(.003)
City	.699	(.459)	.445	(.497)	.253***	(.022)
Town	.242	(.428)	.437	(.496)	-.195***	(.020)
Village	.026	(.159)	.107	(.309)	-.081***	(.008)
Tokyo Special Ward	.034	(.181)	.011	(.103)	.023***	(.008)
Region						
Hokkaido	.048	(.214)	.101	(.301)	-.053***	(.010)
Tohoku	.070	(.255)	.137	(.343)	-.067***	(.012)
Kanto	.257	(.438)	.174	(.379)	.084***	(.020)
Chubu	.164	(.370)	.184	(.388)	-.020	(.017)
Kansai	.224	(.417)	.123	(.328)	.101***	(.019)
Chugoku	.058	(.234)	.064	(.244)	-.006	(.011)
Shikoku	.040	(.196)	.057	(.232)	-.017*	(.009)
Kyushu and Okinawa	.140	(.347)	.160	(.367)	-.021	(.016)
Election						
Contested	.914	(.280)	.630	(.483)	.284***	(.014)
Winning Vote Share	.615	(.093)	.611	(.096)	.003	(.005)
Municipalities	357		1,726		1,741	
Prefectures	46		47		47	
Elections	501		5,269		5,770	

Notes: Mayoral elections with and without at least one candidate under 45 years old among the top-two candidates. Population demographics come from the Census of Japan. Election data was collected by the author from Japanese election websites and newspaper archives. * $p < .1$; ** $p < .05$; *** $p < .01$.

elections. The patterns are similar for candidates under 40 and under 50.

It is important to note that the types of municipalities where younger people are more likely to run—namely, younger, more urban cities—are also those where demand for childcare tends to exceed the capacity of existing daycare infrastructure (Fukai 2017). It may be the case that a desire to address the lack of child welfare investment is one of the factors driving more young people to run for mayor in these municipalities.

Municipal Social Welfare

To study the effect of younger mayors on social welfare policy, I use data from the annual Local Public Finance datasets published by the Ministry of Internal Affairs and Communications.¹⁵ These datasets provide a detailed accounting of expenditures for local governments. I adjust all monetary figures into 2015 yen based on the consumer price index. I then merge this data with demographic information from population censuses.¹⁶ In my main analysis, I use per capita expenditures to account for population differences across municipalities.

Public welfare expenses (excluding pensions) are primarily the domain of local governments. Prefectural and municipal governments make up 70% of total expenditures compared to 30% by the central government. Of local government spending on welfare, 80% is done by municipalities compared to 20% by prefectures. At the municipal level, welfare is the largest expenditure category in the budget (35%), followed by general administration (12%), civil engineering (12%), and education (10%). Municipal expenditures on welfare have generally increased over the past ten years, while spending on civil engineering and agriculture has decreased.¹⁷

One benefit to the Local Public Finance data is that municipal governments use discrete budget categories to account for social welfare spending that is targeted at children compared to the elderly. The “Child Welfare” category includes spending on parental leave benefits, centers for maternity and daycare support, subsidies for parents, and children with disabilities. Pensions are handled by the national government, but the “Elderly Welfare” category includes public spending on nursing services, subsidies, and facilities for the elderly. Although Japan’s overall social welfare system is biased toward supporting the elderly (Lynch 2006), municipalities on average spend more per capita on child welfare than elderly welfare, although there is significant heterogeneity.¹⁸

¹⁵Ministry of Internal Affairs and Communications, “Local Public Finance Survey,” 2000–2018.

¹⁶While the census in Japan is published every five years, the government publishes official population estimates for the intervening years.

¹⁷Ministry of Internal Affairs and Communications, “White Paper on Local Public Finances,” 2016.

¹⁸In contrast, prefectures spend more per capita on elderly welfare than child welfare.

Municipalities do face constraints from higher tiers of government to fulfill a certain basic level of services, but they still maintain significant policy discretion and both the content and amount of services varies widely across municipalities. To reduce the possibility that a few outliers could drive my results, I focus on the natural logarithm of spending per capita: dividing spending on the elderly by the population 65 and over and spending on children by the population under 15. However, the results are substantively similar for non-logged values of welfare spending.

Regression Discontinuity Design

Identifying the causal effect of a younger mayor on the age orientation of social welfare is not easily solved through typical OLS methods. As shown in Table 1, municipalities where younger candidates enter the race differ in observable characteristics from those elections that do not have younger candidates. Moreover, it is unlikely that OLS will be able to account for other, unobservable differences between these municipalities that affect local preferences for younger mayors and social welfare services.

To address these concerns, I use a regression discontinuity design (RDD) in the context of close elections between younger and older candidates. The core assumption of this design is that in close single-member district elections, where the winner changes discontinuously at 50% of the top-two candidate vote share, which candidate wins is thought to be as-if randomly assigned so long as there is some unpredictability in the ultimate vote (Lee 2008). Because of this as-if random assignment, municipalities on either side of the 50% vote threshold should be largely similar in observable and unobservable characteristics, differing only in whether they receive the treatment of electing the younger mayor. In the Appendix, I conduct several placebo tests to show that municipalities on either side of the election threshold are balanced in terms of their population size, age demographics, and pre-existing social welfare infrastructure and expenditures (Table A1). McCrary (2008) density tests further indicate that there is no evidence of sorting among younger and older politicians at

the election threshold (Figure A1).

To estimate the effect of electing a younger mayor on the age orientation of social welfare, I begin with an age cutoff of 45 and then test the robustness of the results to different age cutoffs and age gaps between younger and older candidates. For the outcome variables, I follow the example of de Benedictis-Kessner and Warshaw (2016), who suggest differencing the dependent variable in an RDD to increase statistical efficiency. This means that I estimate treatment effects on changes in social welfare spending rather than on levels. The results for the first difference of my logged dependent variable can be interpreted approximately as the percentage change in expenditures due to electing a younger mayor. My main analysis focuses on the differences in spending on child welfare and elderly welfare between the year leading up to the mayoral election and the second year of the elected mayor's term.¹⁹

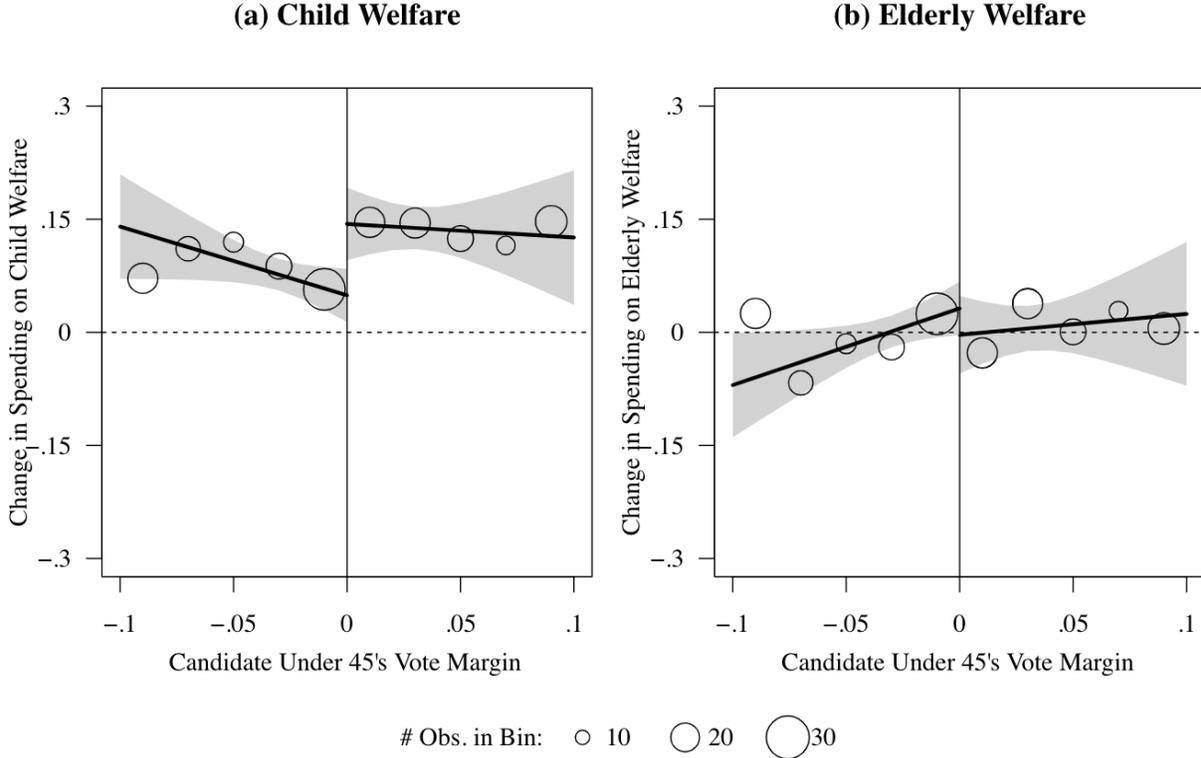
Results

Do younger mayors target different age groups with their social welfare policies than older mayors? Figure 2 presents a graphical representation of the main RD results. Panel (a) shows the results for child welfare and panel (b) the results for elderly welfare. The y-axis in both plots represents the logged per capita change in spending for each welfare category from the year before to the year after the municipal election, and the x-axis is the candidate under 45's vote margin in that election. The circles represent bins of the raw data and are sized according to the number of observations. On each side of the hypothesized discontinuity, where the margin of victory is equal to zero, I fit lines using local linear regression. The grey shaded areas represent 95% confidence intervals.

Figure 2 shows that younger mayors have a differential effect on municipal spending on child welfare compared to elderly welfare. Looking first at panel (a), we can see a clear,

¹⁹Young mayors also have a significant impact on social welfare spending two, three, and four years after their election. I focus on two years later to balance between giving the new mayor time to have an impact on the budget and endogenous responses from other political actors to the mayor's influence that may arise later in the term (de Benedictis-Kessner and Warshaw 2016). However, I obtain similar results if I instead look at spending in year 3, year 4, or an average of years 2-4 (see Figure A4).

Figure 2: Younger Mayors Increase Spending on Child Welfare



Notes: In panel (a), a victory by candidate under 45 leads to an increase in spending on child welfare in that municipality after the election. In panel (b), a victory by the candidate under 45 leads to a small, but insignificant decrease in spending on elderly welfare compared to municipalities that elected the older candidate. Lines are fit using local linear regression. Grey shaded areas represent 95% confidence intervals.

positive jump at the election threshold. Municipalities that narrowly elect the candidate under 45 experience a greater increase in child welfare spending compared to municipalities that elect the older candidate. By contrast, the jump in panel (b) suggests a negative, albeit statistically insignificant effect of younger mayors on changes in elderly welfare spending compared to older mayors.

To test these results more formally, Table 2 presents several models of the RD effect for both child and elderly welfare. For each spending category, the estimate is first calculated using local linear regression and the optimal bandwidth, h , chosen to minimize the mean square error, and then for $2h$ to test whether any results change after widening the bandwidth

Table 2: Younger Mayors Increase Spending on Child Welfare

DV:	Child Welfare				Elderly Welfare			
	Loc.	Linear	Quad.	Cubic	Loc.	Linear	Quad.	Cubic
Specification:								
Bandwidth:	h	$2h$	.2	.2	h	$2h$	.2	.2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mayor Under 45	.102** (.048)	.070** (.034)	.088** (.041)	.135** (.056)	-.010 (.043)	.004 (.030)	-.017 (.052)	-.070 (.074)
Bandwidth	.062	.124	.200	.200	.121	.242	.200	.200
N	128	245	320	320	236	339	320	320

Notes: RD models show the effect of municipalities electing a mayor under 45 on child and elderly welfare expenditures. h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

to include more observations around the treatment threshold (Cattaneo, Idrobo and Titiunik 2019; Imbens and Kalyanaraman 2012). The third and fourth models test whether the results are robust to changing the functional form of the RD specification to be quadratic and cubic, respectively.

The results from Table 2 reinforce the finding from Figure 2 that younger mayors pursue significantly different social welfare priorities in office than older mayors. The narrow election of the candidate under 45 leads to a 7–13.5 percentage point increase in child welfare spending compared to municipalities that elect the older candidate (Models 1–4). In contrast, younger mayors appear to spend 0–7 percentage points less on elderly welfare compared to older mayors, although the coefficients are not statistically significant (Models 5–8). The size of these coefficients are substantively meaningful for municipalities. For example, in the average municipality, Model 1 suggests that younger mayors spend approximately \$356 more on child welfare per child under 15 than older mayors, or \$3.6 million in total.²⁰

The lack of a significant finding for elderly welfare indicates that younger mayors do not fund greater expenditures for child welfare by shifting resources directly between age groups. Instead, younger mayors rely on a mixture of general resources, bonds, and transfers from

²⁰In Japanese yen, younger mayors spend 39,392 yen more per child under 15 than older mayors, or 401,384,784 yen in total.

higher tiers of government to increase child welfare spending (Table A3). The asymmetric effects of younger mayors may reflect the asymmetric nature of social welfare policy itself: while younger mayors can expect to benefit from elderly welfare at some point in the future, older mayors can no longer directly benefit from child welfare (Busemeyer, Goerres and Weschle 2009). Another possibility, reinforced during personal interviews with mayors, is that younger mayors do not reduce spending on elderly welfare because of electoral pressures from older constituents, who are more numerous, better organized, and vote at higher rates than younger constituents.

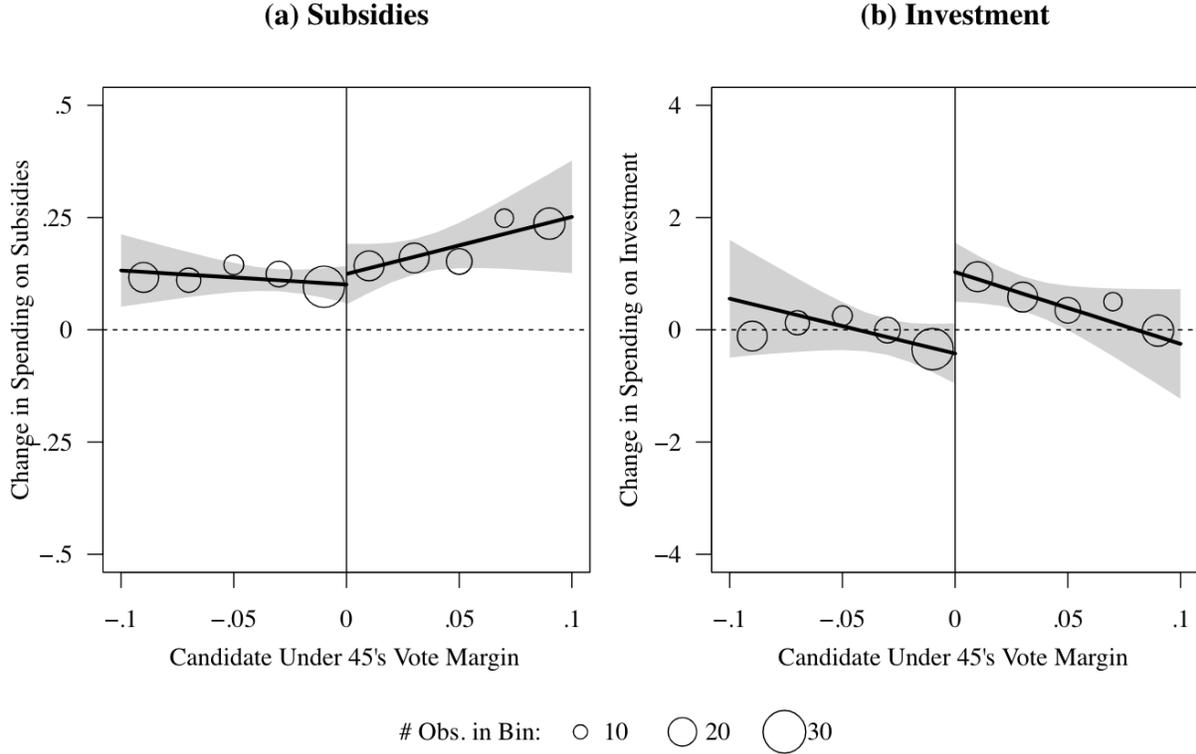
Time Horizons

While younger and older mayors pursue similar policies for elderly welfare, what explains their divergent pattern in child welfare expenditures? As discussed earlier, one potential explanation is that younger politicians have different budget priorities than older politicians because they have longer time horizons.

To test this hypothesis, I break down the overall child welfare budget into spending on subsidies and investment. Younger mayors could be expanding the child welfare budget through more short-term policies aimed at giving direct payments to parents in the form of subsidies. If they favor longer-term policies, however, then we might expect them to expand investment in improving and expanding the existing infrastructure for childcare centers.

Figure 3 compares the local average treatment effects of younger mayors on subsidies (panel a) and investment (panel b) for child welfare. In line with the theoretical predictions, we can see that the difference between younger and older mayors in child welfare spending is driven more by different patterns in investment compared to subsidies. Panel (a) reveals that both younger and older politicians tend to favor increases in subsidies for child welfare, as the plot shows a negligible difference in the fitted lines near the election threshold. In comparison, there is a significant positive jump between the fitted lines in panel (b) at the hypothesized discontinuity: younger mayors increase the amount of investment in child

Figure 3: Younger Mayors Invest More in Child Welfare



Notes: In panel (a), a victory by the candidate under 45 leads to no significant change in spending on subsidies for child welfare. By contrast, panel (b) shows that a victory by the candidate under 45 leads to an increase in investment in child welfare. Lines are fit using local linear regression. Grey shaded areas represent 95% confidence intervals.

welfare much more than older mayors, who tend to reduce spending in investment.

Table 3 shows the formal results from the RD models, following the organization of Table 2. While none of the models for subsidies reach conventional levels of statistical significance (Models 1–4), the coefficients in all four specifications for investment are large and statistically significant at the 1% level (Models 5–8). The results suggest that the narrow election of a candidate under 45 leads these municipalities to more than double their investment in child welfare relative to municipalities with older mayors. In the average municipality, younger mayors spend approximately \$208 more per child under 15 on these investment projects than older mayors, or \$2.1 million in total.²¹

²¹In Japanese yen, younger mayors spend 22,980 yen more per child under 15, or 234,154,710 yen in total.

Table 3: Younger Mayors Invest More in Child Welfare

DV:	Child Welfare							
	Subsidies				Investment			
	Loc.	Linear	Quad.	Cubic	Loc.	Linear	Quad.	Cubic
Specification:								
Bandwidth:	h	$2h$	.2	.2	h	$2h$	.2	.2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mayor Under 45	.059 (.055)	-.006 (.045)	.007 (.052)	.053 (.066)	1.927*** (.596)	1.399*** (.393)	1.731*** (.480)	2.247*** (.688)
Bandwidth	.064	.128	.200	.200	.065	.130	.200	.200
N	132	250	320	320	134	251	320	320

Notes: RD models show the effect of municipalities electing a mayor under 45 on subsidies and investment in child welfare. h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

The finding that younger mayors are more likely to make long-term investments in child welfare than older mayors offers solid evidence in support of the time horizon mechanism. However, it is important to address two other interpretations of these results. The first is that younger mayors may be expanding investment in child welfare because mayors have greater discretion over investment than they do over subsidies. While there are no codified rules governing the amount of investment expenditures, national guidelines prohibit mayors from reducing subsidies for child welfare below a minimum guaranteed level. With that being said, there are still significant differences in the change in spending on subsidies between municipalities in the sample—ranging from a 55% decrease to a 103% increase (Table A2). Moreover, it is reassuring that we find the greatest difference between younger and older mayors in areas of the budget where they have greater discretion, as there is more room for characteristics such as age to drive the observed differences in mayoral spending patterns.

The second possibility is that the tendency of younger mayors to increase spending in public works could be viewed less through an investment lens and instead as evidence of generational differences in preferences for pork-barrel politics. Scholars have long documented the important role of pork in Japanese politics (Scheiner 2006; Catalinac 2016). In these

cases, the typical clientelist argument is that politicians target spending in construction projects in order to offer jobs in exchange for votes from workers. To try and rule out this interpretation, I show in Table A4 that younger mayors are not more likely to expand investment in other types of public works projects (e.g., roads, bridges) than older mayors. This evidence suggests that it is unlikely that younger politicians' greater investment in child welfare can be purely explained by stronger preferences for pork-barrel politics.

Robustness Checks

To further analyze the sensitivity of the main results, I run several additional tests in the Appendix. First, Figure A2 shows that the main effect is not dependent on a cutoff at 45, but is instead robust to a wide range in age cutoffs between younger and older mayors. Second, Table A5 finds that the effect size increases with the age gap between candidates, suggesting the results are not driven by mayors close to one another in age. Third, the RD estimate is robust to smaller and larger bandwidths (Figure A3), placebo cutoffs (Table A6), and the exclusion of units very close to the cutoff (Table A7). Fourth, Table A8 shows that the effects of younger mayors are concentrated in spending on social welfare, rather than other aspects of the municipal budget. Finally, Table A9 demonstrates that the main results are robust to including controls for incumbency, gender, municipal population, municipal mergers, and year fixed effects to help account for national level policy changes during specific years.

Additional Mechanisms

The main finding presented thus far is that younger mayors increase municipal spending on child welfare compared to older mayors. There is also evidence that younger mayors do so because they have longer time horizons, as most of the difference between younger and older politicians is driven by their different patterns in committing city resources to longer term investments in child welfare as opposed to shorter term subsidies. Drawing on the theoretical argument outlined earlier in the article, this section seeks to explore whether the other three discussed mechanisms may also be at work.

Personal Experience

Do younger mayors increase investment in child welfare because of their personal experience as parents? As discussed earlier, younger mayors may do so because they are more likely to be at a stage in the life cycle where they are the parents of younger children.

To test this hypothesis, I compile data on whether mayoral candidates had a child at the time of the election or not. Collecting this information is not an easy task: candidates are not required to disclose their family structure and a comprehensive survey of mayoral candidates does not exist. Thus, I rely on publicly available information for each candidate, including personal and municipal websites as well as newspaper coverage of the election. Thankfully, there is a strong norm in Japan for politicians to have a profile page on their website that includes an outlined summary of their prior education, work history, and family structure. Many municipal governments similarly publish the profiles of current and past mayors on their websites, and many politicians likewise share information about their families on social media websites such as Facebook and Twitter.

To evaluate whether younger mayors with children invest more in child welfare than younger mayors without children, I subset the main dataset into two groups depending on whether the candidate under 45 had a child at the time of the election. In total, 45% of the younger candidates entered the race with a child. In Table 4, I then re-run the main RD analysis for each group. Partitioning the main sample into two groups in effect changes the local average treatment effect estimated by each analysis. Models 1–4 estimate the effect of electing a younger mayor *with* a child on child welfare investment, whereas Models 5–8 estimate the effect for younger mayors *without* children.

Overall, the results in Table 4 indicate that younger mayors have a significant impact on investment in child welfare regardless of whether they have children. Across all eight models, the coefficients are similarly signed and statistically significant. There are a few models where the effect for mayors with children appears to be slightly larger (Models 1 and 4) than the comparable effect for mayors without children (Models 5 and 8), although this

Table 4: Younger Mayors Invest More Regardless of Whether They Have Children

DV:	Investment in Child Welfare							
	Candidates Under 45 With Children				Candidates Under 45 Without Children			
Children:								
Specification:	Loc. Linear		Quad.	Cubic	Loc. Linear		Quad.	Cubic
Bandwidth:	h	$2h$	.2	.2	h	$2h$	.2	.2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mayor Under 45	3.114*** (.928)	1.926*** (.614)	2.313*** (.693)	3.184** (.952)	2.511*** (.697)	1.985*** (.522)	2.244*** (.605)	2.921*** (.850)
Bandwidth	.051	.102	.200	.200	.060	.120	.200	.200
N	49	100	142	142	70	126	178	178

Notes: Sample split by whether the candidate under 45 has children. h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses.

* $p < .1$; ** $p < .05$; *** $p < .01$.

difference is not consistent across specifications.

One caveat to the findings presented here is that measuring the effect of children is complicated by whether candidates with children choose to share this information with voters. In interviews with mayors, most suggested that candidates prefer to share their family information in order to try and forge a more personal connection with their constituents. However, it is possible that some candidates do not share this information in order to protect their children from the public eye. There may also be a gendered effect wherein women candidates choose not to share this information to avoid being seen in a more stereotypical family role. If these two phenomena are common and correlated with preferences for expanding child welfare investment, then it is possible that there could be a larger effect of having children. However, given the information that is publicly available, the results suggest that the main effect of younger mayors on child welfare investment is not driven by whether they have personal experience raising children.

Electoral Incentives

A second way that age could affect investment in child welfare is through differing electoral incentives between younger and older mayors. As hypothesized earlier, younger mayors may

be more likely to increase investment in child welfare because they place greater importance on catering to younger constituents than older mayors.

To put this argument to the test, I first collect municipal-level data on the percentage of the population under 15 years of age from the census. I then divide the main sample into two subgroups by the median value of this percentage (13%). While constituents under 15 years of age are below Japan's minimum voting age (18) themselves, municipalities with more children are also likely to have more young parents who are the recipients of many child welfare benefits. If younger mayors feel that they have a stronger electoral incentive to cater to the needs of younger parents than older mayors, then we might expect the level of child welfare investment to be sensitive to the overall number of younger parents.

Table 5 reruns the main statistical models by subgroup for child welfare investment. Consistent with the theory, the significant effects of younger mayors on child welfare investment are concentrated in municipalities with younger populations. The coefficients in Models 1–4 are all larger in magnitude than their respective counterparts in Models 5–8 and are significant at the 1% level. The coefficients in Models 5–8 are in the expected positive direction, suggesting younger mayors do increase investment in these municipalities as well, however none of them reach conventional levels of significance.

In interpreting the results in this section, it is important to keep in mind that the differences between subgroups is not causally identified. Younger and older municipalities likely differ along several dimensions other than the percentage of the population that is under 15 years of age. These differences could affect the type of candidate likely to run for mayor as well as local preferences concerning social welfare spending. However, existing evidence suggests that demand for child welfare is if anything greater in cities with more children, where existing infrastructure tends to be inadequate and waitlists are long (Fukai 2017).

The observed patterns also run counter to what we might expect from more traditional models of representation. If characteristics of mayors such as their age had no influence over policy, then we might expect all mayors to converge their policies toward the preferences of

Table 5: Younger Mayors Invest More in Younger Municipalities

DV:	Investment in Child Welfare							
	Younger Municipalities				Older Municipalities			
Age Demographics:	Loc. Linear		Quad.	Cubic	Loc. Linear		Quad.	Cubic
Specification:	h	$2h$	.2	.2	h	$2h$	.2	.2
Bandwidth:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mayor Under 45	1.792*** (.655)	1.292*** (.450)	1.886*** (.611)	2.406** (.939)	1.216 (.874)	.825 (.627)	1.284 (.865)	1.615 (1.241)
Bandwidth	.083	.166	.200	.200	.087	.174	.200	.200
N	94	142	161	161	76	146	159	159

Notes: Sample split at median of municipality’s population under 15 (13%). h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

the median voter (Downs 1957). Instead, the opposite appears to be the case. In younger municipalities, there is a greater divergence between the tendency of younger and older mayors to invest in child welfare. These results thus suggest that younger mayors are more responsive than older mayors to the demands of younger constituents.

Political Selection

A final way that age could affect spending on child welfare is through political selection. There may be generational patterns in pathways to the mayor’s office that influence mayoral preferences toward child welfare as well as the relative ability of mayors to carry out their preferred policies in office.

I test this hypothesis by collecting biographic information on the candidates in these close elections from personal and municipal websites as well as newspaper coverage. These data cover five types of candidate qualities. First, I use candidate profiles to verify the gender of each candidate as recorded through the initial construction of the mayoral dataset. Second, I record the highest level of school that each candidate completed. Third, while nearly every mayor in the sample officially ran as an independent, parties do offer recommendations and support to candidates during election campaigns. I code whether the candidate received any

form of support from one of the four most active parties in mayoral races: the Liberal Democratic Party, Democratic Party of Japan, Komeito, and Social Democratic Party. Fourth, I account for each candidate’s prior experience in elected office. Finally, I record any experience in government or other professional fields. Given that I rely on candidate websites, there is some missing data. However, the regularity with which candidates list their profiles helps to avoid this problem—while there is some variation across categories, overall I am able to collect nearly 90% of the target biographical data.²²

To test whether differences in backgrounds between younger and older candidates could be driving the differences in child welfare policy, I again rely on RD designs to assess whether there are any discontinuities in these covariates at the election threshold. In statistical terms, I look for any evidence of a compound treatment, wherein the age of the mayor is not the only characteristic that changes when a candidate under 45 narrowly defeats a candidate 45 or older in a close election. This approach to assessing the role of individual covariates is akin to checking covariate balance in municipality characteristics in Table A1.

Table 6 displays the results. While the findings suggest that there are some interesting patterns between younger and older mayors, the vast majority of individual characteristics are not statistically significant. The signs of the coefficients indicate that younger candidates are no more likely to be women, tend to be more educated, receive less party support, have more experience serving in national as opposed to local politics, have less experience in many professional fields, and are slightly more likely to be either a celebrity or a member of a political dynasty than older candidates. The lack of significant differences along these dimensions in the RD tests, however, means that it is unlikely that they are behind the observed patterns in social welfare expenditures.

²²This percentage assumes that mayors do not strategically omit parts of their past history as in the case of having children. It seems unlikely for these particular categories, and I try wherever possible to corroborate personal and municipal websites with information from newspaper coverage of the election.

Table 6: Pathways to the Mayor’s Office for Younger and Older Candidates

	Mayors Under 45 vs. Mayors 45 and Over			
	RD Estimate	SE	Bandwidth (h)	N
Characteristics				
Age	-22.6***	(1.45)	.126	277
Female	-.001	(.025)	.054	131
Education				
College	.054	(.043)	.065	124
Graduate School	.084	(.122)	.106	202
Party Electoral Support				
Liberal Democratic Party	-.059	(.114)	.095	220
Democratic Party of Japan	-.034	(.091)	.088	199
Komeito	-.124	(.108)	.088	198
Social Democratic Party	-.062	(.039)	.079	177
Any Political Party	-.035	(.135)	.088	199
Political Experience				
First Time Mayor	.483***	(.161)	.086	163
Mayor (number of terms)	-.966***	(.299)	.086	163
Municipal Assembly (number of terms)	.675	(.536)	.059	119
Prefectural Assembly (number of terms)	.109	(.300)	.070	131
House of Representatives (number of terms)	.037	(.065)	.087	167
Any Previous Experience in Elected Office	.030	(.184)	.062	135
Government Experience				
Local Bureaucrat	-.105	(.127)	.087	143
National Bureaucrat	.055	(.107)	.111	180
Politician’s Secretary	.062	(.078)	.109	179
Professional Experience				
Business	-.099	(.131)	.128	203
Media	-.084	(.059)	.116	184
Education	-.056	(.082)	.094	160
Law	.003	(.012)	.114	182
Medicine	.006	(.009)	.131	204
Non-Profit	-.037	(.090)	.084	135
Other Experience				
Celebrity	.011	(.011)	.075	117
Political Dynasty	.048	(.038)	.071	131

Notes: All RD models use local linear regression and a bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

The one category where a significant difference exists between younger and older candidates is in political experience. Mayors under the age of 45 are more likely to be entering

Table 7: First Time Mayors Do Not Spend More on Child Welfare

DV:	Child Welfare							
	Total				Investment			
	Loc.	Linear	Quad.	Cubic	Loc.	Linear	Quad.	Cubic
Specification:								
Bandwidth:	h	$2h$	.2	.2	h	$2h$	.2	.2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
First Time Mayor	.014 (.029)	.016 (.021)	.014 (.028)	.014 (.037)	.156 (.265)	.208 (.195)	.183 (.233)	.236 (.302)
Bandwidth	.080	.160	.200	.200	.064	.128	.200	.200
N	998	1,582	1,785	1,785	834	1,401	1,785	1,785

Notes: Sample split at median of population under 15 (13%). h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

the mayor's office for the first time and on average have one less term of prior experience as mayor than their older colleagues. Interestingly, younger mayors in the sample do not have any less overall experience in elected office than older mayors. Younger mayors are more likely to enter office with experience serving in the municipal assembly, prefectural assembly, or House of Representatives than older mayors, although the RD effects are not statistically significant.²³

Is the difference in past mayoral experience the main driver of differences between younger and older mayors in their spending on child welfare? I take two approaches to assess this possibility. First, Table A4 in the Appendix shows that the main results are robust to controlling for the mayor's past experience and incumbency status. Second, Table 7 estimates the RD effect of electing a first-time mayor on child welfare expenditures. To do so, I use a similar RD approach as the main results, but instead focus on the 2,239 elections in the dataset where the top-two candidates feature someone with past mayoral experience facing off against a potential first time mayor. Table 7 finds that there is no significant relationship of electing a newcomer on either total child welfare spending or investment. As a result, it

²³One mayor in the sample served previously in the House of Councillors and one mayor served previously as governor. Given that there are too few cases to estimate an effect, they are omitted from Table 7.

is unlikely that the effect of age is purely a proxy for past mayoral experience. Overall the results in this section do not suggest that political selection is the main explanatory factor of differences between younger and older mayors in their child welfare spending.

Conclusion

There is substantial evidence that social identities such as race, gender, class, and sexual orientation shape the political behavior of elected officials. In this article, I provide evidence that the age of politicians also matters. Younger mayors pursue different social welfare policies in office than older mayors: their election leads municipalities to increase spending on child welfare relative to elderly welfare. Mechanism tests provide evidence that this effect is driven by the longer time horizons and electoral incentives of younger mayors, and not political selection or prior personal experience with child welfare.

These findings contribute to our understanding of descriptive representation by suggesting that the age bias of political institutions deserves further attention. Aging demographics and the generational conflicts that arise from it are not unique to Japan, but are instead common features of advanced industrialized nations. Future work is needed to explore the extent to which age as a social identity drives representational behavior in other countries and institutional contexts. For example, how does age affect the behavior of legislators? Are younger members of parliament more likely to campaign on issues relevant to younger voters, serve on committees that pertain to youth interests, or respond to constituency service requests from younger citizens?

Within the realm of Japanese politics, the findings presented here also challenge the conventional wisdom that tends to downplay the influence of local politicians over policy outcomes compared to national politicians. As institutional reforms continue to devolve authority from the central government to prefectures and municipalities, it is increasingly important to study the roles that local politicians play in the policy process and citizens' daily lives. The results in this paper suggest that the age bias in local political institutions

in Japan may have significant ramifications for the types of social welfare policies that local politicians implement.

Finally, future studies should investigate whether age affects other dimensions of elite political behavior and attitudes apart from social welfare. We know from public opinion polls in a variety of country contexts that younger members of society are often more likely to support issues ranging from same-sex marriage to immigration, gender equality, global governance, and environmental protection (Norris and Inglehart 2001; Wattenberg 2007; Kissau, Lutz and Rosset 2012). These studies could look at whether younger representatives are more likely to support these issues in public office.

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Does It Matter That Politicians Are Older Than Their Constituents? Yes.

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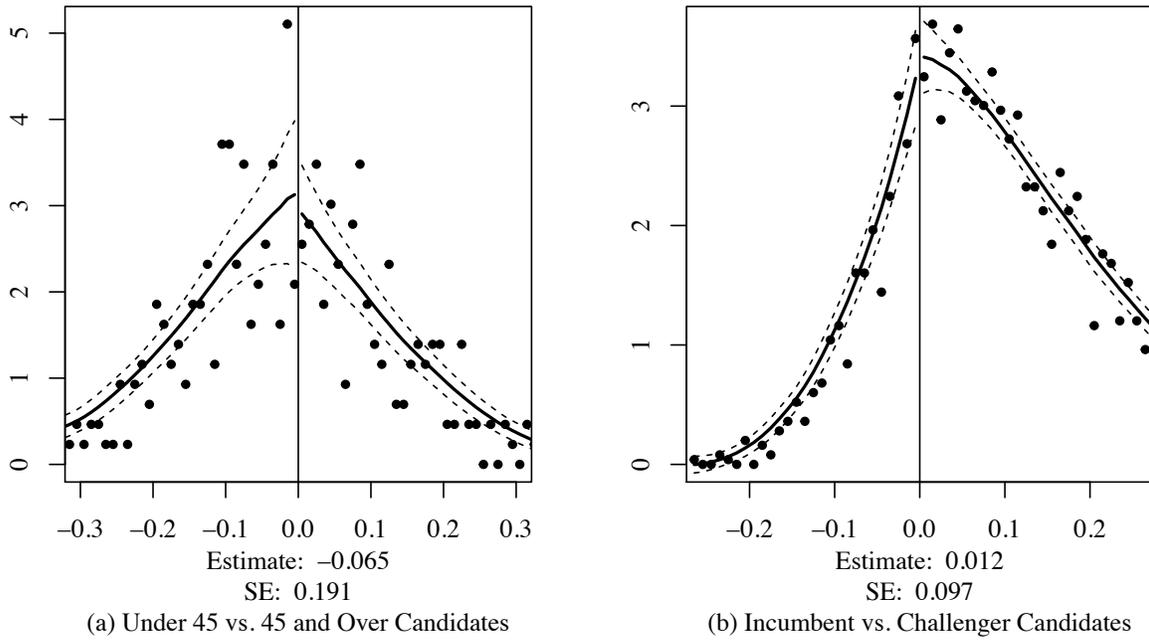
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Table A1: Balance Checks for Pre-Treatment Covariates

	Mayors Under 45 vs. Mayors 45 and Over			
	RD Estimate	SE	Bandwidth (h)	N
Population	-20,705.183	(57,422.719)	.060	140
Population Under 15	-3,839.491	(7,393.309)	.060	140
Population 15–64	-17,829.092	(37,366.349)	.059	138
Population 65 and Over	794.605	(12,301.655)	.071	154
Daycare Centers	-2.246	(8.462)	.073	131
Elderly Care Centers	-1.601	(2.611)	.069	135
Child Welfare	-1,375,913.055	(2,130,216.348)	.085	194
Elderly Welfare	193,638.338	(1,179,787.218)	.080	177
Total Expenditures	1,375,032.834	(21,982,809.247)	.064	146

Notes: All RD models use local linear regression, where h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Figure A1: McCrary Density Tests



Notes: Panel (a) shows the density of the candidate under 45's margin of victory is continuous at the threshold (Estimate: -0.065, standard error: 0.191). Panel (b) similarly shows that the density of the incumbent candidate's vote share is continuous at the threshold (Estimate: 0.012, standard error: 0.097).

Table A2: Summary Statistics for Regression Discontinuity Analysis

	Mean	SD	Min	Max	N
Candidate Under 45's Vote Margin	-.021	(.149)	-.424	.440	375
Child Welfare	.130	(.177)	-.507	1.276	375
Child Welfare (Subsidies)	.165	(.209)	-.552	1.026	375
Child Welfare (Investment)	.260	(1.657)	-4.015	6.115	375
Elderly Welfare	.002	(.118)	-.665	.503	375

Notes: Mayoral elections with one candidate under 45 years old and one candidate 45 or over.

Table A3: Younger Mayors and the Child Welfare Budget

	Mayors Under 45 vs. Mayors 45 and Over			
	RD Estimate	SE	Bandwidth (h)	N
Expenditures				
Total Expenditures	.102**	(.048)	.062	128
Personnel	-.029	(.066)	.051	117
Property	.071	(.104)	.077	151
Maintenance and Repair	-.018	(.109)	.082	166
Subsidies	.059	(.055)	.064	132
Investment	1.927***	.596	.065	134
Revenues				
Total Revenues	.102**	(.048)	.062	128
Contributions	.020	(.073)	.059	126
General Resources	.058	(.047)	.071	140
National Treasury Disbursements	.109	(.109)	.066	137
Prefectural Treasury Disbursements	.085	(.071)	.097	202
Bonds	1.492***	(.532)	.057	124

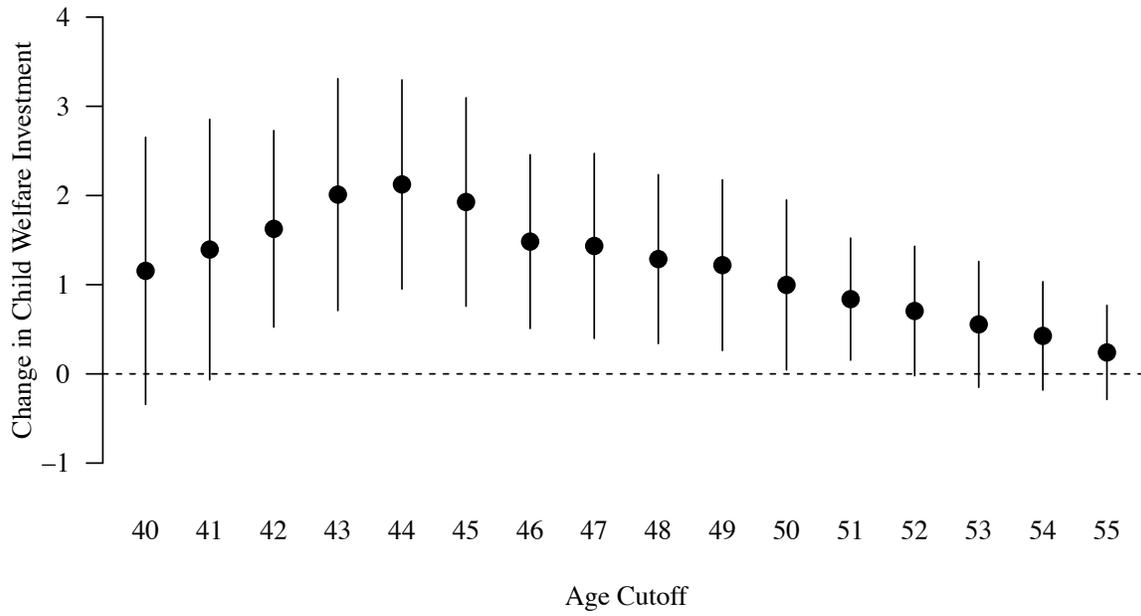
Notes: All RD models use local linear regression, where h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table A4: Younger Mayors Do Not Spend More on Public Works

	Mayors Under 45 vs. Mayors 45 and Over			
	RD Estimate	SE	Bandwidth (h)	N
Total Public Works	-.014	(.073)	.089	177
Engineering	-.009	(.161)	.125	248
Roads and Bridges	.041	(.100)	.079	158
Housing	-.193	(.178)	.082	166

Notes: All RD models use local linear regression, where h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Figure A2: Robustness to Different Candidate Age Cutoffs



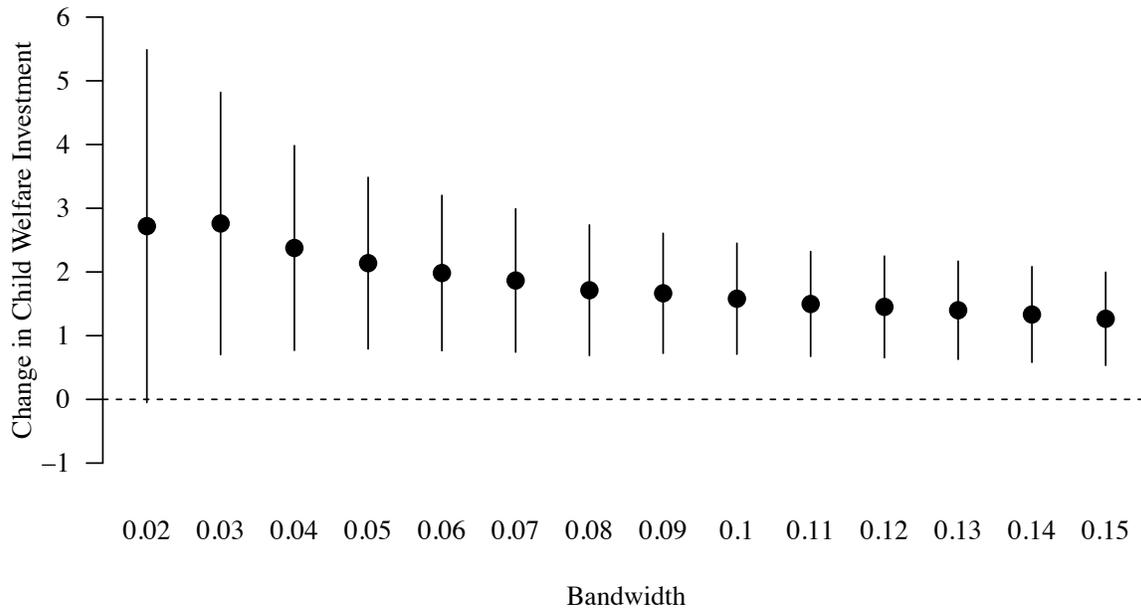
Notes: All RD models are estimated using local linear regression, a bandwidth chosen to minimize mean square error, and standard errors clustered by municipality.

Table A5: Robustness to Different Candidate Age Gaps

DV:	Investment in Child Welfare							
	Candidates Under 45 vs. 45–59				Candidates Under 45 vs. 60 and Over			
Age Gap:	Loc. Linear		Quad.	Cubic	Loc. Linear		Quad.	Cubic
Specification:	h	$2h$	.2	.2	h	$2h$	.2	.2
Bandwidth:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mayor Under 45	1.235*	.730	.994	1.755*	2.228**	1.671***	2.096***	2.453**
	(.731)	(.483)	(.645)	(.991)	(.928)	(.630)	(.790)	(1.079)
Bandwidth	.078	.156	.200	.200	.069	.242	.200	.200
N	60	101	123	123	84	164	197	197

Notes: RD models compare the effect of electing a mayor under 45 to mayors who are 45–59 (1–4) and 60 and over (5–8) on child welfare investment. h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Figure A3: Robustness to Different Bandwidths



Notes: All RD models are estimated using local linear regression and standard errors clustered by municipality.

Table A6: Robustness to Placebo Cutoffs

Alternative Cutoff	Mayors Under 45 vs. Mayors 45 and Over			
	RD Estimate	SE	Bandwidth (h)	N
-.150	.059	(.747)	.061	87
-.100	-.642	(.909)	.037	74
-.050	-.215	(.625)	.037	77
0	1.927***	(.596)	.065	134
.050	.819	(.805)	.034	66
.100	-.840	(1.060)	.032	50
.150	-1.039	(1.227)	.066	84

Notes: All RD models use local linear regression, where h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table A7: Sensitivity to Observations Near the Cutoff

Donut-Hole Radius	Mayors Under 45 vs. Mayors 45 and Over			
	RD Estimate	SE	Bandwidth (h)	N
0	1.927***	(.596)	.065	134
.0025	1.937***	(.611)	.064	132
.0050	1.860***	(.645)	.062	120
.0075	1.987***	(.685)	.060	116
.010	1.721**	(.755)	.065	117

Notes: All RD models use local linear regression, where h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table A8: Younger Mayors and the Overall Municipal Budget

	Mayors Under 45 vs. Mayors 45 and Over			
	RD Estimate	SE	Bandwidth (h)	N
Expenditures				
Total Expenditures	.064**	(.030)	.076	151
General	.031	(.075)	.117	232
Welfare	.078**	(.038)	.069	137
Sanitation	.047	(.081)	.074	146
Labor	.140	(.131)	.069	136
Agriculture	.075	(.116)	.105	216
Industry	.105	(.126)	.093	195
Public Works	-.014	(.073)	.089	177
Fire	-.005	(.077)	.086	175
Education	.121	(.095)	.109	225
Revenues				
Total Revenues	.060**	(.029)	.073	144
Local Allocation Tax	.200	(.178)	.079	154
Local Taxes	-.032*	(.018)	.067	136
National Treasury Disbursements	.192*	(.107)	.070	138
Prefectural Treasury Disbursements	.138	(.188)	.085	171
Bonds	.061	(.207)	.066	137

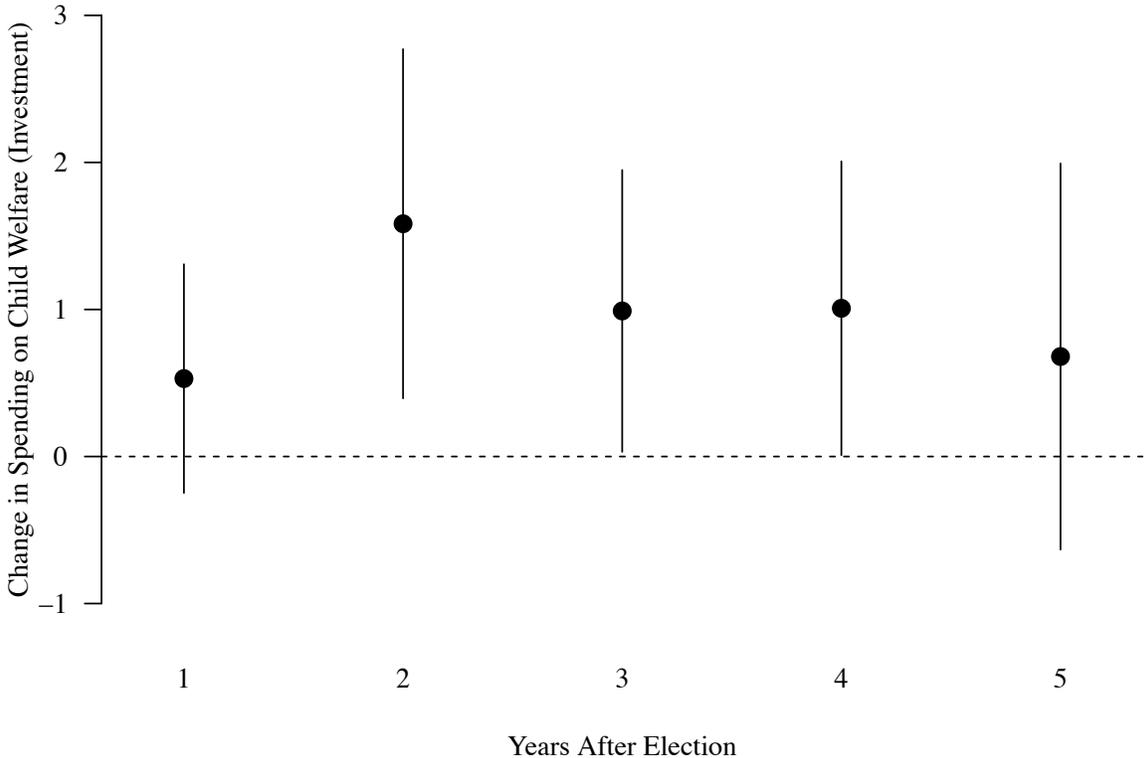
Notes: All RD models use local linear regression, where h represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table A9: Younger Mayors Increase Spending on Child Welfare (With Controls)

DV:	Child Welfare							
	Total				Investment			
	Loc.	Linear	Quad.	Cubic	Loc.	Linear	Quad.	Cubic
Specification:	<i>h</i>	<i>2h</i>	.2	.2	<i>h</i>	<i>2h</i>	.2	.2
Bandwidth:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mayor Under 45	.124*** (.040)	.096*** (.031)	.116*** (.038)	.155*** (.051)	2.168*** (.551)	1.661*** (.383)	1.968*** (.474)	2.377*** (.691)
Bandwidth	.064	.128	.200	.200	.064	.128	.200	.200
Controls	Y	Y	Y	Y	Y	Y	Y	Y
Year Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y
N	134	250	320	320	132	250	320	320

Notes: RD models show the effect of municipalities electing a mayor under 45 on investment and total spending in child welfare. Controls include incumbency, gender, population, and municipal merger. *h* represents the optimal bandwidth chosen to minimize mean square error. Standard errors clustered by municipality are in parentheses. *p<.1; **p<.05; ***p<.01.

Figure A4: Younger Mayors Invest More in Child Welfare (1–5 Years After Election)



Notes: All models are estimated using local linear regression and a bandwidth, h , chosen to minimize mean square error.