Policy Feedbacks and the Structure of Redistribution: Quasi-Experimental Evidence from Medicare, 2008-2012

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Redistribution, particularly through the welfare state, is a cornerstone of most modern democratic polities. While scholars generally argue for and document a correlation between participation in the welfare state and democratic citizenship, making causal claims about the effect of redistributionary policies on political engagement is difficult since recipients and non-recipients differ across a number of dimensions. To identify the causal effect of redistribution on political participation, I leverage a discontinuity generated by the eligibility rules for Medicare–one of the most ubiquitous social welfare programs in the United States. Using a fuzzy regression discontinuity design, I find that participation in Medicare actually reduces political engagement measured along a variety of dimensions. To explain the results, I develop an alternate theory that highlights the interaction between individual incentives and the structure of redistribution. These results indicate that public policies, in certain cases, that are a product of democratic politics may actually undermine democratic citizenship.

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INTRODUCTION

Redistribution has engendered a substantial amount political conflict throughout much of the course of American history. In part, the politics around redistribution are so salient because they distribute costs and benefits across major cleavages in societies such as class (Meltzer and Richard 1981; Acemoglu and Robinson 2000) and race (Gilens 1996; Alesina, Baqir, and Easterly 1999; Hersh and Nall 2016). But not only is politics an input into redistribution and the welfare state, but it is also an outcome as well. A vast literature in American and comparative politics shows how policy feedback–the ways in which policies reshape politics–is crucial to understanding how redistributive policies, once put into place, can have long-lasting impacts on mass politics. Starting with Schattschneider (1935)'s initial observation around tariff policy, scholars since then have shown how social policy around redistribution can create and mobilize constituencies as in the case of Social Security (Campbell 2003a) and pensions (Hacker 2002) or demobilize them as in the case of food stamps (Soss 1999). Even more, politicians–knowing these political implications–might then strategically shape policy in such a way so as to benefit their own electoral interests (Kriner and Reeves 2012; Anzia and Moe 2016). In short, political battles regarding the welfare state do not end once legislators turn social policy into law: citizens' participation in the welfare state itself also has the prospect of shaping the future political landscape.

Building on theories that argue that policy feedbacks depend on the policy context, I offer an alternate hypothesis that emphasizes the nature of beneficiaries and the structure of the policy itself. For policies, such as Medicare, that redistribute benefits from young to old, it may be rational to drop off political participation upon becoming a beneficiary of the program. Since the young pay into the program in expectation of receiving benefits when they become old, it may be the case that individuals increase their participation prior to receiving benefits to insure the existence of the program when these individuals become old. Upon becoming

old, individuals could have an incentive to decrease their participation especially along more costly forms of participation absent salient threats to the program itself (Campbell 2003a).

One of the key inferential challenges with this line of research is to disentangle the effect of the welfare program itself from other observed and unobserved characteristics that distinguish recipients of redistribution from non-recipients (Campbell 2012). To overcome this empirical hurdle, I leverage a "natural experiment" created by the eligibility rules for Medicare–one of the largest social welfare programs in the United States– to identify the causal effect of redistribution on political engagement.[1] Using a fuzzy RDD strategy and data from the Cooperative Congressional Election Study (CCES) leveraging the discontinuous eligibility for Medicare between 64 and 65 year olds, I find that participation in this government health insurance program actually leads to a *reduction* in political participation as measured by propensity to attend political meetings, work on campaigns, donate money to campaigns, interest in news, and validated voter registration. While I do find some evidence that Medicare eligibility induces retirement from the labor market, this channel is insufficient to explain the observed results. The results, then, do not seem to be driven by disruptions to life induced by Medicare eligibility. Moreover, these results are robust to estimation methods (semi-parametric vs parametric), inference procedures, bandwidths, and controlling for pre-treatment characteristics. I also go onto show that existing theories around the relationship between social policy and mass politics cannot explain these results.

This paper, then, provides an important caveat to existing theories regarding the mass politics of redistribution in the United States. Participation in the welfare state itself, at least in the case of Medicare, can actually *decrease* political participation across a number of dimensions. It should be emphasized that the findings do not discount the role that threats to existing programs can have in mobilize existing interest groups and welfare state beneficia-

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[1]Lerman and McCabe (2017) use a similar identification strategy to test the effects of receiving Medicare on political attitudes.

ries (Campbell 2003a); rather, they suggest that scholars should re-examine existing theories about the direct effects of being a welfare state beneficiary on democratic citizenship.

The rest of the article proceeds as follows. First, I provide an overview of the existing literature on policy feedback effects and the distinct mechanisms underpinning the overall concept. I then go onto describe the case used in this paper–Medicare–and distill a set of empirical predictions as they relate to existing theories of policy feedbacks. Next, I test these predictions using a regression discontinuity design to establish causality. I then go onto discuss the results in terms of an alternate framework through which to view policy feedbacks. Finally, I conclude by discussing the implications of this study for the existing literature as well as policy design.

WHAT IS A POLICY FEEDBACK AND WHAT PRODUCES THEM? THE EXISTING CONCEPTUAL FRAMEWORK

Path dependence is a central feature in the formation and longevity of public policy (Pierson 1993, 2000). In other words, the policies we have now and have had in the past shape what we might achieve in the future. Generally speaking, policy feedbacks encompass processes where "new policies create new politics" (Schattschneider 1935, p. 288). For example, a new welfare program around maternal benefits could have spillovers into politics by creating new interest groups that have a stake in this system, redistributing resources from one group to another, and by shaping the actual experiences that mothers have with government. Politics, then, serves as both input and output of the welfare state. Following Pierson (1993), recent research tends to focus on how feedback effects shape mass politics (the politics of ordinary citizens). To date, there has been an extensive amount of theoretical development around this notion of mass policy feedback across a wide swath of empirical settings. In general, these

perspectives can be grouped into three sets of emphases: (1) the role of personal stakes, (2) resource effects, and (3) interpretative effects. Together, these three sets of explanations tend to structure most inquiries into feedback effects.

The Role of Personal Stakes

Most early formulations of policy feedback emphasized the role of personal stakes in a given policy. The basic logic behind this mechanism is that policies themselves create beneficiaries who would be worse off without that policy. Whether through a logic of collective action (concentrated benefits) or loss-aversion, individuals might mobilize individually or collectively in response to receiving some benefit from a given program so as to continue receiving a future stream of benefits (Campbell 2003a). This perspective suggests that the creation of social policies that create significant beneficiaries might boost political participation tying an individual's personal stakes to the existence of these social policies.

A number of studies highlight the importance of personal stakes across a variety of contexts. For example, Schattschneider (1935)'s study of tariff policy highlighted how existing tariff schedules created incentives for protected industries to lobby for the continued existence of these tariffs for without them they would suffer extreme import competition. Studying the welfare state across the United States and the United Kingdom, Pierson (1993) and Hacker (2002) both demonstrate how mobilization of the mass public, which has a significant stake in the existence of the welfare state, has perpetuated the continued existence of the welfare state in each country respectively. Campbell (2003a, 2003b) shows how threats to programs such as Social Security and Medicare in the United States mobilized senior citizens–the group of citizens who have a direct stake in this social policy. In recent work, Clinton and Sances (2018) show how Medicaid expansion in 2010 led to an increase in voter turnout especially among voters in counties that would benefit most from Medicaid expansion. These studies suggests that self-interest and personal stakes in a given set of public policies can create more

engaged publics among those who benefit from that program.

The Role of Resources

Building off of the rich literature on the role of resources in shaping political behavior, policy feedback scholars also highlight how social policies can enhance (or diminish) resources amongst the mass public. Brady, Verba, and Schlozman (1995) in their seminal study of political participation amongst the American public show how resources such as time, money, and civic skills are strong predictors of political participation. Since many social policies can give (or take away) monetary resources, we might also expect public policies to shape political participation by structuring who receives what. Programs such as welfare, health insurance, or unemployment insurance can enhance political participation by giving individuals clear benefits with noticeable monetary values attached to them (Mettler 2002; Campbell 2003a, 2012). Conversely, programs that take away time or money such as incarceration can reduce political participation (Weaver and Lerman 2010, pg. 819). Thus, this line of research hypothesizes that public policies can enhance or diminish political participation through this resource effect.

The Role of Interpretation and Experience

The final set of mechanisms emphasizes how policies can shape citizens through their lived experiences with the state, how they interpret these experiences, and how others interpret their deservingness. Personal experience with a certain policy might shape an individual's future political participation or attitudes by creating an idea of what government looks like (Soss 1999; Michener 2018). When an individual's experiences reinforce a positive view of government, this might make them more likely to participate in civic life and more favorable toward government. On the other hand, if an experience with a certain social policy creates a negative view of government, this might reduce political efficacy amongst individuals and

reduce their participation. Moreover, the ways in which individuals interpret a certain policy themselves or vis-a-vis other can shape their politics. Social policies, by categorizing beneficiaries into deserving or undeserving groups, can cause individuals within these groups to internalize these categories and adjust their politics accordingly (Schneider and Ingram 1993). So not only can the welfare state shape politics through creating stakes or varying material resources, but it can also shape citizens beliefs about the value of a certain welfare regime and the role of government.

THE CASE OF MEDICARE

To test whether there is a causal relationship consistent with these theories of policy feedback, I focus on the case of Medicare in the United States. Using Medicare as the empirical setting provides an attractive test for a number of reasons including the size of the program and clear assignment rule for receiving benefits. Overall, Medicare is not only substantively quite large, but focusing on this particular policy domain can overcome problems of causal inference that often plague studies of policy feedbacks (Campbell 2012).

First, Medicare is one of the largest social welfare programs in the United States. Part of the Great Society social welfare programs introduced during Lyndon Johnson's presidency in 1966, Medicare primarily provides a national health insurance system for individuals aged 65 and older. In 2016, Medicare covered over 56 million Americans with over 47 million being over the age of 65. Moreover, this is one of the largest entitlement programs in the United States with expenditures hovering around $670 million in 2016 (Trustees of the Federal Hospital Insurance and Funds 2017). Importantly, the program raises revenue through an intergenerational system of transfers where those who are employed pay a percentage of their income to fund disbursements for those enrolled in Medicare (generally individuals above the age of 65). Benefits from Medicare are also highly visible as well since recipients have to

go through specific doctors and plans. These features suggest that Medicare has many of the features of a policy in which we should expect feedback effects because of both of the size and the visibility of the benefits (Campbell 2012).

Second not only is Medicare is quite large and similar in scope to other welfare systems comparatively, but it is also a useful case for facilitating causal inferences. Unlike many social policies with unclear assignment processes and significant latitude for individuals to endogenously choose to participate in these programs (Lerman, Sadin, and Trachtman 2017), Medicare has a clear and known treatment assignment process that is not subject to manipulation: individuals primarily become eligible for Medicare after they turn 65 years old. This known assignment process based on an age eligibility criteria then allows the researcher to use a regression discontinuity design to evaluate the causal effects of the program. Essentially, this strategy compare individuals who are 65 and "treated" by Medicare to be compared to individuals who are 64 and "untreated" by Medicare to establish causality. I discuss the details and mechanics of this strategy in greater detail in the following section.

What do the theories discussed above predict we should see in the data as they relate to Medicare? The literature that emphasizes the role of stakes and self-interest predicts that we should see an increase in political participation in response to receiving Medicare. Once these individuals start receiving Medicare, they might be motivated to participate more in politics because they see their economic interests as tied to the continued existence of Medicare (Pierson 1993; Campbell 2003a; Hacker 2002).

These same predictions could also be borne out by the resource thesis of policy feedbacks. Medicare, as described above, provides individuals with clear benefits through its health insurance program. Evidence from the literature in economics suggests that individuals are likely aware of actually receiving these benefits since their health also improves in response to receiving Medicare (Card, Dobkin, and Maestas 2008, 2009). As a result, resource-oriented theories of policy feedback would predict that individuals should also increase their partici-

pation in civic life after becoming eligible for Medicare (Mettler 2002; Campbell 2003a).

Finally, theories that emphasize the interpretive nature of policy feedbacks provide varied predictions that depend on how individuals might actually experience Medicare. If individuals have positive experiences with the system of Medicare, then we should expect these individuals to increase their levels of political efficacy and participate more in politics as a result (Soss 1999). Moreover, these positive experiences should also be detectable in terms of shifts in attitudes toward social welfare programs (McCabe 2016; Lerman and McCabe 2017). If, on the other hand, individuals tend to have poor, personal experiences with Medicare, then we should see a reduction in political participation in tandem with worse attitudes toward the welfare state overall.

It is worth noting that the time period of this study (2008-2012) is unique in some respects. This period follows the Great Recession–a context in which there was much debate about the future of the welfare state in the United States. In this context, then, we should expect from the personal stakes-based theories of policy feedbacks that becoming eligible for Medicare should actually increase political participation as individuals' personal stakes become even more salient in terms of the viability of the system. Moreover, this time period also included the creation of the Affordable Care Act (ACA) and the expansion of Medicare–both of which have been important drivers of political participation and public opinion (Lerman and McCabe 2017; Clinton and Sances 2017; Lerman, Sadin, and Trachtman 2017). Moreover, the debate around the ACA also could have spilled into the broader public's attitude toward Medicare and redistribution. In terms of interpreting the results, these features of the political context at the time suggest that this is precisely the context in which we should *most* expect positive policy feedback effects since this was a highly salient issue at the time.

AN ALTERNATE PERSPECTIVE OF POLICY FEEDBACKS: THE NATURE OF WHO GETS WHAT AND WHEN

Thus far, I have shown several empirical regularities that all point toward a consistent pattern: receiving Medicare reduces political participation. Moreover, these patterns are inconsistent with predictions across a number of mechanisms suggested in the existing literature. Is there a framework through which to understand these patterns?

I argue that these regularities can be reconciled with an alternate formulation of the personal-stakes hypothesis that highlights the role of the structure of redistribution. By structure of redistribution, I mean the way in which a social welfare system redistributes resources from one group to another. For example, programs such as Medicaid can be seen as class-based distribution where the program redistributes from the well-off to the less well-off. In the case of Medicare, the structure of redistribution can be thought of as age-based where the system redistributes income from the young to the old. While proponents of the personal stakes mechanism perhaps most notably articulated by Campbell (2003a) highlight the ways in which incentives shaped by self-interest are key to understanding policy feedback effects, existing articulations of this mechanism miss the alternate incentives created by the structure of redistribution characterizing a given program.

Though scholars do note how variation in policy implementation might affect feedback effects, they overlook how the structure of redistribution shapes mass politics. This existing work tends to focus on factors such as the size, visibility, concentration, and duration of benefits (Campbell 2012, pp. 338-341). As shown above, these features and explanations find little support in the data. Instead, I offer an alternate channel through which policy feedback effects may occur: the structure of redistribution itself.

To understand the importance of the structure of redistribution on policy feedbacks, consider a world in which individuals live for two-periods (young and old). When these individ-

uals are young, they pay into a system (generally through some sort of tax on income) that redistributes their income to those who are old. In the next period, those who were young and paid into the system then receive some fraction of the total amount redistributed from the new generation of young individuals. Clearly, this is a simplified version of how Medicare and redistribution works in general, but it does capture the essence of the redistributionary process.

Assuming that there is some probability that society reneges on this form of redistribution and reduces the amount of redistribution or completely eliminating it altogether, then individuals face incentives to increase their amount of political participation when they are young and then reduce it once they actually start receiving the benefits of redistribution. To understand why, consider the following concrete example. For a young individual who begins approaching the eligibility age for receiving benefits, she has incentives to begin increasing her involvement in politics so as to ensure that she receives benefits from this system after having paid into it for most of her life. Suppose this individual is 64 years old and society drastically reduces Medicare benefits, then she likely paid far more into this system than she will receive following this change. If there is some sufficiently, salient chance that Medicare benefits might be cut, then there is an incentive for individuals to pay the cost of participating in politics (especially with respect to activities that are perceived to have higher impact than turning out to vote) in order ensure the future stream of benefits from this system of redistribution. Upon receiving benefits, individuals then have an incentive to drop off their participation because they are now receiving benefits from a system that they paid into over the course of their lifetime. Given these incentives, we should expect individuals to increase their level of political participation just prior to receiving Medicare and then decreasing their involvement in politics after just receiving benefits.[2]

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[2]The role of personal stakes, as articulated by Campbell (2003a), suggests that we should see an increase in political participation over time as individuals become more embedded or dependent on this system.

This framework, while an important caveat to the personal stakes mechanism behind theories of policy feedback, is still complementary to this perspective. Personal stakes and self-interest, on net, still plays an important role in shaping how the mass public might respond to social policy; yet, by highlighting the way in which the structure of redistribution also shapes self-interest, the predictions from this alternate mechanism diverge from the existing literature. Despite this, threats to these programs even among those receiving Medicare already still has room to mobilize the recipients of redistribution. So long as the threat is particularly salient, then individuals still have capacity to increase their participation in politics during times where they view these programs as particularly under attack. Where this theory differs is by suggesting that the direct of effect of receiving government benefits itself given this structure of redistribution from young to old creates incentives that *on average* lead to reductions in political participation in response to becoming a beneficiary.

In the following section, I test predictions from the existing literature on policy feedbacks using a large, nationally representative survey and a fuzzy regression discontinuity design to establish causality. In what follows, I find little, overall support for the existing theories: Medicare actually *reduces* political participation as measured along a number of dimensions including validated voter registration while making individuals *more* supportive of the welfare state. Instead, the results are consistent with the framework provided in this section, which highlights how personal stakes interact with the nature of redistribution to shape the politics of the mass public.

RESEARCH DESIGN

Data

To assess the causal effect of receiving government benefits on political participation, I use a fuzzy regression discontinuity design (RDD) strategy that follows from the age eligibility

rules for Medicare in the United States combined with multiple rounds of the Cooperative Congressional Election Survey (CCES)–one of the largest nationally representative surveys of political life in the United States.[3] The basic intuition behind the fuzzy RDD strategy is that one can isolate plausibly exogenous variation in welfare state participation by comparing individuals who are just barely eligible for Medicare to those who are just barely ineligible to assess the causal effect of Medicare on political participation. For this study, the CCES is a near ideal dataset or which to test theories of policy feedback since it includes an individual's age (the forcing variable), whether they receive government health insurance (the "treatment"), and a battery of questions on political participation and attitudes (the outcome).

I measure and operationalize political participation using several different measures from the survey. These include separate indicators for whether the respondent marked that he or she attended political meetings, put up a political sign outside of of his or her home, worked on a political campaign, donated money to a campaign, and whether the respondent is registered to vote in the General Election.[4] A broader definition of political participation could also include simple acts such as information-seeking (Prior 2005). As such, I also code a variable for whether the respondent marked him or herself as being highly interested in news.[5] While any one measure may not be sufficient to establish a relationship between Medicare and political participation, the variety of different measures should all paint a consistent picture (Ansolabehere, Rodden, and Snyder Jr. 2008).[6]

The main independent variable of interest is whether the respondent indicates that he or she receives health insurance from a government program. This includes respondents on Medicare in addition to individuals who receive benefits from Medicaid. Importantly, one of

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[3]I pool together survey rounds from 2008, 2010, and 2012, which provide data on the relevant outcomes.

[4]The indicator for whether the respondent is registered to vote in the General Election represents *actual* turnout since the CCES validates this variable against the Catalist voter registration database.

[5]Summary statistics for all relevant variables can be found in Table 1 in the Online Appendix.

[6]Though less interpretable, using the average across all measures of principle components analysis yields the same result.

the main eligibility criteria for receiving health insurance from the Medicare program is that an individual is at or above the age of 65. This eligibility criteria creates a discontinuous jump in the probability that a respondent indicates that he or she receives health insurance from the government. Literature in economics and public health uses this strategy to show that Medicare causes an uptake in health care utilization and improves health-related outcomes (Card, Dobkin, and Maestas 2008, 2009). Thus, we should have ex ante reason to believe that turning 65 actually does mean that individuals are receiving Medicare and actively using these benefits.

Since the CCES does not distinguish between Medicare and Medicaid beneficiaries when asking about government health insurance, the jump in the probability of receiving government health insurance is less than one. As such, I rely on a fuzzy RDD to estimate the causal effect of government redistribution on political participation. Essentially, the fuzzy RDD allows one to isolate the variation that is specific to Medicare by leveraging the discontinuity in Medicare eligibility around age 65. Though the main survey question about government health insurance pools together Medicare and Medicaid recipients, this RDD strategy allows me to only make causal statements about Medicare and not Medicaid.[7]

Identification and Estimation

As noted above, identification of the causal effect of receiving government transfers comes from the discontinuity generated from the age eligibility criteria. For a simple "intent-to-treat" (ITT) analysis–the causal effect of the age eligibility discontinuity itself, the key identifying assumption is that the expected potential outcomes for the participation variable are continuous around the eligibility threshold (65). In essence, this allows the researcher to use the group of individuals who are just below 65 to serve as the counter-factual control group

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[7]Since the variation in the first-stage comes from the Medicare age-eligibility restrictions, this strategy isolates variation specific to Medicare.

for those who are above 65 and assigned to treatment.[8] Importantly, this type of research design identifies the Local Average Treatment Effect (LATE) of being eligible for Medicare for those individuals who are exactly 65 years old.[9]

While the ITT analysis is informative about the effect of *eligibility* for Medicare, it does not specifically assess the effect of actually receiving government health insurance. To identify this causal effect of interest, I use a "fuzzy" RDD, which relies on the continuity of potential outcomes around the threshold as well as the monotonicity, relevance, and exclusion assumptions used in an instrumental variables design in which eligibility for Medicare serves as an instrument for receiving government insurance. The monotonicity assumption states that there should not exist individuals who end up becoming less likely to receive Medicare after becoming eligible for it. In this case, this assumption is largely satisfied by the design of the program since individuals generally cannot enroll in Medicare prior to turning 65. Next, estimates from the first-stage relationship depicted in Figure 1 between eligibility for Medicare and actually receiving government health insurance is large, positive, and statistically significant indicating strong support for the assumption that this discontinuity is a strong instrument. Finally, this design must also satisfy the exclusion restriction where eligibility for Medicare cannot affect political participation except through actually receiving Medicare. One issue is that the Social Security benefits age is 66, which is very near to the age at which individuals become eligible for Medicare. Lerman and McCabe (2017) use a similar identification strategy on the 2012 CCES and find no evidence that Social Security benefits explain away the effect of Medicare on political attitudes. It is important to note that retirement or part-time work status induced by Medicare does not violate the exclusion restriction since changes

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[8]It should be noted that simply controlling for age is insufficient to recover causal effects in this setup since we do not have common support across the discontinuity; instead, the RDD trades off this common support assumption for extrapolating the individuals just below the cutoff to serve as the counter-factual control group for treated units.

[9]Though these estimated effects are local to individuals who are exactly 65, a review of the RDD literature by Cook and Wong (2008) shows that RDD estimates are able to recover experimental estimates with a relatively high frequency.

Figure 1: Binned Estimates of Medicare Eligibility Discontinuity on Receiving Medicare
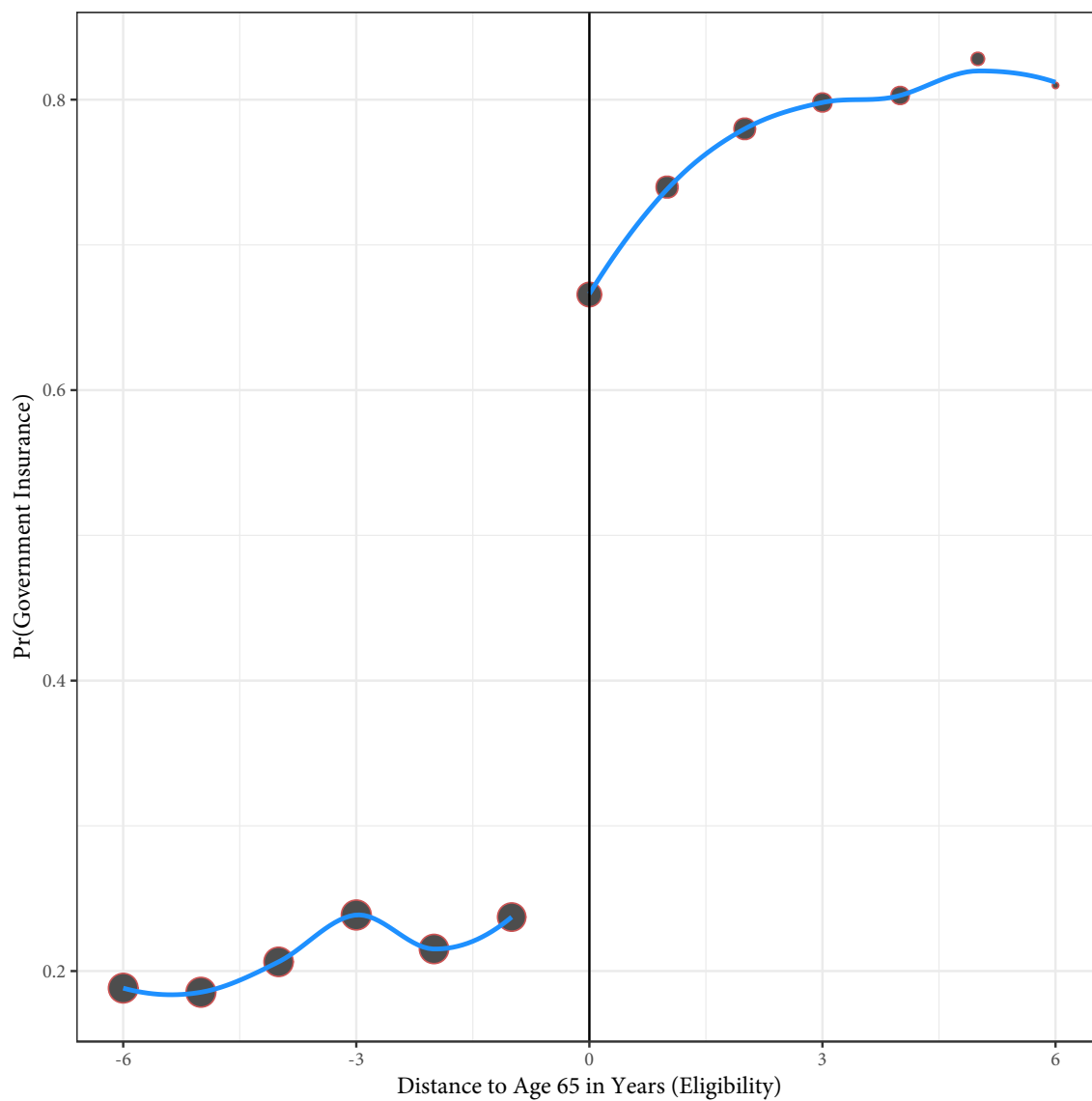
Notes: Each dot represents the probability that an individual has health insurance for a given value of the forcing variable. Dot size is proportional to the number of individuals in that bin.

in work status are a potential causal effect of Medicare and not a direct path from Medicare eligibility to political participation. Keeping in mind these assumptions for the "fuzzy" RDD, I proceed to estimate the following system of equations using local linear regression where the $forcing$ variable is an individual's age in years centered around 65:

$$HasInsurance_i = \lambda Eligible + \tau f(Forcing_i) + \eta_i \tag{1}$$

$$Participation_i = \beta \widehat{HasInsurance} + \tau f(Forcing_i) + \epsilon_i \tag{2}$$

The coefficient β represents the causal effect of interest. The coefficient λ represents the first-stage effect of being eligible for Medicare on the probability that an respondents indicates that he or she has health insurance through the government. The function $f(.)$ represents a smooth function that is allowed to vary in shape within a given bandwidth of ages on either side of the cutoff of age 65. Finally η_i and ϵ_i represent uncorrelated disturbances.

One of the main issues with the RDD is that there are many ways to estimate functional forms of the forcing variable and different bandwidth sizes to use. As suggested by Calonico, Cattaneo, and Titiunik (2014), I use local linear regression to estimate the conditional expectation function on either side of the eligibility cutoff. Moreover, I follow Calonico, Cattaneo, and Titiunik (2014) and use robust bias-corrected confidence intervals for inference.[10] Following Lee and Lemieux (2010), I also estimate the discontinuities using different parametric functional forms and vary the bandwidth size and find that the main results are robust to these changes in modeling choices.

Figure 2: Local Linear Coefficient Estimates of Medicare Benefits on Political Participation, Fuzzy Discontinuity
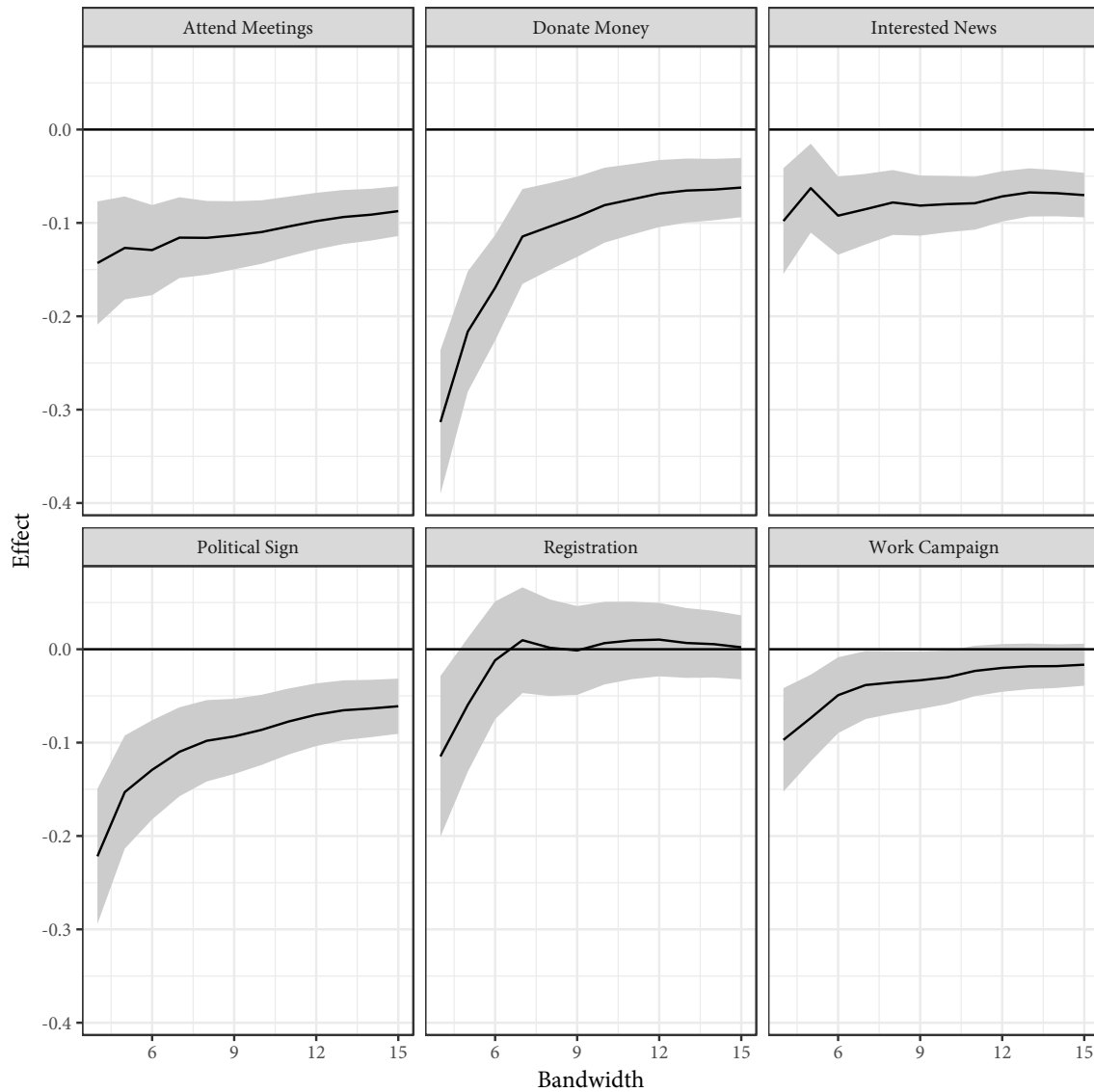
Results vary bandwidth size from 4 to 15 years from cutoff. Dark lines represent the point estimates from local linear regressions implemented in the `rdrobust` package in R. Shaded areas represent 95% bias-corrected confidence intervals.

Results

Figure 2 plots the coefficient $\hat{\beta}$ on each outcome discussed above across a wide range of bandwidths. Starting with the top, left panel–whether an individual attended any political meetings–the main point estimate across a wide range of bandwidths indicated by the dark line with 95% bias-corrected confidence intervals in gray show that receiving Medicare decreases an individual's propensity to attend political meetings. This effect does not cross zero as indicated by the horizontal line. Moving across the rest of the outcomes reveals a striking pattern. Participation in Medicare *reduces* political participation as measured by meeting attendance, donations, news interest, putting up a political sign, voter registration, and working on campaigns. Moreover, the general results (with the exception of voter registration) seem to be robust to the choice of bandwidth with the more credible estimates closer to the bandwidth indicating a sizable negative effect. Substantively, the estimates with shorter bandwidths (less bias) shown in Figure 2 hover anywhere between a ten to twenty percentage point drop in participation depending on the outcome–results that are quite large in magnitude.[11]

Contrary to predictions from the existing literature, I find little evidence that being a beneficiary of the welfare state vis-á-vis Medicare in the United States increases political participation; rather, these quasi-experimental estimates demonstrate a dampening effect on political participation. This suggests that the role of personal stakes, as commonly articulated, cannot explain these estimated effects since these individuals should have a stake in the system, yet they end up participating less in response to receiving Medicare. While threats to Medicare may mobilize these individuals (Campbell 2003a), potentially through their perceptions of potential losses or recruitment by interest groups, the relatively short time period of the data does not allow me to assess how threats to the program over time can actually mobilize this group of citizens. The results, however, indicate that the *average total effect* on political

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[10]Local linear regressions are conducted using the `rdrobust` package in the R computing environment.

[11]These results cannot be explained by differential campaign contact. See Figure 7 in the Online Appendix.

participation is negative in response to receiving Medicare.

These results are also inconsistent with the resource-based set of mechanisms behind policy feedbacks. Results from the first-stage (graphically depicted in Figure 1), show that individuals know that they are actually receiving their health insurance through Medicare. Moreover, work by Card, Dobkin, and Maestas (2008, 2009), which uses a similar discontinuity strategy to assess the effect of Medicare, shows that receiving Medicare also improves an individual's health. Additionally, Burden et al. (2016) shows that improved health seems to be positively correlated with political participation as measured by voter registration. This suggests that individuals not only know that they receive government health insurance, but that they are also are utilizing it. Given these factors, it is unlikely that Medicare reduces one's resources in a way that would depress political participation; if anything, Medicare should have the opposite effect as predicted by resource models of policy feedbacks. Healthier individuals should increase political participation, not reduce it.

Assessing the Role of Interpretative Effects

Might these results be explained by personal experiences with Medicare as a system? Perhaps it is the case that individuals know that they are receiving Medicare, using it, but society views them as being undeserving of this benefit or they have poor, personal experiences with the day-to-day aspects of Medicare. On deservingness, the existing literature predicts the exact opposite: senior citizens are deserving of social welfare because they have paid into this system and earned it while the poor are undeserving of programs such as AFDC or Medicaid because they do not contribute to the program (Schneider and Ingram 1993; Soss 1999; Campbell 2003a; Michener 2017).[12] While deservingness heuristics do not seem to explain these results, it could be the case that Medicare recipients simply have poor experiences with government

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[12]There is also an important racial dimension to this. Gilens (1996) shows that whites tend to oppose welfare because they view blacks as the primary recipients and that they are undeserving of state assistance.

causing them to disengage from politics in general. To test this mechanism, I build on Lerman and McCabe (2017) and evaluate to what degree Medicare shapes individuals attitudes toward redistribution and the welfare state. If individuals have poor experiences with Medicare, then we should expect individuals to become more hostile toward the welfare state. If, on the other hand, individuals actually have positive experiences with Medicare, then we should see improvements in support for redistribution. Again, I use the same fuzzy RDD and data from the CCES, but this time replace the outcomes with indicators that measure support for redistribution such as cutting domestic spending including Medicare, party identification for the Democrats and Republicans, and support for the Affordable Care Act (ACA). Figure 3 presents the results of this exercise using the optimal bandwidths for each outcome and bias-corrected confidence intervals.[13]

Results from this exercise indicate little support for the argument that individuals who receive Medicare tend to have poor experiences with government. Figure 3 shows that individuals tend to become more supportive of redistribution and social welfare systems across a number of different variables. These fuzzy RDD results indicate that individuals who receive Medicare become less supportive of cutting domestic spending like Medicare, more supportive of Democrats who are traditionally the party in favor of expanding the welfare state, less supportive of the Republicans who are generally ideologically opposed to expansions of government, and more supportive of the latest expansion of the U.S. social welfare system through the ACA. Encouragingly, these results replicate Lerman and McCabe (2017) using semi-parametric estimation techniques and two additional rounds of the CCES suggesting that these attitudinal effects are unlikely to be artifacts of any particular survey or estimation technique. These findings indicate that, despite becoming more supportive of redistribution and the welfare state, citizens tend to *disengage* in response to receiving Medicare.

These results, when viewed against the prevailing wisdom that these types of programs

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[13]Results are robust to varying the bandwidth and using heteroskedastic robust and clustered standard errors.

Figure 3: Local Linear Coefficient Estimates of Medicare Benefits on Political Attitudes, Fuzzy Discontinuity

Outcome
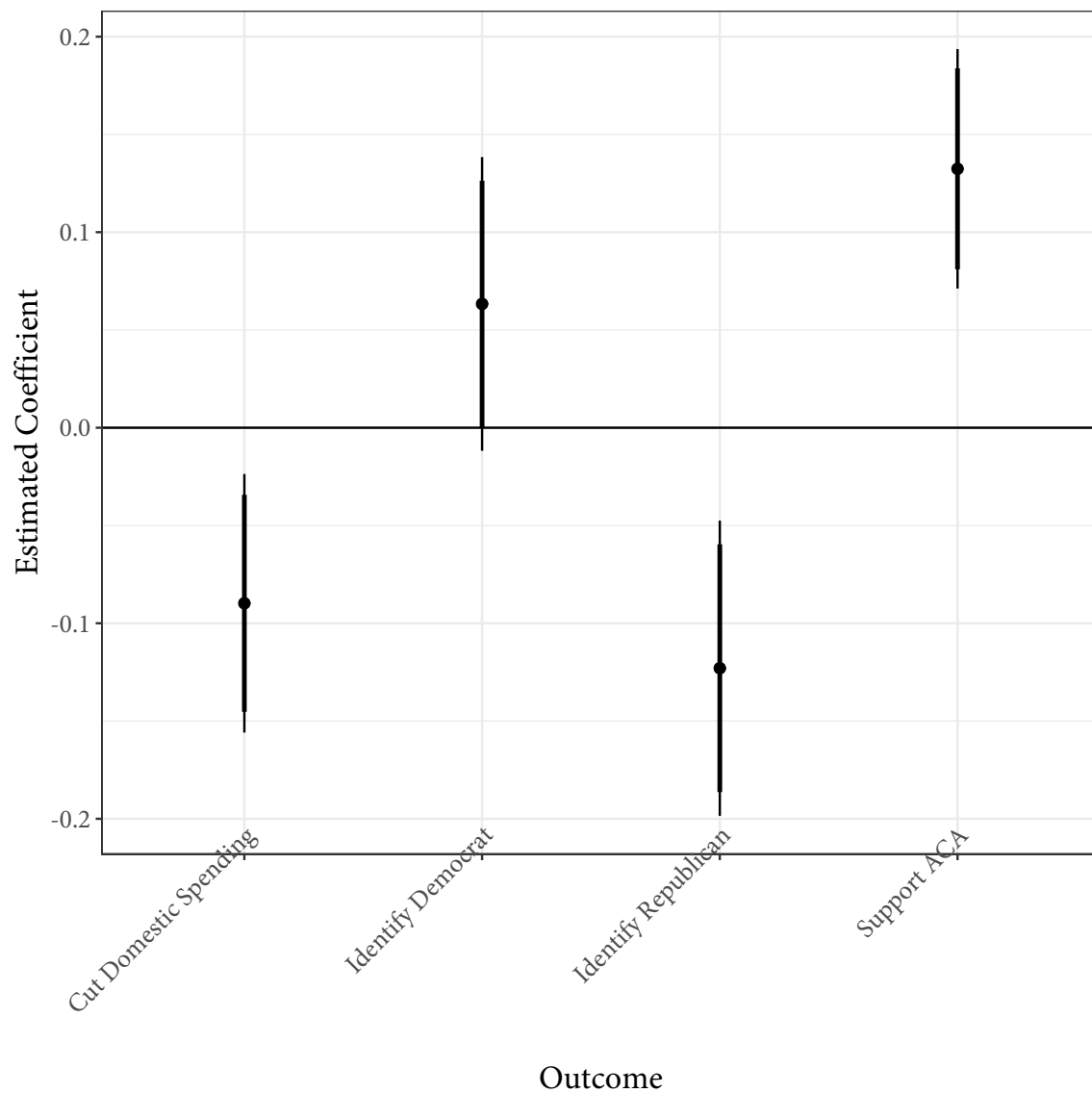
Coefficients estimated using two-stage least squares with 90 and 95% confidence intervals represented by thick and thin error bars respectively.

increase political participation, are indeed surprising. Perhaps they could be rationalized if individuals are induced to retire as a result of being eligible for Medicare and if retirement reduces political participation. Ex ante, it is not completely clear whether changes in work patterns can explain the general pattern across all outcomes. On one hand, Medicare could induce retirement or part-time work subsequently reducing one's income. This would, then, provide fewer monetary resources that would shape an individual's propensity to participate. On the other hand, becoming retired or switching over to part-time work could also free up time to become more involved in politics (Campbell 2012, pg. 336). Thus, changes in work status alone provide ambiguous effects on political participation; moreover, the time effects should also suggest that we should actually see increased participation in meetings and working on campaigns since these activities are costly primarily in terms of time. Theoretically, then, these results across *all outcomes* are inconsistent with changes in work patterns being the primary mechanism. I also assess this empirically by re-rerunning the main models on political participation and controlling for retirement and part-time work status. What this exercise allows one to do is to estimate the effect *net of* the effect of the discontinuity through the retirement or part-time work channels.[14] Table 2 in the Online Appendix shows the negative effect receiving Medicare persists net of any effect through the retirement channel. As a result, this mechanism also cannot explain the patterns shown in this paper so far.

In addition to the empirical tests above, I also run a number of robustness checks in the Online Appendix. First, I show that the results remain virtually unchanged when using parametric models with up to cubic polynomials on either side of the cutoff. Second, I show that the results are robust to using parametric models that include and exclude survey weights indicating that the results are not an artifact of survey sampling. Third, I show that inferences remain unchanged when using heteroskedastic consistent standard errors instead of clustered

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[14]Importantly, the point-estimate on retirement and part-time status is unidentified so it is difficult to directly interpret the coefficient on these variables.

Figure 4: Binned Estimates of Political Participation by Distance to 65
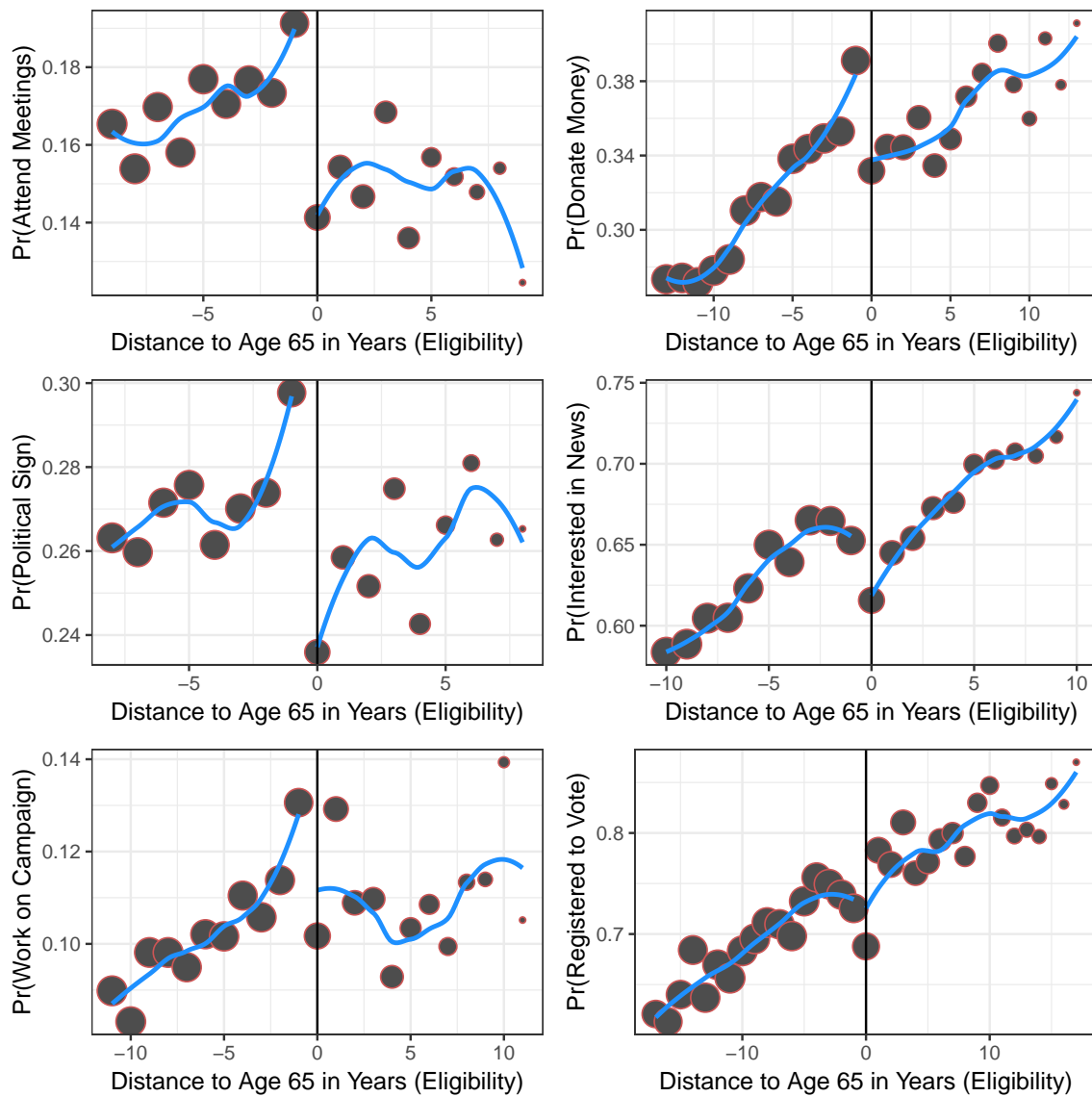
standard errors. Fourth, these general results become stronger when weighting the sample to be nationally representative.[15] Fifth and finally, the results remain unchanged when controlling for pre-treatment demographics such as gender, race, and education.

Finally to evaluate the theory posited in this paper, I plot the probability that an individual of a given age participates across all types measured in the CCES as they get closer to

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[15]Results shown in the Online Appendix using weighted two-stage least squares.

becoming 65. The basic logic of this test is as follows. If individuals do respond to these incentives, then individuals should increase their levels of political participation as they approach 65. Figure 5 provides evidence consistent with these incentives. For activities that are likely to be higher impact such as attending political meetings, donating money, and working on campaigns, we can see that there is a marked increase in political participation right around the age of 64–the set of individuals who would have most incentive to participate in politics. After turning 65, we can see that there is a dramatic drop in the probability that in individual participates in politics along these measures. Thus, this test provides evidence in support of the alternate theory provided in this paper where personal stakes interact with the structure of redistribution.

CONCLUSION

Does the welfare state make democratic citizens? In this article, I move beyond existing correlational research and provide a quasi-experimental test of policy feedback using the case of Medicare in the United States. Contrary to the existing literature, I find evidence that participation in Medicare reduces political participation as measured by attending meetings, donating money, displaying political signs, working on campaigns, voter registration, and news interest. Moreover, these results cannot be explained by individuals having poor experiences with the Medicare systems: individuals also become more supportive of the welfare state in response to receiving Medicare. Instead, I offer an alternate mechanism through which the structure of redistribution–from young to old–shapes political behavior in a way consistent with the findings. In general, I highlight an important yet understudied feature of policy feedback that can help reconcile ostensibly counter-intuitive findings.

While the research design in this article cannot speak to the ways in which *threats* to Medicare, Social Security, and the welfare state more broadly can mobilize interest groups,

they do open up new questions as to why and under what conditions do redistributionary programs enhance, diminish, or have no effect on political participation. On a more general note, the findings also suggest that Medicare might exacerbate political inequalities if it tends to demobilize beneficiaries while simultaneously making them more supportive of the welfare state. If indeed the structure of redistribution is an important element of the interplay between social policy and mass political behavior, then this suggests further exploration of this mechanism across a variety of different policies and contexts. For example, how might the interaction of personal stakes and the structure redistribution shape feedbacks from existing programs such as Medicaid and home ownership subsidies or proposed programs such as national health insurance or universal basic income? By taking the structure of redistribution more seriously, we can develop new perspectives on the possibility of these programs to mobilize or demobilize citizens.

This study joins Campbell (2012) in highlighting the importance of strong research designs in testing theories of policy feedback and the relationship between the welfare state and its beneficiaries. For example, Lerman and McCabe (2017) uses a similar identification strategy to show that the welfare state can reshape attitudes especially among those partisans who might be most skeptical of the welfare state. Furthermore, recent work by Clinton and Sances (2017) uses a geographic RDD paired with a difference-in-differences design to show how the expansion of Medicaid actually increased voter turnout among those areas with the most individuals who would benefit from it–a finding that stands in contrast to Soss (1999). These results along with the findings presented in this study encourage future work to re-examine existing theories and apply the existing arsenal of quasi-experimental designs to revisit old questions and test new ones.

From an empirical standpoint, the nature of the welfare state itself provides many opportunities to apply modern causal identification techniques to the study of policy feedback. For example, a large literature in economics uses policy benefit "kinks" to identify the causal ef-

fect of unemployment benefits on a variety of economic outcomes (Card et al. 2015; Landais 2015). Similarly, Ludwig and Miller (2007) use discontinuities in poverty thresholds to identify the causal impact of Head Start on child mortality and education. Given that many state welfare programs follow policy thresholds and kinks, this presents an exciting opportunity for scholars to use rigorous quasi-experimental strategies to speak to and further develop the rich literature on policy feedback and redistribution.

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ONLINE APPENDIX

Table 1: Summary Statistics

	Mean	SD	Min	Max
Age	45.822	15.637	18	109
Has Medicare	0.267	0.453	0	1
Above Cutoff	0.153	0.399	0	1
Attend Meetings	0.133	0.380	0	1
Political Sign	0.219	0.445	0	1
Work Campaign	0.081	0.313	0	1
Donate Money	0.243	0.470	0	1
News Interest	0.501	0.484	0	1
Validated Registration	0.598	0.460	0	1
Retired	0.165	0.415	0	1
White	0.736	0.425	0	1
Black	0.116	0.304	0	1
Male	0.482	0.500	0	1
College	0.260	0.474	0	1

Summary statistics weighted to be nationally representative.

Figure 5: Binned Estimates of Medicare Eligibility Discontinuity on Political Participation.
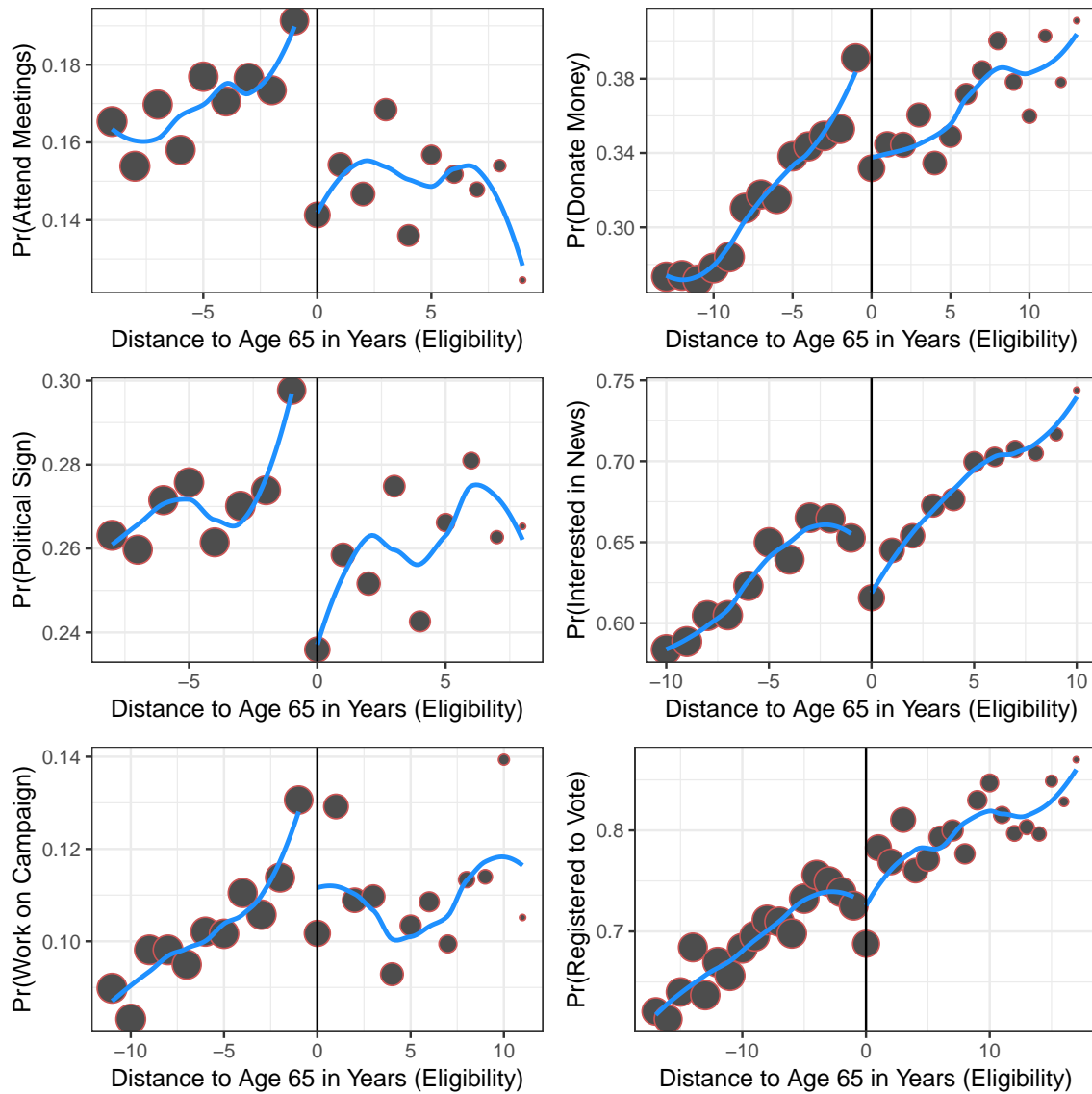
Binned estimates weighted to be nationally representative. Size of the dots correspond to the number of respondents in each bin and the lines indicate a loess smoother.

Table 2: Fuzzy RDD Estimates, 2SLS: Political Participation

	Attend Meetings	Political Sign	Work Campaign	Donate Money	News Interest	Validated Registration
	(1)	(2)	(3)	(4)	(5)	(6)
Has Medicare	−0.125***	−0.141***	−0.089***	−0.208***	−0.117***	−0.100
	(0.022)	(0.029)	(0.016)	(0.035)	(0.020)	(0.083)
Forcing	0.009***	0.017***	0.013***	0.027***	−0.004***	−0.011
	(0.003)	(0.003)	(0.001)	(0.006)	(0.001)	(0.008)
Above*Forcing	0.005	−0.004	−0.007*	−0.009	0.032***	0.072***
	(0.004)	(0.006)	(0.004)	(0.006)	(0.005)	(0.018)
Retired	−0.025***	−0.015	0.004	−0.006	−0.007	−0.0002
	(0.007)	(0.011)	(0.007)	(0.017)	(0.017)	(0.021)
Part-Time	0.009	0.017	0.022	−0.034***	0.007	−0.012
	(0.023)	(0.024)	(0.015)	(0.009)	(0.014)	(0.036)
Constant	0.243***	0.335***	0.158***	0.466***	0.698***	0.742***
	(0.011)	(0.011)	(0.004)	(0.022)	(0.011)	(0.031)
N	17,049	17,049	17,049	17,049	23,572	8,649

*p < .1; **p < .05; ***p < .01
Standard errors clustered by age in parentheses.
Weighted by survey weights to be nationally representative.
Bandwidth size is three with varying linear slopes on either side of cutoff.

Figure 6: Binned Estimates of Medicare Eligibility Discontinuity on Political Attitudes
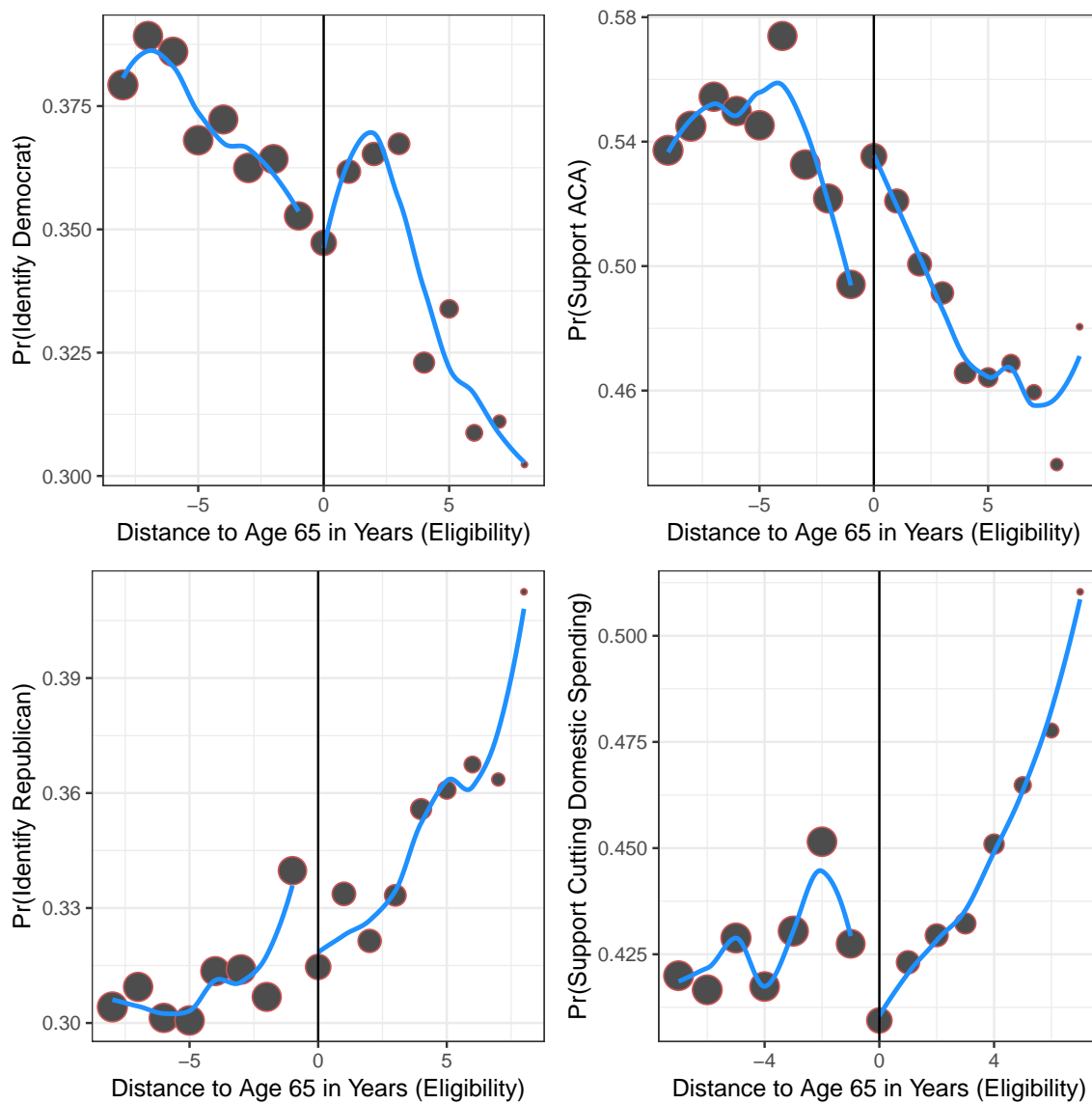
Binned estimates weighted to be nationally representative. Size of the dots correspond to the number of respondents in each bin and the lines indicate a loess smoother.

Table 3: Fuzzy RDD Estimates, 2SLS: Political Participation (Robust Standard Errors)

	Attend Meetings	Political Sign	Work Campaign	Donate Money	News Interest	Validated Registration
	(1)	(2)	(3)	(4)	(5)	(6)
Has Medicare	−0.062*	−0.097**	−0.061**	−0.121**	−0.043	−0.037
	(0.035)	(0.044)	(0.030)	(0.051)	(0.049)	(0.085)
Forcing	0.008	0.016**	0.015***	0.028***	−0.001	−0.012
	(0.006)	(0.007)	(0.005)	(0.008)	(0.008)	(0.013)
Above*Forcing	0.002	−0.006	−0.010*	−0.014	0.025***	0.066***
	(0.007)	(0.009)	(0.006)	(0.010)	(0.010)	(0.017)
Retired	−0.021**	−0.012	0.006	−0.001	0.002	−0.003
	(0.010)	(0.012)	(0.008)	(0.013)	(0.013)	(0.022)
parttime	0.004	0.014	0.017	−0.042**	0.002	−0.012
	(0.015)	(0.019)	(0.013)	(0.018)	(0.019)	(0.032)
college	0.149***	0.113***	0.127***	0.260***	0.235***	0.099***
	(0.008)	(0.010)	(0.007)	(0.011)	(0.010)	(0.015)
white	−0.014	−0.028	−0.012	−0.053**	0.036	0.080**
	(0.016)	(0.021)	(0.012)	(0.025)	(0.022)	(0.038)
black	−0.080***	−0.058**	0.045**	−0.048	−0.117***	0.061
	(0.019)	(0.030)	(0.021)	(0.035)	(0.032)	(0.057)
male	0.042***	0.026***	−0.013**	0.034***	0.074***	0.055***
	(0.008)	(0.010)	(0.006)	(0.011)	(0.010)	(0.017)
Constant	0.168***	0.296***	0.121***	0.382***	0.544***	0.591***
	(0.025)	(0.032)	(0.020)	(0.036)	(0.035)	(0.055)
N	17,049	17,049	17,049	17,049	23,572	8,649

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

Eicker-Huber-White standard errors in parentheses.

Weighted by survey weights to be nationally representative.

Bandwidth size is three with varying linear slopes on either side of cutoff.

Table 4: Fuzzy RDD Estimates, 2SLS: Political Participation (Quadratic)

	Attend Meetings	Political Sign	Work Campaign	Donate Money	News Interest	Validated Registration
	(1)	(2)	(3)	(4)	(5)	(6)
Has Medicare	−0.244***	−0.248***	−0.123***	−0.439***	−0.147***	−0.368***
	(0.010)	(0.011)	(0.006)	(0.005)	(0.004)	(0.024)
Forcing	0.068***	0.062***	0.024***	0.141***	0.002***	0.102***
	(0.001)	(0.001)	(0.0004)	(0.00005)	(0.0003)	(0.0003)
Forcing Sq.	0.015***	0.011***	0.003***	0.029***	0.002***	0.029***
	(0.0003)	(0.0002)	(0.0002)	(0.0003)	(0.0003)	(0.0001)
Above*Forcing	−0.040***	−0.015	0.003	−0.093***	0.055***	0.045
	(0.011)	(0.013)	(0.007)	(0.001)	(0.005)	(0.036)
Above*Forcing Sq.	−0.018***	−0.022***	−0.009***	−0.036***	−0.011***	−0.053***
	(0.004)	(0.004)	(0.002)	(0.001)	(0.002)	(0.012)
Retired	−0.012	−0.006	0.003	0.030	−0.005	0.034***
	(0.011)	(0.008)	(0.006)	(0.020)	(0.018)	(0.011)
Constant	0.315***	0.396***	0.178***	0.593***	0.710***	0.877***
	(0.005)	(0.004)	(0.003)	(0.009)	(0.009)	(0.008)
N	17,049	17,049	17,049	17,049	23,572	8,649

*p < .1; **p < .05; ***p < .01
Standard errors clustered by age in parentheses.
Weighted by survey weights to be nationally representative.
Bandwidth size is three with varying quadratic slopes on either side of cutoff.

Table 5: Fuzzy RDD Estimates, 2SLS: Political Participation (Cubic)

|	Attend Meetings	Political Sign	Work Campaign	Donate Money	News Interest	Validated Registration
	(1)	(2)	(3)	(4)	(5)	(6)
Has Medicare	−0.403***	−0.426***	−0.219***	−0.450***	−0.225***	−0.861***
	(0.002)	(0.002)	(0.001)	(0.003)	(0.005)	(0.003)
Forcing	0.183***	0.191***	0.094***	0.149***	0.058***	0.481***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.00001)
Forcing Sq.	0.074***	0.078***	0.039***	0.033***	0.030***	0.234***
	(0.0002)	(0.0002)	(0.0001)	(0.0003)	(0.001)	(0.0001)
Forcing Cubed	0.009***	0.011***	0.006***	0.001***	0.004***	0.034***
	(0.0001)	(0.0001)	(0.00004)	(0.0001)	(0.0001)	(0.00000)
Above*Forcing	−0.098***	−0.079***	−0.032***	−0.097***	0.025***	−0.148***
	(0.0001)	(0.00005)	(0.00004)	(0.0001)	(0.001)	(0.0003)
Above*Forcing Sq.	−0.122***	−0.138***	−0.072***	−0.043***	−0.060***	−0.411***
	(0.001)	(0.0004)	(0.0003)	(0.001)	(0.001)	(0.0002)
Retired	0.006	0.015	0.014*	0.031	0.004	0.091***
	(0.015)	(0.011)	(0.008)	(0.020)	(0.019)	(0.010)
Constant	0.408***	0.499***	0.234***	0.600***	0.755***	1.162***
	(0.008)	(0.006)	(0.004)	(0.011)	(0.008)	(0.004)
N	17,049	17,049	17,049	17,049	23,572	8,649

*p < .1; **p < .05; ***p < .01
Standard errors clustered by age in parentheses.
Weighted by survey weights to be nationally representative.
Bandwidth size is three with varying cubic slopes on either side of cutoff.
Above*Forcing Cubed omitted because of multicollinearity issues.

Figure 7: Effect of Medicare on Probability of Being Contacted by a Campaign: Local Linear Fuzzy RDD Estimates
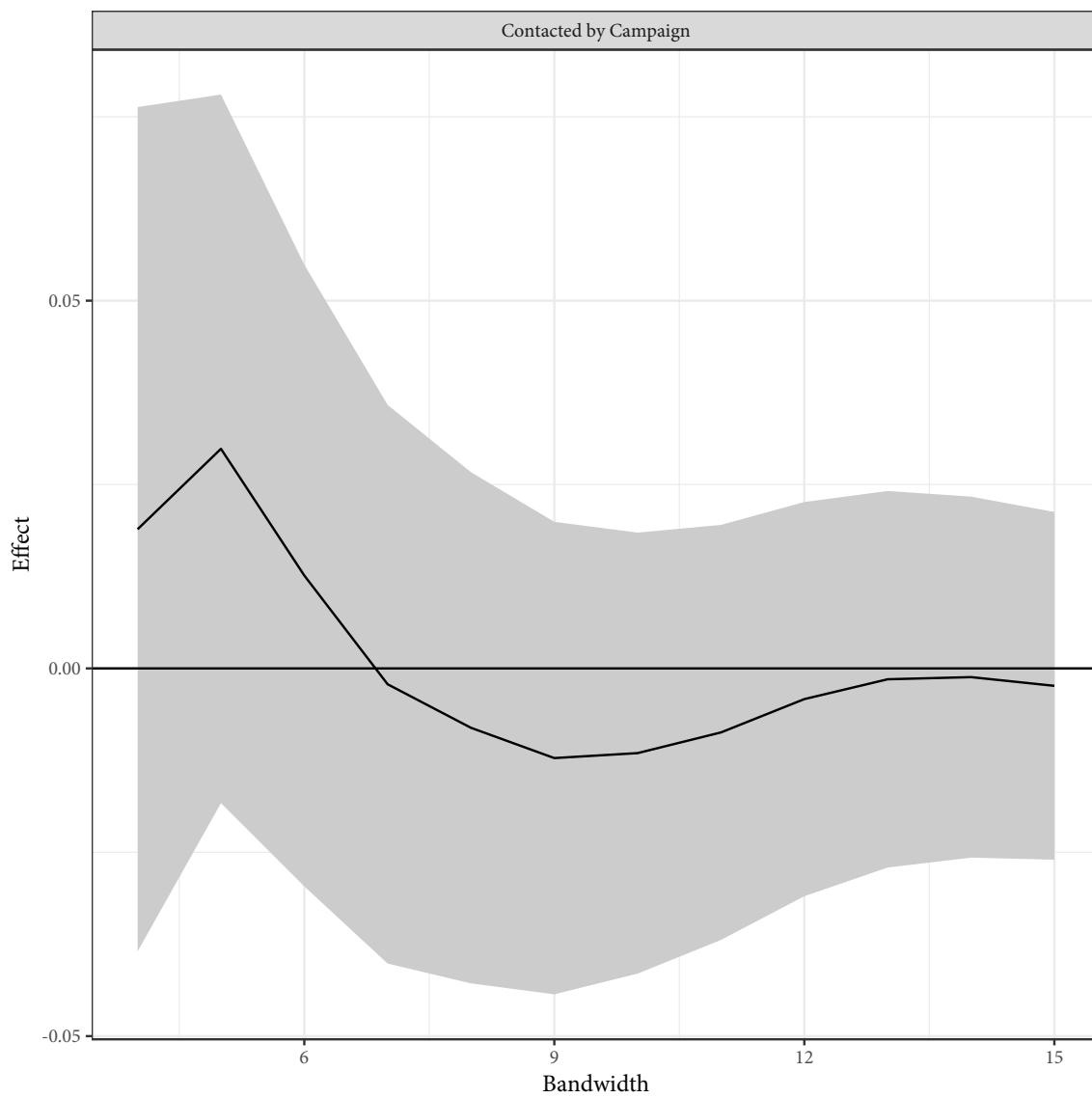
Shaded area represents 95% bias corrected confidence intervals.