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VOTING FOR DEMOCRACY:
CHILE'S PLEBISCITO AND THE ELECTORAL PARTICIPATION OF A GENERATION

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ABSTRACT

This paper assesses if voting for democracy affects long-term electoral participation. We study the effects of participating in Chile's 1988 plebiscite, which determined whether democracy would be reinstated after a 15-year long military dictatorship. Taking advantage of individual-level voting data for upwards of 13 million Chileans, we implement an age-based RD design comparing long run registration and turnout rates across marginally eligible and ineligible individuals. We find that Plebiscite eligibility (participation) significantly increased electoral turnout three decades later, reaching 1.8 (3.3) percentage points in the 2017 Presidential election. These effects are robust to different specifications and distinctive to the 1988 referendum. We discuss potential mechanisms concluding that the scale of initial mobilization explains the estimated effects. We find that plebiscite eligibility induced a sizable share of less educated voters to register to vote compared to eligibles in other upstream elections. Since less educated voters tended to support Chile's governing left-wing coalition, we argue that the plebiscite contributed to the emergence of one party rule the twenty years following democratization.

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1 Introduction

Important political events often make indelible impressions on the minds and future actions of voters. Mere participation in an election has been shown to impact future partisanship (Kaplan and Mukand, 2014), the degree of polarization (Mullainathan and Washington, 2009) and voter turnout (Coppock and Green, 2016; Fujiwara et al., 2016; Meredith, 2009). In fact, early-life political events which are particularly salient may have even larger long-term effects (Sears and Valentino, 1997; Sears and Funk, 1999; Alesina and Fuchs-Schündeln, 2007; Prior, 2010; Laudenbach et al., 2019). In this paper, we examine the long-run impacts of participating in one of the most consequential elections in recent history: Chile's 1988 plebiscite, which was held to determine whether the country would return to democracy after a 15-year long military dictatorship. Augusto Pinochet came to power under a military coup in 1973 and maintained autocratic control through civil rights restrictions and military rule. In 1980, under international pressure for human rights abuses, the military government of Augusto Pinochet wrote a new Constitution, which called for a plebiscite to be held eight years later on the restoration of democratic rule. The plebiscite was held on October 5^{th}, 1988, and Pinochet unexpectedly lost.[1] The success of the 'No' vote then ushered in elections for a new President in 1989 and the restoration of a democratically elected regime in 1990 (Loveman, 1995).

In this paper, we analyze the impact of voting on democracy itself on future voter registration and future electoral turnout. We estimate a regression discontinuity design using age-based plebiscite eligibility. Only citizens who had turned 18 by the closing of the registration rolls on August 30, 1988 were allowed to participate in the election. Taking advantage of individual-level voter data for upwards of 13 million Chileans, coupled with information on individuals' weeks of birth and registration outcomes, we first show that 56% of marginally age-eligible Chileans registered for the 1988 plebiscite. Moreover, we find that these registration gaps persisted. Twenty years later, in 2009, marginally eligible plebiscite participants were still registered at a 12 percentage point higher than those born merely one week later. In Chile's old electoral system, citizens who registered to vote remained on the rolls permanently; as a result, the 2009 effects indicate a lack of complete catch-up by plebiscite ineligibles. While actual turnout data for pre-2010 elections is unavailable, we note that voting was mandatory for registered individuals through the 2009 election, and turnout rates exceeded 86% through 2009.

Chile switched from a voluntary to an automatic registration system after the 2009 election, which implied that any pre-reform differences in registration rates across the plebiscite cutoff automatically disappeared. Taking advantage of voter-level data on actual turnout for the 2013 and 2017 Presidential elections as well as for the 2016 municipal election, we thus estimate downstream turnout impacts of plebiscite eligibility which are not mediated by registration differences.

[1] The Constitution called for the Plebiscite to be a Yes/No vote on whether a candidate chosen by the military regime would stay in power for an additional eight years, or whether Chile would return to democratic rule, by holding its first presidential election in 1989. Boas (2015) has shown that a vast majority of polls conducted in 1988 showed the 'Yes' option to be in a commanding lead.

We find that marginal eligibility to vote in the 1988 plebiscite on the restoration of democracy raised turnout by 3 and 1.8 percentage points for the 2013 and 2017 Presidential elections, or 6% and 4% of baseline participation rates, respectively.

We further analyze the downstream effects of actual plebiscite voting by estimating a fuzzy regression discontinuity design and find that having voted in the plebiscite increased 2013 and 2017 turnout rates by 5.5 and 3.3 percentage points, respectively. We find similar effects for the lower-stakes 2016 municipal election and show that the results are robust to a number of different different functional form and sample choices. These results thus indicate that having voted in Chile's most consequential election had substantial downstream effects even three decades after the return to democracy.

Since the existing literature on downstream voting effects has largely focused in the United States (Coppock and Green, 2016; Meredith, 2009), our estimates are not necessarily comparable to the literature. As a result, we benchmark the estimated plebiscite turnout effects using age-based discontinuities around other upstream elections. We focus on Chile's first five presidential elections, the first of which took place in December 1989, followed by elections in 1993, 1999, 2005 and 2009. We estimate a differences-in-discontinuity design and only find significant turnout effects in the presidential 2017 election for plebiscite eligibles. We further estimate a fuzzy differences-in-discontinuity design and show that this result can be explained by the large mobilization effects of the plebiscite, rather than through a particularly strong persistence effect.

We also examine heterogeneous impacts across a number of dimensions, a first in this literature. We find larger effects for males, as plebiscite participation results in 14% higher 2017 turnout rates relative to their ineligible counterparts. We find suggestive evidence of larger downstream effects for individuals living in left-leaning municipalities, though the effects are not statistically significant in the 2013 and 2016 elections.

In addition, using two other administrative data sources, which contain detailed information on individuals' educational attainment, we analyze whether the set of compliers responding to the plebiscite varied across upstream elections.[2] We find that plebiscite eligibility induced a sizable share of high school dropouts to initially register to vote, compared to high school dropouts in other upstream elections. Moreover, in specifications with longer bandwidths, which include plebiscite eligibles who had more time to register, the share of high school dropouts who registered to vote increases significantly. These results indicate that both the salience of an election and the time to registration both affect electoral participation heterogeneously by socioeconomic status. Since Chile's old electoral system implied permanent registration (with high turnout rates), we note that the 1988 plebiscite induced a larger share of less educated Chileans to vote. Using survey data, we document that this group tends to support left-learning parties in Chile. As a result, we lastly posit that the structure of the plebiscite may have contributed to the the 20-year period of one-party rule — a common feature in various post-dictatorship countries — by a left-leaning

[2]We analyze information linking the educational attainment data to registration outcomes under the old electoral system, allowing us to explore heterogeneous registration outcomes by education level. Nonetheless, since our turnout data is de-identified, we cannot examine turnout effects by education.

coalition (*Concertacion*) in Chile.

Previous work has examined the impacts of upstream election eligibility on downstream turnout in the United States, using the age-18 eligibility cut-off as well. Using data from California (California Statewide Voter File), Meredith (2009) documents that presidential election eligibility increases subsequent participation up to four years later. Coppock and Green (2016), on the other hand, show persistent effects of early-life electoral participation on future voter turnout over a period of two decades. We note, however, that these papers rely on voter files. Nyhan et al. (2017) have shown that due to selectivity of registration, these data sources do not recover registration effects across the cutoffs, and as such may lead to biased downstream turnout effects. Our empirical strategy is robust to this criticism.

We also contribute to a growing literature analyzing Chile's 1988 plebiscite. Other papers have used cross-sectional variation to estimate the impact of exposure to military repression (proxied by distance to a military base) (Bautista et al., 2019) and the penetration of the 'No' campaign (González and Prem, 2018), defined by TV-ownership rates across municipalities, on support for the 'No' position in the plebiscite. To the best of our knowledge, this is the first paper to consider the long-term electoral consequences of the plebiscite. Furthermore, we present the first estimates of downstream electoral persistence in a non-US context using reliable administrative data.

We note that our analysis of complier characteristics across upstream elections provides important evidence as to why downstream effects may vary across elections. In fact, this is the first paper to document substantial heterogeneity in concurrent registration rates by educational attainment, and we further show that less educated voters are far more likely to register in more salient elections and when they have more time to do so. We thus contribute quasi-experimental evidence to an extensive experimental literature considering the factors which drive voter turnout, see (Green and Gerber, 2019; Arceneaux and Nickerson, 2009; Gerber et al., 2008, 2003; Gerber and Green, 2000), among others. Moreover, given the prevalence of one-party rule in various countries after the reinstatement of democracy, we present suggestive evidence that the nature of the Chilean plebiscite may have contributed to the twenty years of *Concertacion* rule, by inducing less educated citizens to vote.

Finally, this is the first paper to consider the long-term effects of an election held under dictatorial rule. Other work has analyzed downstream effects in developing countries using survey data, including De Kadt (2017) in South Africa and Holbein and Rangel (2019) in Brazil, but always under democratic rules. Furthermore, our administrative data sources allow us to separately estimate registration and turnout effects. In fact, Chile's electoral reform implies that we recover a turnout effect which is not explained by differential registration rates but rather reflects a pure effect of voting on future voting — a first in this literature. Moreover, we present evidence on important sources of heterogeneity, analyzing differential effects by gender and partisanship (measured at the municipality level).[3]

[3] As discussed below, in the lead-up to the plebiscite, the 'No' campaign focused its advertisements towards women, yet we find larger downstream effects for men.

The rest of the paper proceeds as follows: In Section 2, we discuss institutional details. In Section 3, we introduce our data sources and present summary statistics. In Section 4, we present our empirical strategy. Section 5 presents our main results of the long-run effects of Plebiscite eligibility on persistent downstream registration and voting spanning up to three decades. Section 6 documents how our findings vary by gender, education-level and partisan orientation of municipality. We also discuss the implications of our results for partisan mobilization and relate them to single party dominance in newly democratized countries. Finally, Section 7 concludes.

2 Institutional Details

Political Background. In 1970, Salvador Allende and the Socialist Party came to power in a narrowly won and highly contested electoral victory. Allende and his Popular Unity coalition of communists, socialists, social democrats and radicals faced off against the center-left Christian Democrats, led by Radomiro Tomic, and the right wing National Party candidate Jorge Alessandri. Allende received the 36.6% of the votes as compared to Alessandri's 35.2% and Tomic's 28.1% and formed a government with the support of the Christian Democrats, giving him 78.5% of the Congressional roll-call vote.

On September 11, 1973, Salvador Allende's government was overthrown in a military coup led by General Augusto Pinochet. Pinochet's regime suspended civil rights, raided the homes of suspected oppositions supporter and also kidnapped and murdered potential members of the opposition. The Rettig and Valech reports, conducted after the end of the dictatorship, estimated that the regime was responsible for the murder of 3,216 individuals and the torture of 38,254 Chileans.

Under international pressure over human rights abuses, Pinochet sought to legitimize his regime through a plebiscite proposing a constitutional reform (Varas, 1982).[4] The plebiscite took place on September 11, 1980 and the Constitution was ratified with 67.5% of the vote. The new Constitution ushered in a new eight-year rule for Pinochet, which began on March 11, 1981 and was set to last through March 11, 1989. The Constitution called for the military regime to propose a new candidate for the next eight-year term at least 90 days prior to the end of Pinochet's rule. This candidate would be ratified in a plebiscite in which a "Yes" vote would imply an eight-year term for the proposed candidate, beginning on March 11, 1989 and lasting through March, 1997. A "No" vote would first extend Pinochet's rule for an additional year and then trigger a democratic Presidential election to be held 90 days prior to the end of Pinochet's extended term — in December, 1989 (Nagy and Leiva, 2005).

While the 1980 Constitution had made voting mandatory, the norms for electoral participation

[4]In 1978, the government had held a plebiscite calling for an up or down vote on the following statement: "Faced with international aggression launched against our fatherland, I support President Pinochet in his defense of the dignity of Chile and reaffirm the legitimacy of the government." Since the regime had destroyed the voter rolls under the argument that Allende had manipulated voter registration rolls to secure a win in the 1973 Parliamentary elections, all Chileans over 18 were allowed to vote. The 'Yes' option won with 71% of the vote, though its legitimacy was highly questioned (Welp, 2010).

were not defined until the restitution of the Electoral Commission in 1986 (*SERVEL* in Spanish). The guidelines established by SERVEL in 1986 did not require Chileans to register to vote — thus leaving Chile with a unique system of voluntary registration with mandatory voting only for registered citizens.[5]

1988 Plebiscite. The guidelines laid out in the 1980 Constitution implied the plebiscite would be held in 1988, yet a specific date was not announced in advance. Voter registration opened on February 25, 1987, and all Chilean citizens older than 18 years old became immediately eligible to register to vote.[6] By the end of 1987, over 3 million Chileans had registered, reaching 40% of the voting-age population. On August 30th of 1988, the military regime announced that the candidate for the 'Yes' option would be Augusto Pinochet, and that the Plebiscite would be held on October 5th (Boeninger, 1997). Servel also closed voter registration on August 30, with 7.4 million Chileans having registered to vote. Over 90% of the voting age population registered. Registration was even high among young Chileans; 70% of 18-24 year olds registered in time for the Plebiscite.[7]

In the lead-up to the Plebiscite, the Pinochet government gave both the 'Yes' and 'No' campaigns fifteen minute-long sequential advertisement slots on national television — called the *franja*— every night. The regime and the opposition, a coalition of political parties named *Concertación*, both presented videos supporting their respective positions and the videos were syndicated on all television stations across the country every day between September 5th and October 1st from 8:30 to 9PM. González and Prem (2018) exploit variation in TV penetration across counties (*comunas*) to examine the impact of the *franja* on the 'No' vote share, finding that a one standard deviation increase in television exposure increased 'No' support by two percentage points.

Most polls conducted in 1988 showed the 'Yes' option to be leading among registered voters (Boas, 2015). However, 97% of all registered individuals voted in the Plebiscite and the 'No' option won with 54.7% of the vote. As a result, Pinochet's rule was extended for a year, through March 11th, 1990 and Presidential elections were called for December, 1989.[8]

During 1989, the military regime and the opposition agreed on a number of reforms to the Constitution. A Constitutional referendum was held on July 30th and these reforms were ratified by 85.7% of the electorate. The *Concertación* candidate, Patricio Aylwin, won the Presidential elec-

[5] Navia (2004) has argued that the military regime installed this electoral system in order to skew the electorate in its support. In particular, they assumed that regime supporters would be eager to register whereas the opposition would fracture on whether to encourage registration and potentially legitimize the results of the plebiscite or boycott it, thus leading the 'Yes' option to an easy win. This was of particular concern since, as documented in Fuentes (2013), the 1980 plebiscite was replete with voter fraud on behalf of the regime.

[6] SERVEL's electoral guidelines published in 1986 mentioned that citizens who turned 18 prior to an election, but after the registration closing date could still register to vote. Nonetheless, this rule did not apply for the 1988 Plebiscite as the Plebiscite date had not been announced in advance. As a result, Chileans who turned 18 between February 25th 1987 and registration closing date for the Plebiscite could only register to vote upon turning 18.

[7] The age cut-off described above combined with the sudden announcement of the registration closing date implies that Chileans who turned 18 on August 31st were ineligible to vote in the Plebiscite. At the same time, those who turned 18 on August 30 had only one day to register on that day whereas those born earlier in 1970 had a longer time period during which they could register. For instance, those born on July 30, 1970 had a full month to register.

[8] Electoral registration closed on June 15th in 1989, yet Chileans who would turn 18 by the Presidential election date (on December 14) were allowed to register to vote for both the Constitutional reforms and the Presidential election.

tion with 55% of the vote, becoming Chile's first democratically-elected President in seventeen years and ushering in twenty years of *Concertación* Presidents.[9]

Post-Plebiscite Elections and Electoral Reform. In the years following the restoration of Democracy, eligible registrants increasingly registered to vote at lower rates. By the time of the 2009 Presidential elections, only 20% of 18-24 year olds registered to vote. The large decline in voter registration was in large part blamed on the electoral system which combined voluntary registration with mandatory voting.[10] Since Chile's electoral system never purged citizens from voter rolls absent death, young potential voters could only exercise their voting rights if they were willing to commit to a perpetuity of voting or fines. As a result in the decline in youth registration, Chileans under 30 accounted for one third of all registered voters for the Plebiscite but only a mere 10.9% of registered voters for the 2009 election (Contreras and Navia, 2013). Moreover, only two-thirds of the entire voting age population had registered to vote for the 2009 election.[11] In contrast to the plummeting registration rates, electoral participation for the registered remained quite high. Turnout rates fell from 94.7% for the first presidential election in 1989 to a nadir of 86.7% in 2009.

Partly motivated by the aging of the electorate, Chile undertook a sizable change in its electoral system in 2009. It changed the system from a mandatory voting but voluntary registration system to a universal automatic registration but voluntary voting system. The new registration system, which is still in place today, thus resembles that of Germany and the United Kingdom.[12,13] All eligible adults were immediately registered and all minors were automatically registered at age 18. As a result, the number of registered voters increased from 8.5 to 13.4 million. The new electoral system was first put in place for the 2012 municipal elections, yet despite the sizable increase in the number of registered citizens, turnout actually fell from 7.0 to 5.8 million voters. The decline in voter turnout persisted through the 2013 and 2017 Presidential elections, falling from 7.25 million voters in the 2009 election to 6.7 million in both the 2013 and 2017 Presidential elections. Table 1 shows registration and turnout over time for all Presidential elections, documenting the large

[9]Important for our results, Chile's post-dictatorship electoral system created a "top two" (two-stage) electoral system for President. In the first round, a candidate wins only with an outright majority of the votes. Otherwise, the election proceeds to a second round with the two top candidates, as was the case in the 1999, 2005, 2009, 2013 and 2017 Presidential elections.

[10]The mandatory voting system was enforced with substantial fines. SERVEL levied a nominal Peso equivalent of $100 USD in the 1989 Presidential election. The nominal fines increased over time and exceeded $200 by 2009. These fines had not been put in place by the plebiscite.

[11]Different additional reasons have been put forth to explain the falling registration rates. First, voters were unable to register during certain times: in off-election years, individuals could only register to vote in the first seven week days of each month. Second, in election years, registration closed three-to-fourth months prior to the election date. In fact, Corvalan and Cox (2018) find that contemporaneous registration rates are 20% lower for those who turn 18 the day after a registration deadline relative to those born one day earlier despite both being eligible to register for an election months in the future.

[12]Automatic registration combined with voluntary voting is also increasingly popular in the United States. Beginning with Oregon, 16 U.S. states and the Distict of Columbia have all passed automatic registration laws.

[13]After the reform was approved, Chile's President, Michelle Bachelet, argued that "expanding the universe of voters is of critical importance, as voter rolls have aged significantly, as such, it is important for young people to express their opinions". Another argument made by the Bachelet government centered around allowing individuals who became interested in voting close to the day of the election to be able to vote.

registration rates for early elections, along with the sizable decline in turnout following the 2009 electoral reform.

Our analysis of the impact of plebiscite eligibility and plebiscite participation upon future voter turnout captures two different margins of downstream effects. First, the permanent registration feature of Chile's old electoral system implies that our analysis of the effects of Plebiscite eligibility on long-term registration rates captures differential catch-up by non-registered individuals born after the Plebiscite cut-off. Second, since the 2012 electoral reform automatically registered all Chileans, our turnout analysis for the 2013, 2016 and 2017 elections recovers the effects of Plebiscite eligibility on turnout only through a direct turnout effect rather than through a registration effect. This stands in contrast to the existing literature in the U.S., which does not and historically could not distinguish between registration and turnout effects (Meredith, 2009; Coppock and Green, 2016). In the next section, we describe our data sources and present summary statistics on our sample.

3 Data Sources and Summary Statistics

3.1 Data Sources

Our main data source comes from de-identified individual-level voting data provided by SERVEL for the 2013 and 2017 Presidential elections and for the 2016 municipal elections.[14] In addition to individual-level turnout data for the three most recent elections, this data set includes information on the birth year and week of Chileans, which we use to determine plebiscite eligibility. Moreover, we observe registration year for those who registered voluntarily under the old electoral system. We additionally observe gender and *comuna* of residence at the time of the election.

We take advantage of voter *comuna* of residence to merge various *comuna*-level characteristics. First, we use data from Chile's last two censuses, conducted in 1992 and 2002, which provide information on *comuna*-level covariates including the share of households with electricity, water, and a toilet in their house respectively, the share of TV ownership and the literacy and the *comuna* unemployment rate. To analyze heterogeneous effects by exposure to the *franja*, we obtain the share of television ownership by *comuna* in 1987 from González and Prem (2018), which comes from Chile's 1987 National Socioeconomic Survey (*CASEN*).[15] Furthermore, we analyze heterogeneous downstream effects of the Plebiscite by political affiliation by merging in SERVEL-provided *comuna*-level vote shares in the 1970 Presidential election for Allende as well as for a broader measure of the left (Tomic plus Allende).[16] We note that our analysis of heterogeneous impacts across *comuna*-level characteristics necessitates the assumption that individuals lived in the same *comuna* in both the upstream and downstream election. While this is a strong assumption, CASEN 2015

[14]The Presidential election data data only covers first round election results. We do not observe turnout for the second-stage runoffs in the 2013 and 2017 elections.

[15]Since the 1987 CASEN did not cover all *comunas* in Chile, we also rely on TV ownership data from the 1992 Census.

[16]We create a cross-walk of 1970 *comunas* to present-day *comunas*.

data indicates that fewer than one-third of Chileans adults have moved *comunas* since birth. For Chileans who moved since the upstream election, our procedure imputes incorrect *comuna*-level characteristics, which would lead to attenuation bias if migration were random.[17]

Since the voter turnout data contains limited information on individual-level characteristics, we complement our analysis using a variety of administrative data sources. First, we use administrative data from SERVEL, which contains exact date of birth, gender and exact registration date for individuals who had voluntarily registered in the old system. Unlike the de-identified turnout data, this data source includes individuals' national identification number.[18] Whereas the SERVEL registration data covers the universe of Chileans who had at some point registered to vote prior to automatic registration in 2012, it does not include the birth date of non-registered individuals.[19] To address this concern, we construct a measure of population size by birth cohort by combining the SERVEL individual data on registration with two other administrative data sets, in which we also observe individuals' educational attainment.

The first of these additional data sources comes from Chile's Unemployment Insurance (UI, *Seguro de Cesantía*) database and contains matched employee-employer data for all formal sector employment contracts signed since November 2002. As a result, this data source covers all Chileans who spent at least one month employed in the formal sector since 2002. These records include upwards of seven million workers. The UI data includes employment status but critically for our analysis, it also contains educational attainment. Since UI data do not capture individuals who have not held formal sector employment since 2002, we complement our analysis with administrative records from the Bureau of Social Protection (FPS, *Ficha de Protección Social* of 2009). The FPS data includes all individuals (along with their family members) who applied for any social program in Chile, covering two-thirds of the Chilean population. From the FPS data, we obtain individuals' educational attainment, as well. These sources of information were merged using the national identification number, generating individual-level records containing educational attainment and date of registration.[20] To ensure that the sample is representative of the Chilean population, we compare it to the SERVEL turnout data for the 2013 election. The 2013 turnout data includes 13.39 million Chileans born before 1995, whereas our data set includes 11.37 million individuals — we observe educational attainment for 9.98 million of them. As a result, we recover educational attainment for 75% of the voting-age population who were eligible to vote in the 2013

[17] Cursory examination of 2015 CASEN data does not show evidence of selective moving patterns towards *comunas* with differential 1970 vote shares or baseline characteristics. As a result, we argue that our *comuna*-level imputation procedure is unlikely to be a source of non-classical measurement error. Nonetheless, since our *comuna*-level analysis relies upon a strong assumption, we remark that our results are suggestive rather than causal.

[18] The RUT or Rol Único Tributario is a unique identifier for all Chileans, which allows us to link individuals across various administrative data sources.

[19] Thus a discontinuity in birth, death or both across the August 30, 1970 birth threshold could potentially confound our estimates of the impact of plebiscite eligibility on voter registration. Nyhan et al. (2017) make a similar argument regarding the use of voter registration data in the United States.

[20] Since the education variables are coded differently in the UI and in the FPS data sets, we classify individuals by whether they were high school dropouts, high school graduates or had at least some post-secondary education by 2009. These educational categories are measured by both data sources.

presidential election.[21]

This data set allows us to present the first estimates of heterogeneous effects of marginal upstream election eligibility on actual participation, to examine long-term differences in registration rates and to examine compliers' educational attainment across different bandwidths and upstream elections. Nonetheless, we do not observe educational attainment in the SERVEL turnout data. Thus, we cannot estimate heterogeneous impacts of plebiscite eligibility on downstream turnout.

Finally, we also use political opinion survey data conducted by the *Centro de Estudios Publicos* (CEP) for all the election years from 1989-2009. This data set contains demographic data, most notably, educational attainment, as well as self-reported turnout and partisanship. We use this data to examine the likely partisan impacts of the plebiscite and to test for differential turnout in pre-reform electoral system.

3.2 Summary Statistics

Table 2 presents summary statistics. The combination of our data sources allow us to analyze voting behavior for over 13 million Chileans. Half of our sample is comprised of males and the majority of these individuals are high school dropouts, with fewer than 11% having gone beyond high school graduation. *Comuna*-level characteristics largely match country-level averages, as individuals in our sample lived in *comunas* in which Allende's vote share reached 37.2%, compared to his 36.6% vote share in the 1970 election. In terms of voting participation, 60% of our sample had voluntarily registered to vote by 2009, 49.5% and 47.2% actually voted in the 2013 and 2017 presidential elections, respectively.

In the second and third columns, we divide the sample across age-based plebiscite eligibility. Those who had turned 18 prior to the plebiscite unsurprisingly have lower educational attainment relative to their ineligible peers. However, they live in *comunas* with otherwise similar baseline characteristics.[22] Moreover, close to 90% of plebiscite eligibles had registered to vote by 2009 whereas 55% voted in the 2017 election. The electoral participation of eligibles nonetheless far outpaces that of younger Chileans, since just 29.8% of individuals in this group had registered by 2009 and 40% of them had turned out for the 2017 election.

Nonetheless, the differences in electoral participation in these two groups could be explained by life-cycle voting patterns. As a result, in columns 4 and 5 of Table 2, we compare individuals who were marginally eligible to participate to those who were marginally ineligible, restricting our attention to Chileans who turned 18 in a 12-month window across the Plebiscite eligibility cut-off. In this group, we find similar differences in terms of electoral participation between elgibiles and

[21] The nature of the two administrative data sources implies that we better recover educational attainment for working-age individuals in 2013. As a result, our match rate is in the 66% range for individuals born in the 1950s, rising to 73.1% and 77.5% for those born in the 1960s and 1970s, respectively. We find no significant differences in match rates for individuals across the birth date threshold, as we observe educational attainment for 75.3% and 75.4% of Chileans born in 1970 and in 1971, respectively. We formally test for differences in match rates across the various upstream election cut-offs and find no significant differences. These results are available upon request.

[22] The differences in educational attainment across the Plebiscite cut-off are explained by the increasing participation in higher education over time in Chile (Ferreyra et al., 2017).

non-eligibles. Fully 86% of eligible individuals had registered to vote by 2009, in contrast to just 69% of marginally ineligible Chileans. Moreover, we find analogous results in terms of voting in the 2013 Presidential election, with the older group having turned out at 55% rate compared to a 50% turnout rate for their younger counterparts. Similar differences emerge for the 2016 municipal and 2017 Presidential elections. While these mean comparison suggest that having turned 18 by the Plebiscite had persistent effects on electoral participation, the effects are not necessarily causal. In the next section, we introduce our empirical strategy and in subsequent sections present causal estimates of the impacts of early voting experiences on long-term behavior.

4 Empirical Strategy and Model Selection

While the patterns presented in Table 2 suggest that Chileans who were eligible to vote in the Plebiscite were more likely to have voted in 2017, this difference cannot be interpreted as causal given the life-cycle patterns associated with voting behavior. To surmount this identification challenge, we take advantage of the sharp cut-off introduced by the age-18 eligibility requirement, which implied that Chileans born after August 30, 1970 were ineligible to vote in the 1988 Plebiscite. We follow Meredith (2009), Coppock and Green (2016) and Fujiwara et al. (2016) among others and implement a regression discontinuity design. We regress downstream registration and turnout on initial eligibility, controlling for the relationship between registration or turnout in the future election on birth date. Our basic regression model can be specified as follows:

$$Y_i^j = \alpha_0 + \alpha_1 Before_i + \mu_i(Cutoff) + Before_i \times \mu_i(Cutoff) + \varepsilon_i^j \tag{1}$$

where Y_i^j is a binary variable which represents either registration by person i in or before the registration deadline for the election in year j or voter turnout by individual i in downstream election j. $Before_i$ is a dummy variable which equals 1 if person i turned 18 prior to the eligibility cutoff for the 1988 plebiscite.[23] $\mu_i(Cutoff)$ is a flexible function of the distance (in months) of person i's age-18 birthday to the same cut-off. The interaction term allows for the relationship between plebiscite eligibility and long-term voting behavior to vary depending upon the distance to the cut-off.

The identifying assumption behind the regression discontinuity design presented in equation (2) is that the unobserved characteristics of individuals are continuous across the cut-off (Imbens and Lemieux, 2008), that is, eligible and ineligible individuals should only differ in terms of their ability to have voted in the 1988 Plebiscite. In fact, both eligible and ineligible individuals were exposed to the electoral fervor surrounding the possible return to democracy, with the only difference being the older group's ability to vote. Of course, this empirical strategy allows us to identify the impacts of Plebiscite eligibility on long-term voting behavior *only* for individuals who were

[23] We omit the week of August 30th, 1970 from our estimation some individuals born in that week were eligible to register in time for the 1988 plebiscite whereas others were not. We also estimate assigning the week of August 30th, 1970 as part of the treatment group and our results do not substantively differ.

marginally eligible/ineligible and the results need not hold across the broader population. We nonetheless show strong suggestive evidence that our estimated effects likely apply more generally to the population.

While our main focus is on the impact of eligibility for the 1988 plebiscite, we also consider eligibility thresholds for other upstream Presidential elections, including the 1989, 1993, 1999, 2005 and 2009 elections. This provides a credible internal benchmark to determine whether the impacts of plebiscite eligibility are significant. We do so by re-estimating equation (1) for each election separately. Thus, for any pair of these elections $\{k, j\}$ with $j \geq k$ we estimate:

$$Y_i^j = \alpha_0^k + \alpha_1^k Before_i^k + \mu_i^k(Cutoff) + Before_i^k \times \mu_i^k(Cutoff) + \varepsilon_i^{j,k} \tag{2}$$

where $Before_i^k$ is a dummy variable which equals 1 if person i turned 18 prior to the eligibility cut-off for election k. Expression (2) produces the main results presented in section 5 across elections (j and k). In addition, to formally test for whether the effects of the plebiscite are statistically different from other upstream elections, we also consider a differences-in-discontinuity design. Let E_i^k be a dummy variable which equals one if person i turned 18 around the eligibility cut-off for upstream election k such that $\sum_{k=0}^{j} E_i^k = 1$ for any election j. Thus, if we define the 1988 plebiscite as the baseline ($k = 0$) election, we can write:

$$\begin{aligned} Y_i^j &= \alpha_0^0 + \alpha_1^0 Before_i^0 + \mu_i^0(Cutoff) + Before_i^0 \times \mu_i^0(Cutoff) \\ &+ \sum_{k=1}^{j} E_i^k \times \left[\alpha_0^k + \alpha_1^k Before_i^k + \mu_i^k(Cutoff) + Before_i^k \times \mu_i^k(Cutoff)\right] + \epsilon_i, \end{aligned} \tag{3}$$

from where we can test whether eligibility to vote in the 1988 plebiscite has a differential effect on Y_i^j relative to eligibility in other upstream elections (we examine the coefficient on $\beta_{1,k} = \alpha_1^k - \alpha_1^0$ for any election k prior to j). To secure the comparability of the parameters of interest, we estimate equation (4) using as outcomes voter turnout in the three upstream elections with automatic registration and voluntary voting, that is the 2013, 2016 and 2017 elections. To construct the set of right-hand side variables, we use election eligibility for 1988 (baseline), 1989, 1993, 1999, 2005 and 2009.

The specification of $\mu_i^k(\cdot)$. For any election k, the optimal bandwidth selection procedure varies by the functional form of $\mu_i^k(\cdot)$. In our context, we consider linear, quadratic, cubic, quartic and non-parametric specifications. Thus, we jointly select bandwidths and functional forms. To this end, we implement two approaches: five-fold cross-validation and the Akaike information criterion (AIC) procedure.

For the cross-validation approach, we randomly split our sample for a given bandwidth into five equally-sized components. In a hold-out sample we estimate the parameters of our model and in the four other samples, we project our model and compute mean-squared error. We then average the mean-squared errors across the four samples and report them in the first panel of Table

3. We present cross-validation results for 13, 26 and 52 week bandwidths.[24] We see no difference in mean-squared error to three digits across all functional form choices. This holds for all bandwidths. In the second panel, we present the results from the AIC procedure, which also captures the bias-variance trade-off in models with different functional forms. The results largely follow those of the cross-fold validation, indicating no significant differences in the AIC across polynomials. Thus, since both the cross-validation results and the AIC results do not display significant differences in terms of model fit across bandwidths and functional form specifications, we follow Gelman and Imbens (2019) and choose a linear functional form as our main specification.[25]

To select a bandwidth, in principle, one could examine the optimal CCT bandwidth (Calonico et al., 2014) across upstream and downstream elections as well as for each specification. However, in our case this strategy yields a large number of different bandwidths, which are not comparable across elections and outcome variables. We therefore select a 26-week bandwidth for comparability with the existing literature in the United States, giving us a full year of coverage for each upstream election. Moreover, since we cluster our standard errors at the week-of-birth level, the number of clusters is over 50 when using the 26-week bandwidth Donald and Lang (2007) even when we present estimates for a single upstream election.[26,27]

[24] The most prominent papers in this literature use different bandwidths, from six weeks in Meredith (2009) to one year in Coppock and Green (2016). The 26-week bandwidth is selected somewhat arbitrarily, though to present comparable estimates, we need some level of discretion given the large set of possible specifications. In the Appendix we show our results are robust to different bandwidths ranging between two-weeks and one-year.

[25] Gelman and Imbens (2019) note that higher order models are more subject to small-sample over-fitting; given the possibility of over-fitting based upon cohort-specific random shocks which would be common across the random samples combined with the small differences in fit across specifications, we opt to follow their recommendation.

[26] We present the optimal bandwidth from the CCT algorithm for each of these combinations in Table A.1. The optimal bandwidth yields 140 different values — ranging from a 4 week bandwidth with a linear functional form for the 1988 first stage to a 61 week bandwidth with a quartic functional form for the downstream effects of the Plebiscite on 2017 turnout. It is worth noting that our bandwidth selection of 26 weeks is the closest to those reported as optimal bandwidths for the linear functional forms presented in Table A.1.

[27] In Table A.2, we present evidence on covariate balance across marginally eligible and ineligible individuals by estimating equation (2) with a linear polynomial and a 26 week bandwidth using different covariates as outcomes. We do not find significant differences in any covariate across the Plebiscite cut-off. Nonetheless, in a few of the other upstream elections, we find minor differences in educational attainment across the eligibility cut-off. These differences are likely driven by Chile's school enrollment cut-off, which is on April 1. A 26-week bandwidth around elections which take place in December capture some individuals in different school cohorts (McEwan and Shapiro, 2008). As a result, we also present balance in educational attainment in Table A.2 using a 13-week bandwidth, where we do not find differences across the cut-off in other upstream elections. Moreover, except for two coefficients for the 2005 upstream election, though the standard errors rise with the restricted 13 week bandwidth, the coefficients for difference across the threshold fall in size such that they would not be significantly distinguishable from zero even with the 26 week standard errors. The fact that the treated and the control have different average first year of entry into school may affect other papers in this literature, which generally use even larger bandwidths (Coppock and Green, 2016). Due to these concerns, in Section 5, we show that our results are robust to a 13-week bandwidth and that the regression discontinuity design for other upstream elections is not compromised due to small differences in educational attainment.

5 Main Effects

5.1 Effects on Voter Registration

We first present our benchmark estimates of plebiscite eligibility upon downstream registration and downstream voting over a period of three decades. In Figure 1, we plot 1988 plebiscite registration rates by birth week. As mandated by law, the data confirm that no one who was born after August, 1970 registered in time for the plebiscite. Thus, unsurprisingly, we have full compliance for those who were ineligible to vote. We see that approximately 20% of the cohort who were born in the last week of August registered in time for the plebiscite. Upwards of 40% of the cohort born in the second to last week of August registered to vote, such that juts one week of additional time to register dramatically increased registration rates. The rate of increase in registration rates per additional week of time to register is significant for about two months — about two-thirds of those who turned 18 eight weeks prior to the cut-off had registered to vote. There is a smaller though steady rate of increase in registration rates over the next 4 months. Those who had six months to register signed up at a near 75% rate.

It is not at all surprising that marginally eligible citizens registered at substantially higher rates than those who were ineligible. What is slightly more surprising is that these registration differences seem to be highly persistent over many decades. When we look at registration by birth cohort two decades later, we see that these differences remain and are quite large. Figure 2 displays registration rates by cohort for those born up to 1000 weeks (almost 20 years) before the last week of August, 1970 and up to 1500 weeks afterwards. Registration rates are roughly constant at approximately 90% for cohorts born before 1970. There is a slight decline in registration rates for those who turned 18 just before the plebiscite registration cutoff and a sharp 13 percentage point drop right at the cutoff, to approximately 70%. Registration continues to decline for younger cohorts with smaller yet observable discontinuities at eligibility cutoffs for other elections.

Table 4 presents regression discontinuity estimates of the impact of marginal eligibility upon registration for both the contemporaneous as well as for subsequent elections (see expression (2)). We use our benchmark specification of a linear functional form and 26 week bandwidth. In Panel A, we show that marginal eligibility for the plebiscite increased contemporaneous turnout by 56 percentage points in 1988. By the following Presidential election, held in 1989, 31% of marginally ineligible Chileans had registered to vote, despite the early registration deadline. Nonetheless, sizable differences in registration rates remained across the two groups, exceeding 30 percentage points. Registration rates increased significantly for both groups in the next two decades, yet marginal plebiscite eligibility led to registration rates which were 13 percentage points higher than their marginally ineligible counterparts. Nonetheless, even marginal plebiscite ineligibles had a 70% registration rate by the 2009 Presidential election.[28]

[28] While the old electoral system mandated Chileans to vote, we do not observe whether the differences in registration rates do in fact correspond to differences in turnout. To this end, we take advantage of political opinion surveys conducted by the *Centro de Estudios Publicos* (CEP). While the post-2005 surveys do not contain information on year of birth, we combine five surveys conducted in the 2001-2005 period which retroactively asked Chileans whether they

We note that these results are consistent with rational political behavior. Registration in Chile before the 2012 electoral reform was costly not only due to the time it took to figure out how to register and to then sign up, but also because it entailed a permanent future commitment to voting enforced by the possibility of non-trivial fines. Since the 1988 plebiscite was particularly salient, it is certainly possible that the costs of registration were the same for marginally eligible and marginally ineligible cohorts but that the benefits of registration were substantially higher for the marginally eligible given the importance of the plebiscite itself.

In Panels B-F of Table 4, we present regression discontinuity estimates of the impact of marginal eligibility of other Presidential elections. Whereas the 1989 Presidential election was held just 14 months after the 1988 plebiscite, marginal eligibles only registered at a rate of 14.5 percentage points despite the fact that, in contrast to the plebiscite, the registration deadline was announced months ahead of time. This 74% decline in the impact of marginal eligibility on contemporaneous registration suggests that the electoral fervor surrounding the return to democracy had quickly died down, potentially due to the absence of mass mobilization (González and Prem, 2018).[29] The substantially smaller effects of marginal eligibility on registration persisted for all subsequent elections in the pre-reform era. Only the 1993 effect is larger (20.3 percentage points) than the 1989 effect. The effects for all other years were are below 10 percentage points and the effect for the 1999 election is even below 5%.

The last column of Table 4 examines whether marginal eligibility for upstream elections led to differences in registration rates in 2009. We find that marginal eligibility for the 1989 and 1999 elections both resulted in higher registration for marginal eligibles, yet the differences are small, in the range of 2 percentage points. While the differences associated with 1993 election eligibility are larger (5.4 percentage points) than the downstream 2009 registration effects of all other elections, the effects are far smaller than for the 1988 plebiscite.

Moreover, our results presented thus far are robust to different combinations of functional forms and bandwidths used in the literature. Table A.3 confirms that the estimated effect of plebiscite eligibility is associated with higher 2009 registration rates in the range of 9.7-14 percentage points. It also shows that the effects of upstream election eligibility on 2009 registration rates are largely robust to different choices of bandwidths and functional form. In addition, Figure A.1 shows graphical robust evidence of the effects of upstream election eligibility on contempora-

had voted in the 2001 Congressional elections. Among Chileans who had registered to vote, we do not find differences in stated 2001 turnout rates between those born in 1967-1969 (90.4%) and those in 1971-1973 (89.4%) — these results are available upon request. While survey responses do not constitute causal evidence of turnout effects, plebiscite eligibility may have induced individuals to over-report their political participation. These differences are consistent with the turnout results presented in Section 5.2. As a result, adjusting our registration estimates by the turnout rate for the corresponding election (presented in Table 1) may provide a reasonable estimate of turnout effects under the old electoral system.

[29] An alternative explanation for the decline in the initial eligibility effect is that 1988 plebiscite marginal eligibles were those who had just turned 18. On the other hand, marginal eligibles for subsequent elections captured those who would turn 18 just before the election. If most potential voters pay attention to voter registration only upon turning 18, closing registration early while allowing voting-eligible 17 year olds to register may reduce the impact of marginal eligibility. we find that the first stage results are robust to longer bandwidths — which include marginal eligibles who had turned 18 by the registration deadline — suggesting the results are robust to such concerns.

neous registration rates, which correspond to those presented in Table 4.

Finally, Figure 3 presents graphical evidence on long-term registration differences across the various upstream elections, confirming that that plebiscite eligibility leads to significantly larger long-run registration effects than in any subsequent election[30]. While the results presented so far indicate that age-18 election eligibility is associated with significant differences in long-run registration rates, these differences may not correspond to turnout effects, particularly after mandatory voting was removed and automatic registration put into place. We consider this issue in the next sub-section.

5.2 Effects on Voter Turnout

We turn to the individual-level voter turnout data to examine the impacts of plebiscite eligibility on turnout for the 2013, 2016 and 2017 elections. Since Chile's 2009 electoral reform led to automatic registration for all age-eligible Chileans, the estimated impacts of plebiscite eligibility on downstream registration rates disappeared following the reform.

We note that the bulk of literature on downstream voting effects has focused on the United States, where electoral participation requires individuals to register to vote. As a result, upstream election eligibility may lead to higher downstream turnout rates partly through differences in registration rates across the eligibility cut-off.[31] In fact, the existing literature does not identify whether downstream voting effects are driven by a one-time registration effect or a long-run increased preference for casting a ballot (Coppock and Green, 2016). Our estimates are the first in the literature not to be plagued by this issue due to the implementation of universal registration following Chile's electoral reform. As a result, our analysis of plebiscite eligibility on post-reform electoral participation thus captures a 'pure' turnout effect.

Figure 4 displays raw voter turnout rates for the 2013 and 2017 Presidential elections by birth week cohorts from 1950 through 1990. Between 1989 and 2009, registration of young cohorts experience a large secular decline; 70% of Chileans born in 1950 turned out for the 2013 election, doubling the participation of their counterparts born 40 years later.As with the registration time series, there is one discontinuity which shows up clearly over the entire 40-year period across both elections, which corresponds to the eligibility threshold for the 1988 plebiscite.[32]

Our difference-in-discontinuity (equation (4)) estimates of marginal upstream election eligibility upon voter turnout in the 2013, 2016 and 2017 elections are presented in Table 5. Its first row shows the estimated impact of plebiscite eligibility, which suggests statistically significant

[30]Note that the six figures presented in Figure 3 all have substantially different y-axis scales. The scale for the 1988 plebiscite is by far the largest as the effects are by the largest.

[31]Those eligible for the upstream election may act upon their initial excitement by registering to vote just after turning 18. Meanwhile, those who are marginally ineligible are substantially older when they first vote and may thus have less enthusiasm for voting than their marginally older counterparts. The fixed costs of registering to vote may not be worthwhile for the marginally younger voter and thus a permanent turnout gap may emerge due to differences in registration rates — fully consistent with rational behavior.

[32]While the magnitude of the jump in turnout rates at the eligibility cutoff declines from the 2013 to the 2017 election, the difference across the cutoff remains significant.

impacts across all three elections. We find that eligibility to participate in the plebiscite increased voter turnout in the first round of the 2013 and 2017 Presidential elections by 3 and 1.8 percentage points, respectively. Relative to baseline turnout rates in both elections — 49.6% and 47.2%, respectively — the estimated impacts of Plebiscite eligibility correspond to an increased turnout rate of 6% and 4% in the 2013 and 2017 elections.

We also find a significant effect on a lower-stakes municipal election held in 2016, such that upstream eligibility resulted in increased turnout by 2.1 percentage points, or 6%, relative to baseline participation rates. The estimated effects are highly persistent through 2017, reaching close to thirty years since the plebiscite. The original event has therefore had an impact over a time period corresponding to around half of an adult's political life.[33]

The results in Table 5 are further confirmed by the graphical evidence presented in the first panel of Figures 5-7, which again show a linear decline in turnout for cohorts closer to the eligibility cutoff. This decline can be explained by the results shown in Figure 1, as cohorts born closer to the cutoff were substantially less likely to register in time than those born even a few weeks earlier. Meanwhile, turnout rates are largely flat across the cutoff for marginally-ineligible Chileans.

Our Appendix presents evidence on the robustness of our baseline estimates to bandwidth and functional form assumptions.[34] In particular, we estimate equation (2) and present 12 different estimates for each upstream/downstream election pair, as we combine three bandwidths (26-week, 52-week and CCT) with four polynomials (linear, quadratic, cubic and quartic). The estimated impacts of plebiscite eligibility are significant across all bandwidths in the linear and quadratic polynomials for all downstream elections. See Tables A.4, A.5 and A.6 for the 2013, 2016 and 2017 elections, respectively.[35]

Table 5 analyzes the comparative effects of eligibility for other upstream elections (relative to the plebiscite) on downstream turnout rates. For the 2013 election, we find that Plebiscite eligibility had a significantly larger impact than any other upstream election. In fact, only the marginal eligibility for the 1993 Presidential election had a positive effect on 2013 turnout, in the range of 1.3 percentage points.[36] We find similar results for the 2016 and 2017 elections, as the differential

[33]Figure A.2 shows estimates of plebiscite eligibility on 2017 election turnout using placebo cut-offs within a six-year window of the plebiscite registration date. We find that only the actual cutoff is associated with higher downstream turnout effects.

[34]We also relax the assumption we impose about the correlation in the error terms. For most of our analysis, we cluster at the week-of-birth level. This presumes no correlation in the propensity to turn out or register for those born in different weeks. Since this assumption may not hold, we make alternative assumptions on the distribution of the error term to test whether the assumption is consequential. In particular, we try clustering by month. This leaves us with a number of clusters that is too small to claim asymptotic validity of the errors. We address this issue by using the wild cluster bootstrap and separately estimating using Newey-West standard errors with one, two, four and eight lags. Overall, significance levels of our estimates change only trivially for all the estimates presented in Section 5. These results are available upon request.

[35]For instance, for the 2016 election, we find that the cubic and quartic 26-week bandwdith specifications are not positive and significant (Table A.5), similar to the cubic 26-week bandwidth for 2017 shown in Table A.6. Nonetheless, the insignificant coefficients correspond to bandwidths which are not close to the corresponding optimal CCT bandwidths shown in Table A.1 for high-order polynomials. For the cubic and quartic specifications for the 2016 election the optimal CCT bandwidths are 40 and 55 weeks, respectively. For the 2017 election, the optimal CCT cubic bandwidth is 45 weeks.

[36]Table A.7 in the appendix displays estimates of equation (2) for each upstream election using a linear polynomial

downstream voting impacts of other election are all statistically distinguishable from the plebiscite effect with well above a 99% level of confidence. While 1993 election eligibility increased turnout in the 2013 election, the effect faded for the two subsequent elections. Moreover, we find that 2005 election eligibility may have had negative impacts on 2017 turnout.[37] We confirm these results by presenting graphical evidence in the remaining panels of Figures 5-7. These graphs show a positive effect of 1993 eligibility on 2013 turnout, which fades by 2016, along with insignificant impacts for other upstream elections. All in all, the results presented so far indicate that the sizable downstream voting effects of the 1988 election seem to be unique to the plebiscite.

While we do not observe turnout for the pre-reform elections, CEP survey data indicates that turnout rates are not different for registered individuals across the plebiscite cut-off. In Figure A.3, we thus show the dynamic impact of plebiscite eligibility on turnout over time by graphing the pre-reform registration effects for the pre-2010 period and the turnout impacts following 2013.[38] The downstream effect by the 1989 election is close 30 percentage points, falling almost in half by 1993, and declining steadily through 2009. Assuming equal 2009 turnout rates across the cut-off, this result implies that downstream turnout effects fell from around 11 percentage points to 3 percentage points between the 2009 and 2013 presidential elections with the removal of mandatory voting and the introduction of automatic registration. The reform both made it easier for non-registrants to vote and allowed prior registrants not to vote. Both of these changes likely narrowed the turnout differences between marginal eligibles and marginal ineligibles. Though the effect size has declined since the reform, it remains positive and statistically significant even 29 years after the plebiscite. Moreover, Chile's electoral reform implies that we can rule out that the persistent voting effect is due to the fixed cost of voter registration. We can thus conclude, and hereby differentiate ourselves from the prior literature, that plebiscite eligibility led to a significant long-term shift in the preference to vote.

5.3 Persistence and initial mobilization as mechanisms

Two alternative channels could explain our estimated impact of plebiscite eligibility on downstream electoral turnout: a high degree of persistence in the initial effect, or a large initial political mobilization for the plebiscite. A large initial mobilization will lead to larger downstream effects because the size of the treated group is larger. A higher degree of persistence will lead to larger downstream effects because the effects last longer. In this sub-section, we disentangle these two channels by directly estimating the degree of persistence in voting in the initial election upon

with two different bandwidths. To address concerns of covariate imbalance in educational attainment for other upstream elections, columns (1)-(3) additionally present estimates of equation (2) using a 13-week bandwidth. Results for a 26-week bandwidth are reported in columns (4)-(6). We do not find significant differences across specifications, underlying the robustness of our results.

[37] While this result may seem surprising at first, we note that Coppock and Green (2016) have also documented that participation in certain upstream elections in the United States has negative consequences on downstream turnout. For example, participating in an election where ex-post the executive disappointed voters could make those who voted less likely to participate in the future relative to those who were not able to participate

[38] We adjust the pre-reform registration effects by election turnout rates equally on both sides of the cut-off.

downstream voting. We do this by implementing a simple two-stage procedure.

We first estimate a linear regression of voting in downstream elections on voting in the relevant upstream election, which is instrumented by birth date eligibility. For consistency with the results presented in Table 5, we estimate this first stage using the differences-in-discontinuity design presented in equation (4). If we denote by $\hat{Y_i^k}$ the voter turnout in upstream election k, instrumented by age-based eligibility, our two stage regression becomes:

$$
\begin{aligned}
Y_i^{k,FirstStage} &= \alpha_0^0 + \alpha_1^0 Before_i^0 + \mu_i^0(Cutoff) + Before_i^0 \times \mu_i^0(Cutoff) \\
&+ \sum_{k=1}^{j} E_i^k \times \left[\alpha_0^k + \alpha_0^k Before_i^k + \mu_i^k(Cutoff) + Before_i^k \times \mu_i^k(Cutoff)\right] + \epsilon_i \qquad (4) \\
Y_i^{j,SecondStage} &= \gamma_0^k + \gamma_1^k \widehat{Y_i^{k,FirstStage}} + \varepsilon_i^{j,k} \qquad (5)
\end{aligned}
$$

where $Y_i^{j,FirstStage}$ denotes having turned out to vote in the post-reform downstream election j ($> k$). As explained above, our empirical analysis considers three post-reform downstream elections: 2013, 2016 and 2017.

Table 6 presents our results. We recover the effect of upstream participation on downstream turnout by dividing the reduced form estimate displayed in Table 5 by the first stage — equal to 56 percentage points for the plebiscite —, as shown in Table 4. As a result, we find that having voted in the plebiscite is associated with a higher turnout rate of 5.5 percentage points in the 2013 presidential election, or 11% relative to baseline participation rates. The persistence estimate declines to 3.8 percentage points for the 2016 election, which still represents 11% of baseline participation, due to low turnout in municipal elections. On the other hand, the estimated impact falls to 3.3 percentage points by Chile's last presidential election, yet the turnout effects remain statistically significant almost 30 years after the plebiscite.[39]

We also present the persistence effects of other upstream elections to consider whether the plebiscite effects are particularly large. We find that voting in the plebiscite had larger effects on 2013 turnout than having voted in any other election, except for the 1993 election. For the 2017 presidential election, the persistence effects of the plebiscite are not distinguishable from those for the 1989 and 1999 elections. Similarly, the 2016 effects are only statistically larger than those in the 1999 and 2009 upstream elections.[40]

[39]Similar to the results presented in Section 5.2, we present various robustness checks to bandwidth and functional form assumptions in Tables A.8, A.9 and A.10 for the 2013, 2016 and 2017 elections, respectively. As in Tables A.4-A.6, we find that the effects of plebiscite participation on downstream turnout are significant across all bandwidths in the linear and quadratic polynomials. However, we find four insignificant coefficients in the cubic and quartic 26-week bandwidth specifications for the 2016 election and the 26-week/cubic and CCT-bandwidth/quartic specifications for the 2017 election. In Figure A.4, we show the robustness of the estimated effects of plebiscite participation on downstream turnout to bandwidths ranging from two weeks to one year.

[40]Table A.11 presents the results for each upstream election. Columns (1)-(3) correspond to the findings using a 13-week bandwidth and (4)-(6) a 26-week bandwidth, which confirm that our results are robust to the bandwidth selection. We first note that instrument weakness is not a concern as first stage F-statistics never dip below 150 for any combination of downstream and upstream election. The results show that voting in the 1999, 2005 and 2009 may have depressed turnout in downstream elections. This result could arise in an upstream election with a disappointing outcome for young voters, which subsequently discourages future participation. For example, since previous work

While the persistence effects for the plebiscite are larger than those of other upstream elections for at least one of the three downstream elections, these differences are not as large as those shown in Table 5, which showed the Plebiscite had a far larger downstream impact than any other election. In fact, the plebiscite persistence estimates are not necessarily larger than those found in the United States, as Coppock and Green (2016) find a wide range of positive persistence effects. As a result, we conclude that the large impacts of plebiscite eligibility on downstream participation are not because of an unusually high degree of persistence but rather because of an unusually large initial mobilization to vote.

6 Heterogeneous Effects and Complier Characteristics

How did plebiscite eligibility affect downstream electoral outcomes across different groups? Despite the fact that we do not observe turnout outcomes by educational attainment, we can characterize differential registration effects by education, a first in the literature. We also analyze heterogeneous effects by gender and by partisanship. Since the downstream plebiscite estimates presented in Section 5 vary by bandwidth, we also check for heterogeneity in complier characteristics across bandwidths. We use this heterogeneity in effect sizes and in complier characteristics to interpret the variation in effect sizes by bandwidth.

6.1 Gender, Partisanship and Education

Gender. Women in Latin American countries are more likely than men to both register and turn out to vote (Espinal and Zhao, 2015). However, this fact need not translate into women being more or less reactive to the long-run effects of plebiscite participation. Hirmas (1993) argues that Pinochet's opposition decided to target women in their *franja* slot based upon focus groups and research by consulting firms. As a result, the effect of plebiscite participation for marginally-eligible women may have been larger. We thus examine the heterogeneous effects of plebiscite eligibility on registration and downstream electoral turnout by gender, a first in the literature.

We estimate equation (2) separately by gender and present the results in Table 7. The first two columns show that plebiscite eligibility increased concurrent female registration by 53 percentage points though the corresponding effect for men was larger, reaching 59 percentage points. We also estimate equation (2) by pooling the sample and we test for statistical difference in the size of the coefficients. We find that plebiscite eligibility initially mobilized men significantly more than it did women.

We also find differences in downstream turnout effects by gender. Plebiscite eligibility increased 2013 election turnout for 3.7 percentage points for men, or 8% of baseline participation. Meanwhile, the corresponding effect for women reached 1.9 percentage points, or 3.4% of baseline electoral turnout. These differences persisted through the 2017 Presidential election, when

(Titiunik, 2009) has found a negative party incumbency effect in Brazil, experiencing a party in power may move voters away from supporting that party or even away from politics more broadly.

the turnout effect for men accounted for 5.4% of baseline turnout rates. The Appendix presents graphical evidence confirming these results (see Figure A.5). Table A.12 reports heterogeneous effects of upstream eligibility on downstream turnout for other elections and we fail to find larger effects for men than for women. All in all, these results indicate that the persistence effect for men was substantial and specific to the plebiscite. Dividing by the first stage, plebiscite participation raised male turnout in the 2013 election by 14% of baseline participation rates.

Partisanship: Effects by Salvador Allende's 1970 Support. Since we do not directly observe voters' partisan affiliation, we rely on pre-plebiscite measures of political affiliation in order to analyze how downstream effects vary by partisanship. We thus consider heterogeneous effects by Allende vote share at the *comuna* level in the last pre-dictatorship election, held in 1970. Allende's support was highly heterogeneous across the country, as he received less than 15% of the vote in *comunas* such as Providencia and over 65% of electoral support in Coronel and Lota. Similar to González and Prem (2018), we estimate heterogeneity in initial registration by prior Allende vote-share to see whether the plebiscite differentially mobilized the left and also in downstream persistence, to analyze whether the long-term effects were larger for left-leaning groups.[41]

We estimate a heterogeneous regression discontinuity design, interacting each term in equation (2) with $Allende_{ic}$, which corresponds to Salvador Allende's voting share in the 1970 election in person i's *comuna* (c) of residence at the time of registration. We also control for various *comuna*-level characteristics measured in the 1992 census, including *comuna*-level unemployment rate, literacy rate, and various measures of household well-being. We present our results in Table 8. The first column shows that eligible Chileans living in high-Allende support *comunas* had lower registration rates for the plebiscite vis-a-vis their counterparts in less left-leaning localities, fitting in with the existing literature across different countries. On the other hand, in the last three columns, we show that plebiscite eligibles who lived in higher left-leaning *comunas* had higher downstream turnout rates — with the caveat that the standard errors are quite wide and the effect is only statistically significant for the 2017 election. The coefficient for the 2017 election indicates that an increase in the Allende share from 0% to 100% is associated with a 8.7 percentage point higher impact of the plebiscite on downstream turnout. The analogous estimates for the 2013 and 2016 elections are similar, ranging from five to eight percentage points. These results are suggestive, especially since we do not observe *comuna* of residence at the time of the plebiscite; yet they suggest that participating in the plebiscite may have had larger long-term effects for left-leaning individuals.[42]

[41] One important caveat of this approach is that we do not observe individual's *comuna* of residence throughout their lifetime, but rather their residence at the time of voter registration. As a result, our analysis of heterogeneous effects across geographic areas relies on the assumption that individuals did not move their *comuna* of registration. In the presence of random migration, this would lead to attenuation of our estimated effects.

[42] We have separately examined the role that media played by intermediating the effect of the plebiscite, particularly in light of the importance of the "No" campaign on television. We do this first by regressing individual turnout on our treatment dummy interacted with the television share and then also by regressing on the the dummy interacted with all three of (a.) the television share, (b.) the 1970 Allende share, and (c.) their interaction. We did not find larger downstream effects for individuals residing in *comunas* with higher TV penetration (individually) nor interacted with

Educational Attainment. An extensive literature has documented higher turnout rates among highly educated citizens, both in developed countries (Milligan et al., 2004; Dee, 2004; Sondheimer and Green, 2010; Marshall, 2019; Kaplan and Spenkuch, 2019) and in Latin America (Haime, 2017). However, to the best of our knowledge, the existing literature has not yet examined how upstream election eligibility affects participation differentially by education. While we do not observe turnout effects by education, we examine heterogeneous registration effects by education, providing an important contribution to the literature .

We estimate equation (2) using a linear polynomial with a 26-week bandwidth separately for high school dropouts, high school graduates and those who have gone beyond high school. We present the results in Table 9.[43] The first panel shows the estimated effects for the plebiscite. We find larger first-stage effects for higher educated individuals, as eligibility induces 48 percent of those with at least some post-secondary education to register, relative to 30.6 percent of high school dropouts. On the other hand, by 2009, we find similar registration effects in absolute levels between eligibles and ineligibles for the three educational groups. In fact, since high school dropouts have far lower baseline 2009 registration rates, we find that plebiscite eligibility resulted in downstream registration rates which were 16.7% higher than those for their ineligible counterparts — higher than the corresponding effect (11.2%) for those in the highest-education group.

In the remaining panels, we examine whether registration effects vary by upstream election. We find multiple substantial differences. First, we note that initial mobililzation (first stage) effects of post-1988 elections are smaller in magnitude uniformly for all educational groups than for the plebiscite, confirming the results presented in Table 4. Second, we find far larger initial mobililization effects for the beyond-high-school groups vis-a-vis high school dropouts in each election. Third, we find that the mobillization gap across educational groups is by far the smallest for the plebiscite: while the ratio of the first-stage coefficient for these two groups equals 1.6 in the plebiscite, it exceeds 3 in all other upstream elections. Fourth, different from the plebiscite where we still see 9.9 percentage point higher registration rates in 2009, we find that initial eligibility for high school dropouts yields small differences in 2009 registration rates among eligibles relative to ineligibles for all other elections. The largest downstream effect, for the 1999 presidential election, only reaches 2.2 percentage points, or one-fourth of the estimated plebiscite effect. These results thus indicate that plebiscite eligibility induced a sizably larger share of less educated individuals to initially register to vote and initial eligibility was associated with higher downstream registration rates for this group only for the plebiscite.

6.2 Complier Characteristics

We have shown that the local average treatment effects vary within elections when we consider different bandwidths (Tables A.8-A.10). In what follows, we examine whether differences in the

Allende baseline support. However, the standard errors are quite large. These results are available upon request.

[43] As discussed in Section 3, we do not observe educational attainment for all individuals in our sample. As a result, the estimated combined sample sizes for the three educational attainment groups are smaller than in Table A.7.

types of compliers may account for the variation in the estimated effects.

We first examine complier characteristics across upstream elections and bandwidths following the approach presented in Angrist and Pischke (2008), where compliers are the eligible individuals who registered to vote in the corresponding election.[44]

Table 10 presents our results for the 26-week bandwidth and three characteristics of interest: education, gender, and the *comuna*-level variables discussed above. As in Deshpande (2016), we include three columns for each upstream election, covering average characteristics for the full sample (26-weeks on both sides of the cut-off), average characteristics only for compliers, and the average characteristics for the ratio between the two. We first note that the share of compliers is far larger for the plebiscite than for other elections, as shown in Table 4. Furthermore, as discussed in Section 6.1, we find significant differences in terms of compliers' educational attainment across upstream elections. In the plebiscite, the complier ratio for high school dropouts equals 0.89, and the corresponding ratio for all other elections does not surpass 0.82.[45] For the other characteristics, the differences are not as stark. We note that the plebiscite as well as the 1989 and 1993 elections had a higher male complier ratio, which reversed in subsequent upstream elections. We do not find significant differences in complier characteristics across *comuna*-level variables, though compliers in the 1999, 2005 and 2009 elections are more likely to come from lower Allende-supported *comunas* with lower unemployment rates.

Since the estimated average effects vary across different bandwidths, we also examine variation in complier characteristics across these bandwidths. We consider 13- and 52-week bandwidths and present the results in Table A.13. For the plebiscite, the male complier ratio decreases with longer bandwidths, indicating that IV estimates with larger bandwidths include a larger share of women in the complier group. This, however, is not the case for other upstream elections. On the education side, we find that the complier ratio for high school dropouts is lower (0.857) for the 13-week bandwidth and significantly higher (0.933) for the 52-week bandwidth. These patterns hold across other elections as well, yet the absolute complier ratios for high school dropouts are far lower than for the plebiscite, independent of the selected bandwidth. All in all, these results indicate that lower educated citizens are far more likely to register to vote when they have additional time to do so, but also are more likely to register for more consequential elections.

Angrist and Fernandez-Val (2010) present a strategy for recovering the source of differences in LATE estimates across samples by separately estimating the local average treatment effect for each complier group/cell and re-weighting the samples to make the LATE estimates comparable. However, this approach is not feasible in our context, as we cannot estimate downstream voting impacts by education groups. Nonetheless, we approximate their analysis by presenting graphical evidence on both treatment on the treated effects and complier characteristics using twelve differ-

[44]Since Chileans who had not turned 18 by the date of the election could not register to vote, there are no always-takers or defiers in our context.

[45]The ratio is far lower for the 1989, 1999, 2005 and 2009 elections. The complier ratio for high school dropouts in the 1993 election is somewhat closer to that for the plebiscite. Since this election had a larger first-stage effect (20.3%) relative to other elections, it may also, as with the plebiscite, have induced a relatively higher fraction of less educated voters to register.

ent bandwidths, ranging from one- to twelve-months, in Figure 8. We find that the estimated instrumental variable estimates for the 2013 and 2017 Presidential elections covary positively with the high school dropout and the female complier ratios, which may indicate larger downstream effects of early-life political participation for less educated voters.

The results shown in this section, along with those presented in Figure A.1 show a sizable share of Chileans over 18 were induced to register to vote due to age-based eligibility, and that these individuals were relatively more likely to be less educated vis-a-vis compliers in comparison with other subsequent elections. As a result, the plebiscite permanently shifted the composition of the Chilean electorate under the old electoral system. In the next section, we examine the potential long-run partisanship consequences of the 1988 referendum.

6.3 Partisanship Effects

In this sub-section, we examine whether the Plebiscite had an impact on subsequent electoral outcomes, given the twenty years of *Concertación* Presidents after the reinstatement of democracy.[46] We note that the analysis presented here is suggestive, as we do not observe individual-level partisan turnout/support.

In order to compute a back-of-the-envelope estimate of the impact of the plebiscite upon the *Concertación* vote share, we rely on four pieces of information. First, we recover the number of Plebiscite eligibles by educational attainment group.[47] We then multiply this number by the estimated downstream election registration effect by education group presented in Table 9. We further adjust this number by the average turnout rate for each presidential election, which ranged between 86.7% and 94.5%, as shown in Table 1. Lastly, we impute the partisanship effect by taking advantage of pre-election polls conducted by CEP in 1989, 1993, 1999, 2005 and 2009 — these polls include measures of heterogeneous support for the *Concertación* by educational attainment.[48]

We present our results in Table 11. We find significant gains for the *Concertación* in the 1989 and 1993 elections, reaching close to 1.5 percentage points, yet these effects decline over time as the share of plebiscite eligibles shrink as a fraction of the electorate. These estimates of the left wing vote share impacts are likely lower bounds. First, we make a conservative assumption by only considering eligible individuals as 'treated' if they were born between 1950 and 1970. More importantly, we do not observe partisanship and therefore cannot directly estimate the differential

[46] As noted above, *Concertación* was the political organization that formed in order to defeat the plebiscite on continued Pinochet rule back in 1988.

[47] We construct this number as follows. From the merged administrative data, we directly observe the number of individuals who turned 18 prior to the eligibility cut-off by attainment group. We note that attainment data is missing for 10% of the sample, and to adjust for this issue, we assume that attainment is missing at random, and multiply the raw number of eligibles by 1.11. Since the registration data was collected in 2009, we restrict our analysis to eligible individuals born in 1950-1970 to avoid including older citizens who had died by 2009, which provides a conservative estimate of partisanship effects.

[48] These surveys were conducted 1-2 months prior to each election and include 1,000-1,500 respondents each. Since the CEP surveys do not include a consistent measure of educational attainment, we rely on their socioeconomic status indicator which classifies respondents by three categories. The 2005 survey also includes educational attainment, and we find a high correlation in these measures. We thus impute average *Concertación* support by education using the stated vote preference by SES in the CEP surveys.

turnout impacts upon those who would vote left versus right (the maximum differential voting rates for the left across our three educational groups and all elections is 0.08). Thus, since education is an imperfect signal of partisanship, using education should attenuate our estimates. Nonetheless, we find moderate partisan impacts two decades after the 1988 plebiscite.

Our estimates provide a potential partial explanation of one party dominance in newly democratic (including post-colonial) states (Magaloni, 2006; Magaloni and Kricheli, 2010). Prior literature has focused on loyalty in support of the party that establishes democracy such as the ANC in South Africa, the labor party in Israel, Frelimo in Mozambique, or the Congress Party in India. However, we suggest an additional mechanism which may be quantitatively important: fighting and/or voting for democracy may not only make voters loyal to a party which wins democratic rights but may also bolster turnout and for decades to come.

7 Conclusion

In this paper, we present evidence that early in life electoral participation can be consequential even across multiple decades. However, there is strong heterogeneity by type of election. We find no persistent downstream effects of electoral participation for most elections in Chile. However, we find that voting for the restoration of democracy in the 1988 plebiscite which ended 17 years of military rule in Chile boosted turnout three decades later in the 2017 Chilean presidential election by 3.3 percentage points. We show that the long-lasting impacts of the plebiscite differ from those from other elections not due to differential persistence of voting for democracy but due to the mass mobilization at the time.

Different from estimates in the United States, ours reflect a pure effect of voting on future voter turnout since Chile abandoned voluntary registration as a precondition for voting after the 2009 presidential elections. We find small differences in the effects gender but larger differential effects by education, with larger effects for less educated individuals. Finally, we provide suggestive evidence that the effects of electoral participation in the plebiscite shifted the electorate to the left politically by bolstering future turnout and particularly for the left. Bolstered turnout for the party that wins democracy can help explain one party dominance in newly democratized countries.

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Tables and Figures

Table 1: Aggregate Voter Turnout for Presidential Elections

	Eligible	Registered	Votes Cast	Share Registered	Share Voting	Turnout Rate
1988	8,062,000	7,436,000	7,251,000	0.922	0.899	0.975
1989	8,243,000	7,558,000	7,159,000	0.917	0.868	0.947
1993	8,951,000	8,085,000	7,377,000	0.903	0.824	0.912
1999	9,945,000	8,084,000	7,272,000	0.813	0.731	0.900
2005	10,800,000	8,221,000	7,207,000	0.761	0.667	0.877
2009	12,226,000	8,285,000	7,186,000	0.678	0.588	0.867
2013	13,188,000	13,388,000	6,634,000	1.000	0.496	0.496
2017	14,080,000	14,080,000	6,646,000	1.000	0.472	0.472

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Table 1 presents summary statistics of voter registration and turnout for the 1988 Plebiscite and for all Presidential elections since 1989.

Table 2: Descriptive Statistics

	Full Sample	Before Plebiscite	After Plebiscite	6 Months Before	6 Months After
	(1)	(2)	(3)	(4)	(5)
Individual-Level Characteristics					
Male	0.487	0.472	0.503	0.494	0.496
	(0.5)	(0.499)	(0.5)	(0.5)	(0.5)
HS Dropout	0.521	0.538	0.51	0.339	0.343
	(0.5)	(0.499)	(0.5)	(0.474)	(0.475)
HS Graduate	0.373	0.372	0.373	0.512	0.503
	(0.484)	(0.483)	(0.484)	(0.5)	(0.5)
> HS Graduate	0.106	0.09	0.117	0.149	0.154
	(0.308)	(0.286)	(0.321)	(0.356)	(0.361)
Comuna-Level Characteristics					
Allende Share	0.372	0.37	0.374	0.372	0.372
	(0.102)	(0.103)	(0.101)	(0.103)	(0.102)
TV Ownership Share	0.846	0.846	0.846	0.846	0.847
	(0.102)	(0.103)	(0.101)	(0.100)	(0.100)
Electricity in Home	0.908	0.904	0.912	0.902	0.905
	(0.137)	(0.141)	(0.133)	(0.14)	(0.139)
Water in Home	0.754	0.75	0.759	0.745	0.749
	(0.193)	(0.197)	(0.189)	(0.197)	(0.194)
Toilet in Home	0.701	0.695	0.706	0.689	0.693
	(0.235)	(0.239)	(0.23)	(0.238)	(0.236)
Literacy Rate	0.904	0.903	0.905	0.902	0.903
	(0.042)	(0.043)	(0.041)	(0.043)	(0.042)
Unemployment Rate	0.087	0.087	0.087	0.088	0.088
	(0.026)	(0.026)	(0.025)	(0.026)	(0.026)
Registration Outcomes					
Registered for Plebiscite	0.406	0.809	0	0.669	0
	(0.491)	(0.393)	(0)	(0.471)	(0)
Registered by 2009	0.598	0.895	0.298	0.864	0.692
	(0.49)	(0.307)	(0.457)	(0.343)	(0.462)
Turnout Outcomes					
Voted in 2013 Election	0.495	0.617	0.373	0.554	0.504
	(0.5)	(0.486)	(0.484)	(0.497)	(0.5)
Voted in 2016 Election	0.352	0.452	0.265	0.398	0.369
	(0.478)	(0.498)	(0.442)	(0.489)	(0.483)
Voted in 2017 Election	0.472	0.559	0.4	0.515	0.483
	(0.499)	(0.496)	(0.49)	(0.5)	(0.5)
Sample Size (Turnout)	13393246	6724234	6669012	114521	130684
Sample Size (Education)	11370669	4797356	6034206	87595	97518

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL*). *Seguro de Cesantia*, *Ficha de Proteccion Social*, 1992 and 2002 Chilean Census.
Note: Table 2 presents summary statistics for the sample considered in the paper. The first column shows summary statistics for the full sample. The second and third columns present descriptive statistics for Chileans born before and after the Plebiscite, respectively. The last two columns present information for individuals who turned 18 six months before and after the Plebiscite, respectively. In each column, we include individuals' gender, comuna-level characteristics matched to their 2013 comuna of residence and educational attainment from the FPS/SC merged dataset. In the last two rows, we include the sample size for the turnout data as well as the sample size for whom we observe educational attainment.

Table 3: Model Selection: Five Fold Cross-Validation and AIC Procedure

Panel A. Five Fold Cross-Validation

Outcome Variable	First Stage			2013 Turnout			2016 Turnout			2017 Turnout		
Bandwidth	13	17	26	13	17	26	13	17	26	13	17	26
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Linear	0.338	0.332	0.324	0.499	0.499	0.499	0.485	0.486	0.486	0.500	0.500	0.500
Quadratic	0.338	0.332	0.323	0.499	0.499	0.499	0.485	0.486	0.486	0.500	0.500	0.500
Cubic	0.338	0.332	0.323	0.499	0.499	0.499	0.485	0.486	0.486	0.500	0.500	0.500
Quartic	0.338	0.332	0.323	0.499	0.499	0.499	0.485	0.486	0.486	0.500	0.500	0.500
Non-Parametric	0.339	0.333	0.324	0.499	0.499	0.499	0.485	0.486	0.486	0.500	0.500	0.500

Panel B. AIC Procedure

Outcome Variable	First Stage			2009 Registration			2013 Turnout			2016 Turnout			2017 Turnout		
Bandwidth	13	26	52	13	26	52	13	26	52	13	26	52	13	26	52
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Linear	85285	142938	252254	138550	259069	494905	184133	354521	703661	176202	340330	676500	183653	354081	705314
Quadratic	84956	142155	250541	138527	258988	494713	184132	354516	703604	176195	340332	676493	183656	354083	705270
Cubic	84916	141942	250059	138527	258971	494665	184132	354515	703590	176198	340329	676491	183658	354082	705264
Quartic	84920	141896	249603	138529	258972	494642	184135	354518	703592	176201	340325	676488	183661	354085	705265

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: The first panel of Table 3 presents the root mean square error (RMSE) from a five-fold cross-validation procedure applied to different functional form assumptions and bandwidths for the first stage and the downstream elections. The second panel presents the Akaike information criterion (AIC) across polynomial/bandwidth combinations for the first stage, 2009 registration rates and downstream election turnout rates.

Table 4: Downstream Registration Effects of Upstream Election Eligibility

	Downstream Election					
	1988 Plebiscite	1989 Election	1993 Election	1999 Election	2005 Election	2009 Election
Upstream Election	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. 1988 Plebiscite						
Before	0.560	0.318	0.157	0.143	0.13	0.124
	(0.020)***	(0.016)***	(0.010)***	(0.009)***	(0.008)***	(0.008)***
Control Mean		0.31	0.626	0.654	0.679	0.692
Observations	250388					
Panel B. 1989 Election						
Before		0.145	0.024	0.02	0.018	0.017
		(0.002)***	(0.004)***	(0.004)***	(0.004)***	(0.004)***
Control Mean			0.577	0.614	0.645	0.661
Observations	261786					
Panel C. 1993 Election						
Before			0.203	0.082	0.06	0.054
			(0.007)***	(0.006)***	(0.006)***	(0.006)***
Control Mean				0.289	0.375	0.416
Observations	248871					
Panel D. 1999 Election						
Before				0.045	0.024	0.019
				(0.003)***	(0.002)***	(0.003)***
Control Mean					0.235	0.298
Observations	274566					
Panel E. 2005 Election						
Before					0.088	0.033
					(0.002)***	(0.003)***
Control Mean						0.165
Observations	287364					
Panel F. 2009 Election						
Before						0.068
						(0.002)***
Control Mean						
Observations	296631					

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table 4 presents estimates of equation (2) using a linear functional form with a 26 week bandwidth across each election cut-off. The results refer to the estimated impacts of upstream election eligibility (1988 Plebiscite, 1989 1993, 1999, 2005 and 2009 Presidential elections) on differential registration rates across various downstream elections. The values along the diagonal correspond to the first-stage results. The 'Control Mean' row corresponds to the share of marginally ineligible individuals who had registered to vote in the downstream election denoted in each column.

Table 5: Estimated Effects of Upstream Election Eligibility on 2013, 2016 and 2017 Turnout

	2013 Election	2016 Election	2017 Election
Before	0.0300***	0.0206***	0.0180***
	(0.0048)	(0.0036)	(0.0036)
Before × 1989 Election	-0.0303***	-0.0157***	-0.0151***
	(0.0057)	(0.0047)	(0.0052)
Before × 1993 Election	-0.0165***	-0.0147***	-0.0214***
	(0.0062)	(0.0056)	(0.0056)
Before × 1999 Election	-0.0379***	-0.0252***	-0.0197***
	(0.0056)	(0.0051)	(0.0050)
Before × 2005 Election	-0.0373***	-0.0212***	-0.0281***
	(0.0066)	(0.0050)	(0.0050)
Before × 2009 Election	-0.0350***	-0.0281***	-0.0238***
	(0.0067)	(0.0055)	(0.0055)
Observations	1587822	1583460	1583419

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Table 5 presents estimates of equation (4) using a linear functional form with a 26 week bandwidth across each election cut-off. The results refer to the estimated differential impacts of upstream election eligibility (1988 Plebiscite compared to the 1989 1993, 1999, 2005 and 2009 Presidential elections) on turnout in the 2013, 2016 and 2017 elections.

Table 6: Estimated Effects of Upstream Election Participation on 2013, 2016 and 2017 Turnout

	2013 Election	2016 Election	2017 Election
Before	0.0551***	0.0379***	0.0331***
	(0.0075)	(0.0062)	(0.0061)
Before × 1989 Election	-0.0568**	-0.0033	-0.0130
	(0.0222)	(0.0219)	(0.0262)
Before × 1993 Election	0.0119	-0.0083	-0.0498**
	(0.0201)	(0.0217)	(0.0221)
Before × 1999 Election	-0.2309***	-0.1399*	-0.0702
	(0.0674)	(0.0793)	(0.0777)
Before × 2005 Election	-0.1381***	-0.0437	-0.1484***
	(0.0534)	(0.0390)	(0.0397)
Before × 2009 Election	-0.1286*	-0.1468**	-0.1184*
	(0.0700)	(0.0617)	(0.0607)
Observations	1587822	1583460	1583419

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Table 6 presents estimates of a fuzzy differences-in-discontinuity using a linear functional form with a 26 week bandwidth across each election cut-off. The results refer to the estimated differential impacts of upstream election participation (1988 Plebiscite compared to the 1989 1993, 1999, 2005 and 2009 Presidential elections) on turnout in the 2013, 2016 and 2017 elections.

Table 7: Heterogeneous Effects of Plebiscite Eligibility by Gender

	1988 Plebiscite		2009 Registration		2013 Turnout		2016 Turnout		2017 Turnout	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Before	0.531	0.59	0.111	0.129	0.019	0.037	0.008	0.027	0.010	0.024
	(0.022)***	(0.019)***	(0.009)***	(0.009)***	(0.007)**	(0.007)***	(0.006)	(0.005)***	(0.006)*	(0.006)***
Control Mean	0	0	0.688	0.698	0.552	0.455	0.405	0.334	0.525	0.441
Observations	126343	124045	126343	124045	126343	124045	125952	123321	126056	123209

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table 7 presents evidence of heterogeneous effects of Plebiscite eligibility on concurrent Plebiscite registration, 2009 registration and downstream 2013, 2016 and 2017 election participation in a linear, 26-week bandwidth specification.

Table 8: Heterogeneous Effects of Plebiscite Eligibility by Partisanship: Allende Support

Outcome Variable	First Stage	2009 Registration	2013 Turnout	2016 Turnout	2017 Turnout
	(1)	(2)	(3)	(4)	(5)
Before	0.588***	0.086***	-0.004	-0.004	-0.017
	(0.015)	(0.016)	(0.019)	(0.021)	(0.019)
Before $\times$ Allende Share	-0.094**	0.079*	0.075	0.049	0.087*
	(0.038)	(0.042)	(0.048)	(0.052)	(0.050)
Observations	216086	216086	216086	215069	214766

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)* and 1992 Chilean Census.
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth and comuna level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table 8 presents evidence of heterogeneous effects of Plebiscite eligibility on concurrent Plebiscite registration, 2009 registration and downstream 2013, 2016 and 2017 election participation in a linear, 26-week bandwidth specification by 1970 Allende vote share. We cluster standard errors at the week-comuna level. We control for 1992 Census comuna characteristics including unemployment rate, literacy rate and the share of household with electricity, water and toliet in the home.

Table 9: Heterogeneous Effects of Upstream Election Eligibility by Educational Attainment

	Initial Registration			2009 Registration		
	HS Dropouts	HS Graduates	> HS Graduates	HS Dropouts	HS Graduates	> HS Graduates
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. 1988 Plebiscite						
Before	0.306	0.387	0.482	0.099	0.103	0.087
	(0.042)***	(0.044)***	(0.030)***	(0.021)***	(0.016)***	(0.007)***
Control Mean	0	0	0	0.601	0.688	0.774
Observations	63187	93905	28021	63187	93905	28021
Panel B. 1989 Election						
Before	0.053	0.085	0.169	-0.011	0.012	0.039
	(0.003)***	(0.003)***	(0.005)***	(0.004)***	(0.006)**	(0.008)***
Control Mean	0	0	0	0.58	0.66	0.723
Observations	63286	98873	31549	63286	98873	31549
Panel C. 1993 Election						
Before	0.085	0.135	0.200	0.020	0.045	0.071
	(0.017)***	(0.012)***	(0.011)***	(0.014)	(0.008)***	(0.009)***
Control Mean	0	0	0	0.323	0.378	0.505
Observations	54416	99126	36959	54416	99126	36959
Panel D. 1999 Election						
Before	0.008	0.009	0.059	0.022	0.017	0.012
	(0.003)***	(0.004)**	(0.008)***	(0.010)**	(0.003)***	(0.008)
Control Mean	0	0	0	0.185	0.236	0.388
Observations	47421	121034	48213	47421	121034	48213
Panel E. 2005 Election						
Before	0.014	0.035	0.116	0.005	0.011	0.060
	(0.002)***	(0.003)***	(0.005)***	(0.003)*	(0.004)***	(0.009)***
Control Mean	0	0	0	0.066	0.103	0.215
Observations	28074	132316	57646	28074	132316	57646
Panel F. 2009 Election						
Before	0.010	0.047	0.063	0.010	0.047	0.063
	(0.003)***	(0.004)***	(0.008)***	(0.003)***	(0.004)***	(0.008)***
Control Mean	0	0	0	0	0	0
Observations	35805	174064	7373	35805	174064	7373

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL*). *Seguro de Cesantia*, *Ficha de Proteccion Social*, 1992 and 2002 Chilean Census.
Note: Standard errors in parentheses. Standard errors clustered at the month-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table 9 presents evidence of heterogeneous effects of upstream election eligibility on concurrent registration (first three columns) and 2009 registration in a linear, 6-month bandwidth specification (last three columns).

Table 10: Complier Characteristics by Upstream Election

Upstream Election	1988 Plebiscite			1989 Election			1993 Election			1999 Election			2005 Election			2009 Election		
	Sample (1)	Compliers (2)	Ratio (3)	Sample (4)	Compliers (5)	Ratio (6)	Sample (7)	Compliers (8)	Ratio (9)	Sample (10)	Compliers (11)	Ratio (12)	Sample (13)	Compliers (14)	Ratio (15)	Sample (16)	Compliers (17)	Ratio (18)
Panel A. Individual Characteristics																		
HS Dropouts	0.341	0.304	0.891	0.327	0.206	0.631	0.286	0.234	0.818	0.219	0.111	0.507	0.129	0.054	0.416	0.165	0.051	0.312
HS Graduates	0.507	0.53	1.045	0.51	0.511	1	0.52	0.523	1.006	0.559	0.436	0.78	0.607	0.443	0.73	0.801	0.891	1.112
> HS Graduates	0.151	0.166	1.097	0.163	0.283	1.739	0.194	0.243	1.252	0.223	0.454	2.038	0.264	0.503	1.904	0.034	0.057	1.687
Male	0.495	0.499	1.007	0.496	0.57	1.149	0.5	0.549	1.098	0.501	0.484	0.967	0.506	0.463	0.915	0.507	0.455	0.898
Panel B. Comuna Characteristics																		
Allende Vote	0.366	0.365	0.997	0.366	0.357	0.975	0.365	0.36	0.984	0.367	0.339	0.924	0.369	0.35	0.948	0.371	0.345	0.93
% Electricity	0.903	0.909	1.006	0.907	0.923	1.018	0.908	0.887	0.976	0.915	0.912	0.996	0.916	0.914	0.998	0.911	0.918	1.008
% Water in Home	0.747	0.751	1.005	0.75	0.778	1.037	0.754	0.724	0.961	0.766	0.78	1.018	0.763	0.773	1.013	0.755	0.78	1.034
% TV Ownership	0.867	0.871	1.005	0.87	0.885	1.017	0.872	0.855	0.98	0.877	0.88	1.004	0.878	0.88	1.003	0.873	0.883	1.011
% Toilet in Home	0.691	0.697	1.009	0.696	0.729	1.048	0.7	0.661	0.944	0.714	0.725	1.015	0.712	0.721	1.013	0.701	0.729	1.039
Literacy Rate	0.902	0.904	1.001	0.903	0.91	1.008	0.904	0.898	0.993	0.906	0.911	1.005	0.906	0.909	1.003	0.903	0.91	1.008
Unemployment Rate	0.088	0.088	0.999	0.087	0.084	0.96	0.087	0.088	1.015	0.086	0.08	0.928	0.087	0.083	0.956	0.088	0.082	0.932
Share Compliers			0.666			0.16			0.287			0.076			0.12			0.102
Panel C. Sample Size																		
Sample Size (Educ.)	185113			193708			190501			216668			218036			217242		
Sample Size	236347			247191			234435			258832			271090			279495		
Ratio	0.783			0.784			0.813			0.837			0.804			0.777		

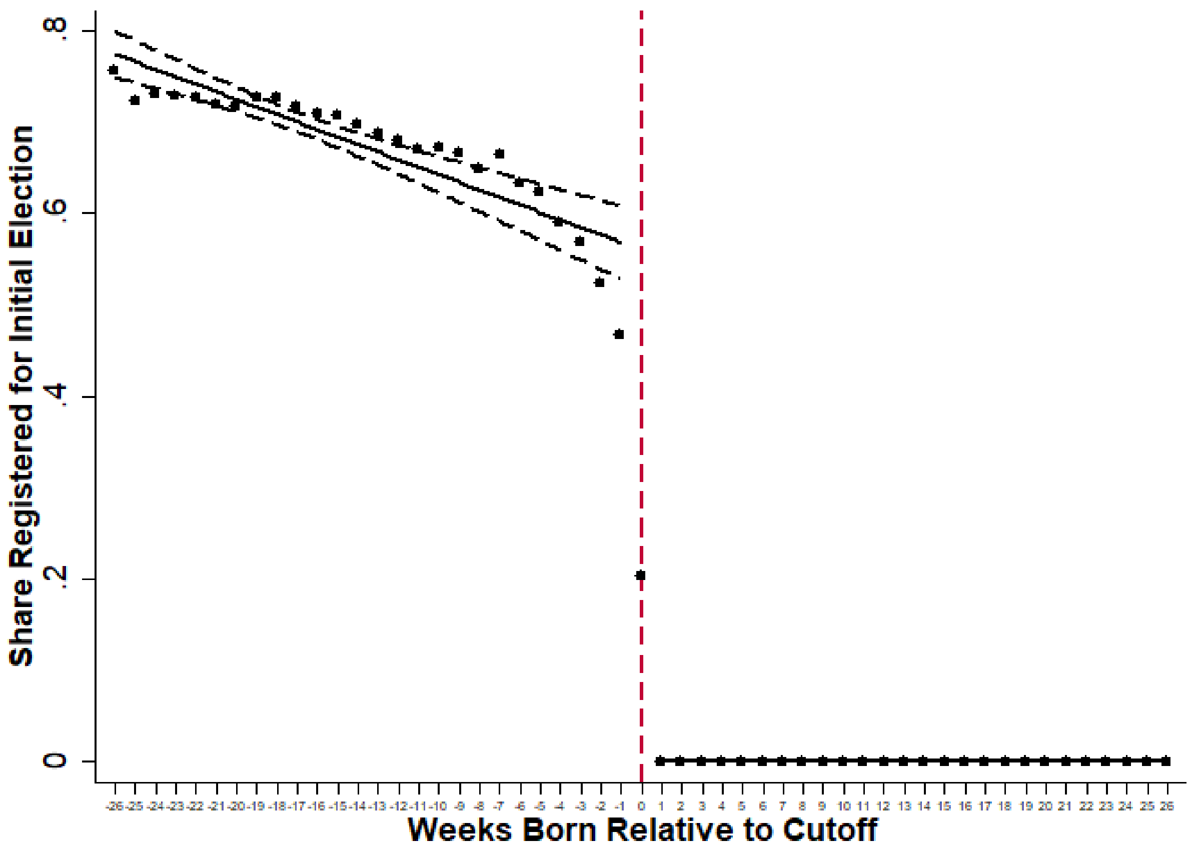
Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Table 10 presents complier characteristics by each upstream election using a 26-week bandwidth. Complier characteristics are calculated using the methodology in Angrist and Pischke (2008). The complier ratio equals the characteristics of compliers divided by those of the full sample across the 26-week cut-off.

Table 11: Vote Gain from the 1988 Plebiscite

Year of Election		1989	1993	1999	2005	2009
Round of Election		1st	1st	1st	1st	1st
Number of eligibles by education group	HS Dropouts			1,625,800		
	HS Graduates			1,588,000		
	> HS Grads			381,000		
Turnout Rate		0.947	0.912	0.900	0.877	0.867
Size of treatment effect	HS Dropouts	0.207	0.099	0.099	0.100	0.099
	HS Graduates	0.232	0.109	0.106	0.107	0.103
	> HS Grads	0.247	0.105	0.099	0.094	0.087
Concertacion vote share	HS Dropouts	0.592	0.678	0.526	0.529	0.588
	HS Graduates	0.560	0.652	0.496	0.520	0.561
	> HS Grads	0.503	0.616	0.445	0.488	0.517
Total effect of the plebiscite on the left wing vote share		1.41%	1.47%	0.04%	0.19%	0.63%

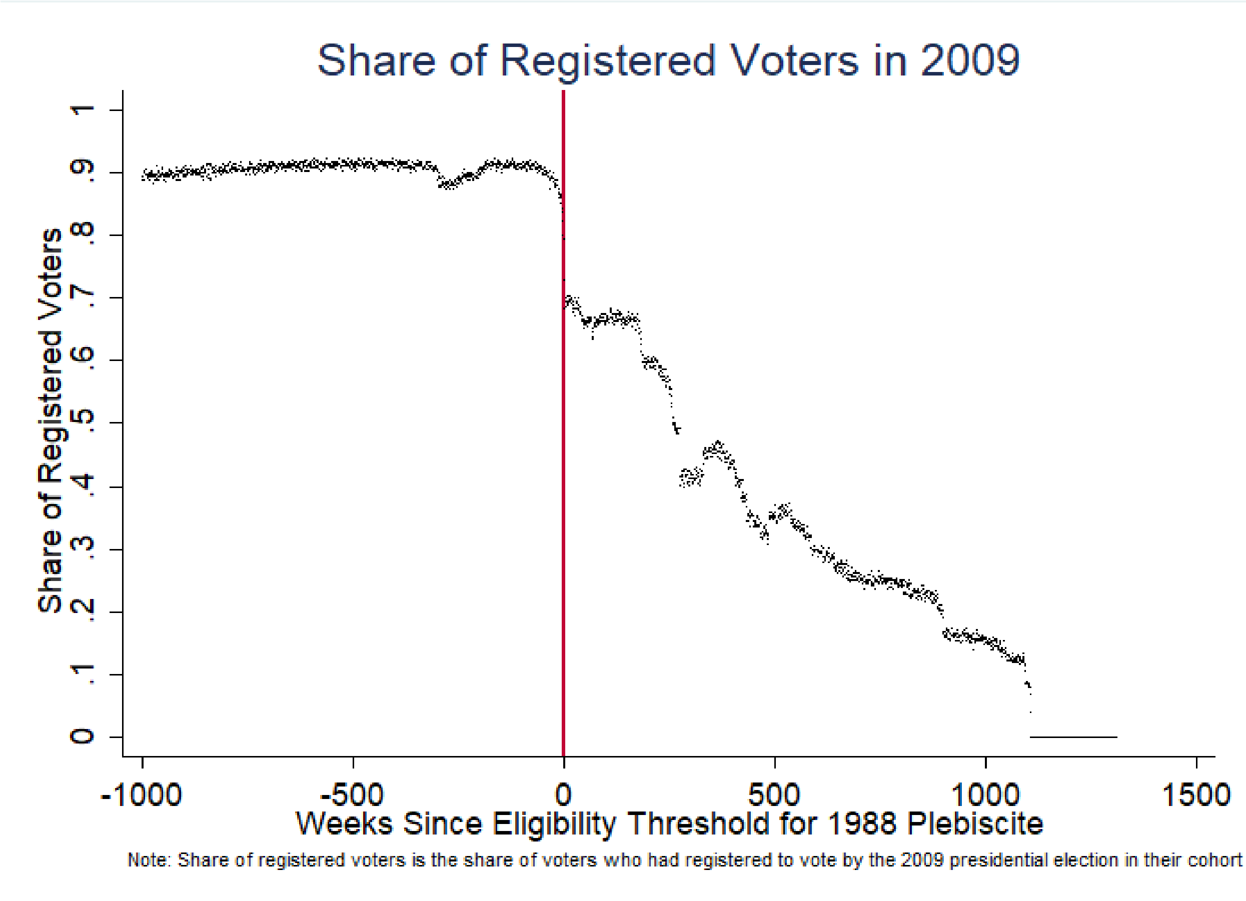
Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)* for turnout effects, *Seguro de Cesantia* and *Ficha de Proteccion Social* for number of eligibles by educational attainment. *Centro de Estudios Publicps*, CEP: pre-electoral surveys conducted in 1989, 1993, 1999, 2005 and 2009 for partisanship effects.
Note: The number of eligibles are calculated from the number of eligible individuals born between 1950-1970 from the merged administrative data multiplied by the ratio of non-missing educational attainment. The turnout rate follows from Table 1. The size of the treatment effect follows from Table 9 and from results available upon request for the 1993, 1999 and 2005 elections. Lastly, the *Concertacion* vote share follows from CEP data from surveys conducted 1-2 months prior to each Presidential election (1989-2009) and shows stated the share of *Concertacion* voters by educational attainment — imputed from the socioeconomic status variable.

Figure 1: The Effect of Plebiscite Eligibility on Plebiscite Participation



Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*. Note: Figure 1 shows graphical evidence of Plebiscite registration rates by week of birth within a year of registration closing for the Plebiscite. Week 0 corresponds to the August 30^{th} week.

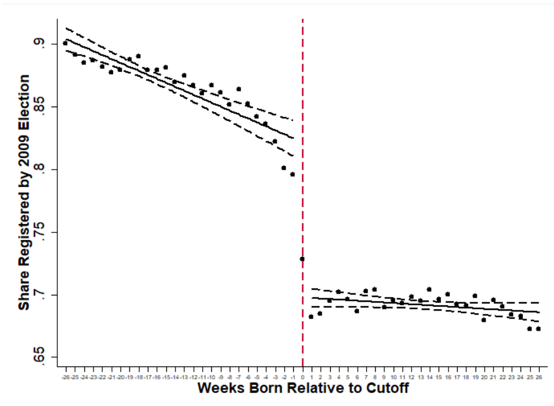
Figure 2: Long-Term Differences in 2009 Registration Rates by Birth Cohort



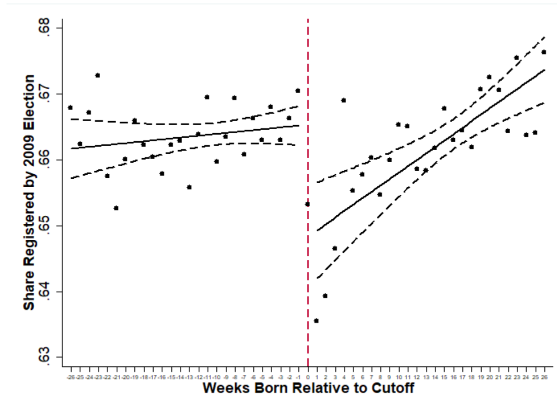
Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*. Note: Figure 2 shows graphical evidence of the share of individuals who had voluntarily registered to vote by the 2009 by week of birth cohort. Week 0 corresponds to the August 30th, 1970 birth cohort.

Figure 3: Differences in 2009 Registration Rates Across Eligibility Cutoff in Various Elections

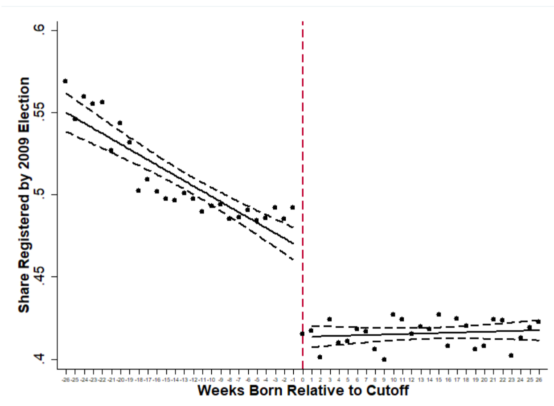
(a) 1988 Plebiscite



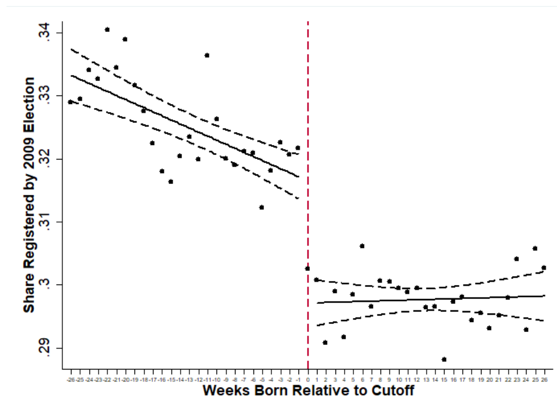
(b) 1989 Election



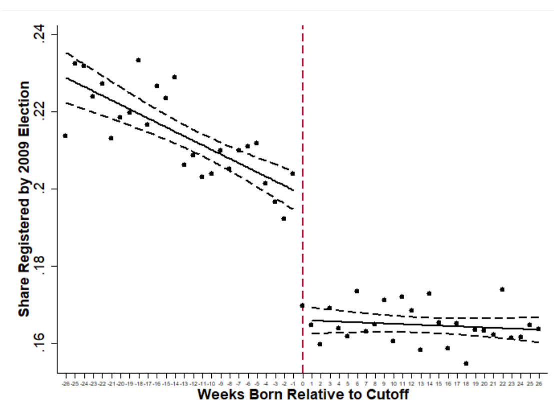
(c) 1993 Election



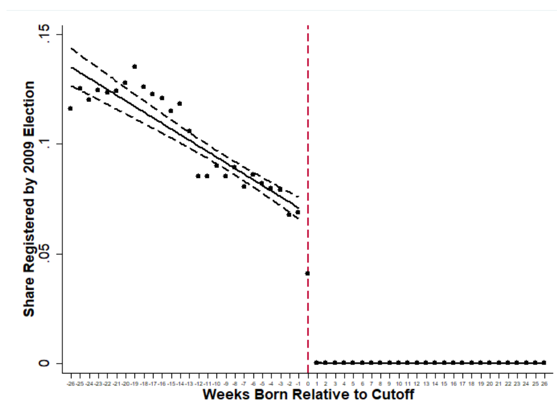
(d) 1999 Election



(e) 2005 Election

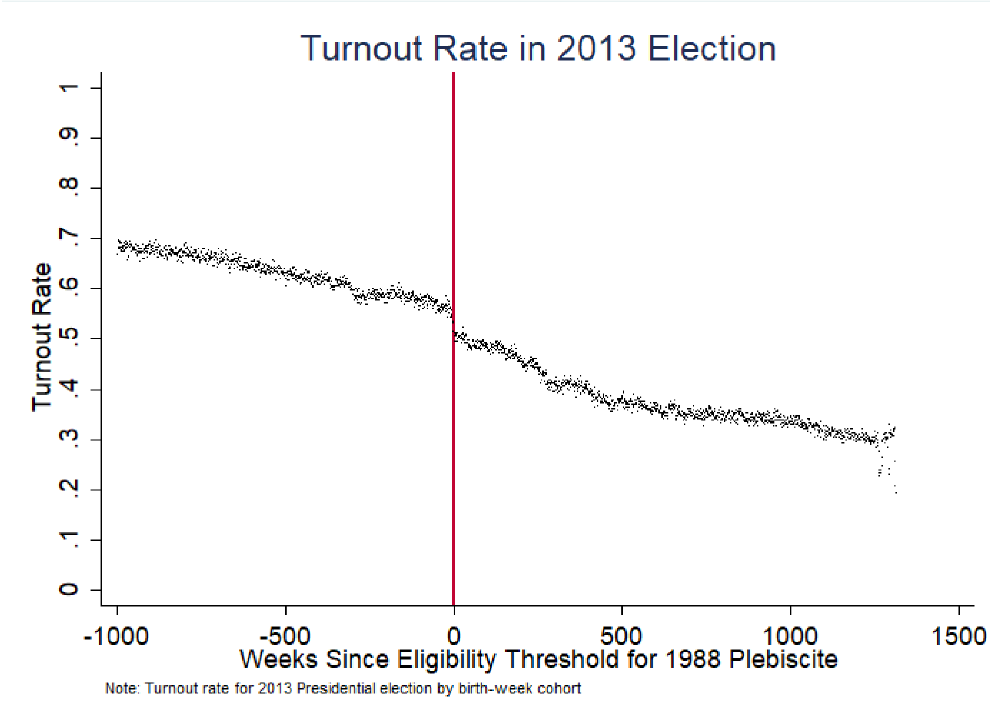


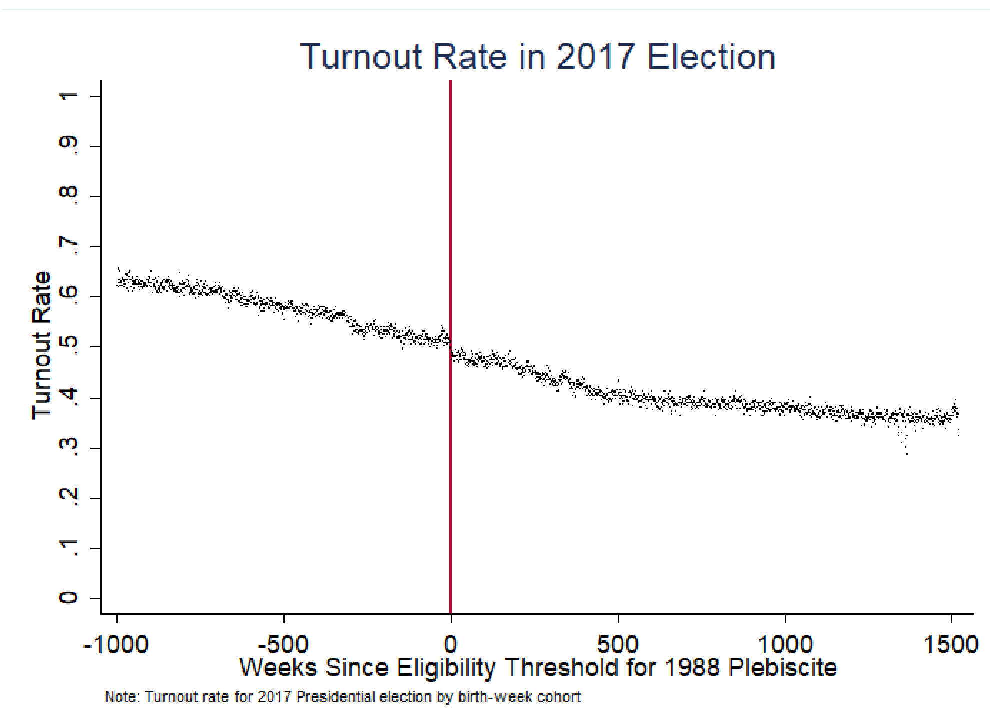
(f) 2009 Election



Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Figure 3 shows graphical evidence of differences in 2009 voluntary registration rates in a linear specification across the eligibility cut-off (26-week bandwidth) in the 1988 Plebiscite and the 1989, 1993, 1999, 2005 and 2009 Presidential elections.

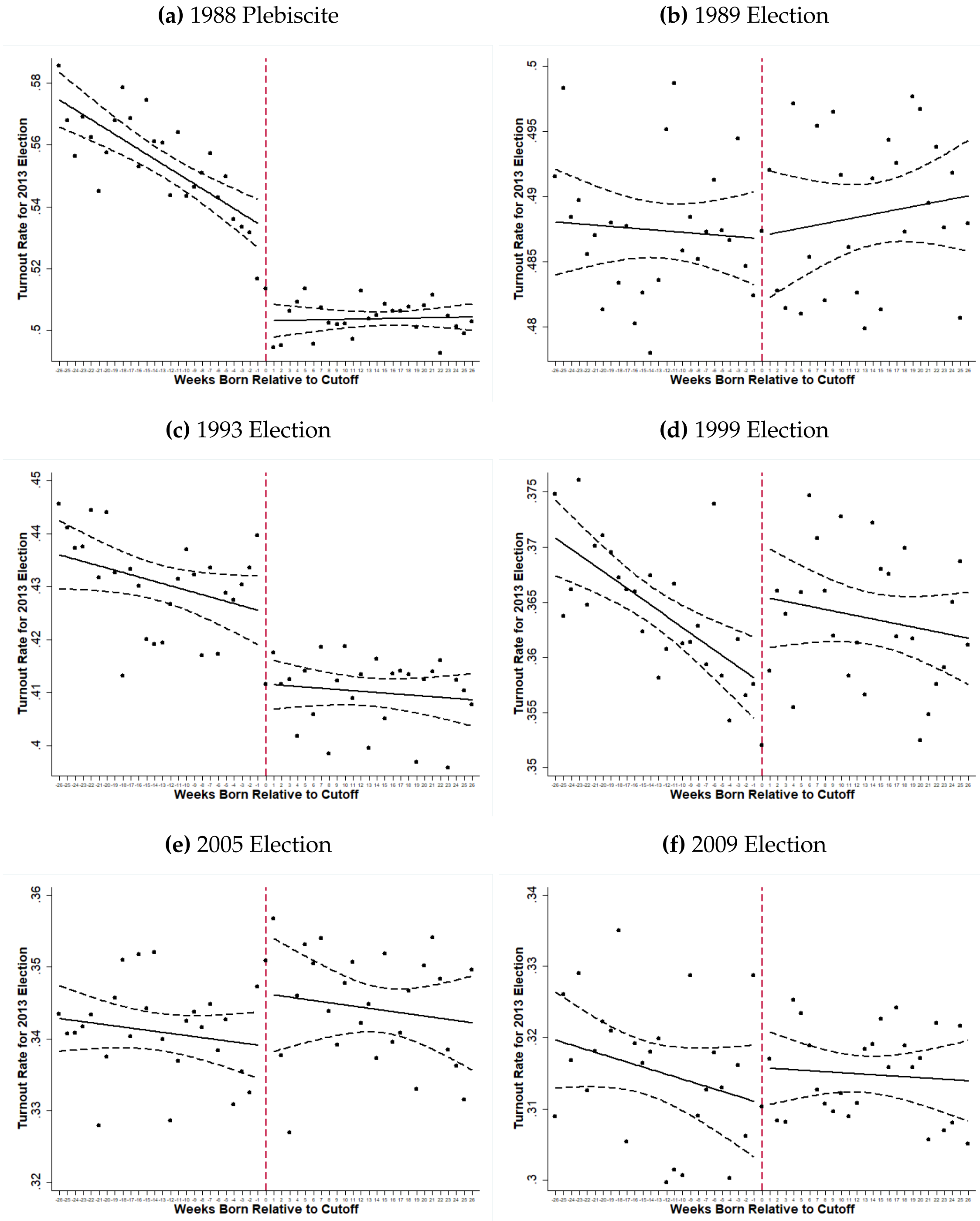
Figure 4: Long-Term Differences in 2013 and 2017 Election Turnout Rates by Birth Cohort





Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL*). Note: Figure 4 shows graphical evidence of the share of individuals who had turned out to vote for the 2013 and 2017 Presidential elections by week of birth cohort. Week 0 corresponds to the August 30th, 1970 birth cohort.

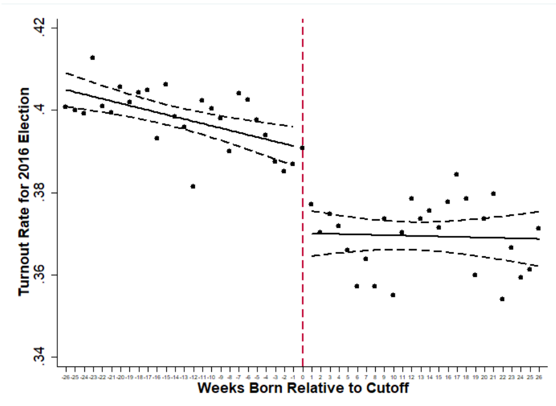
Figure 5: Differences in 2013 Election Turnout Rates Across Eligibility Cutoff in Various Elections



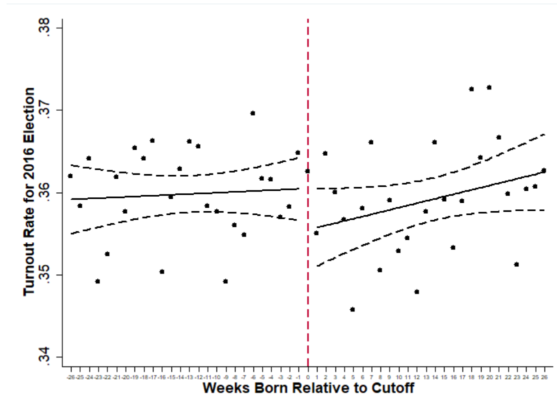
Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Figure 5 shows graphical evidence of differences in 2013 Presidential election turnout rates in a linear specification across the eligibility cut-off (26-week bandwidth) in the 1988 Plebiscite and the 1989, 1993, 1999, 2005 and 2009 Presidential elections.

Figure 6: Differences in 2016 Election Turnout Rates Across Eligibility Cutoff in Various Elections

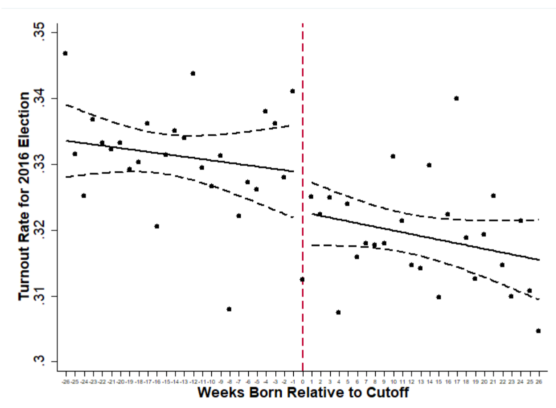
(a) 1988 Plebiscite



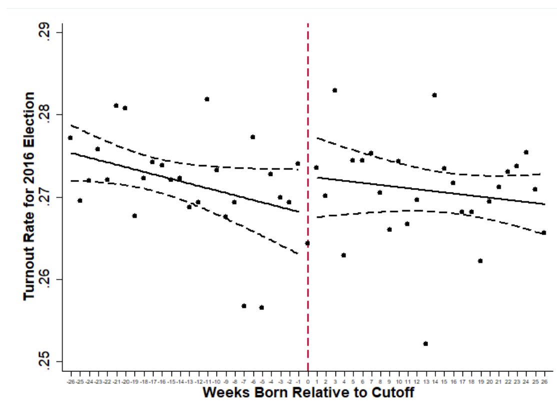
(b) 1989 Election



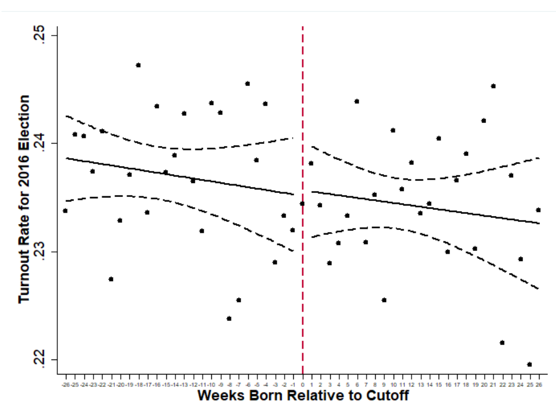
(c) 1993 Election



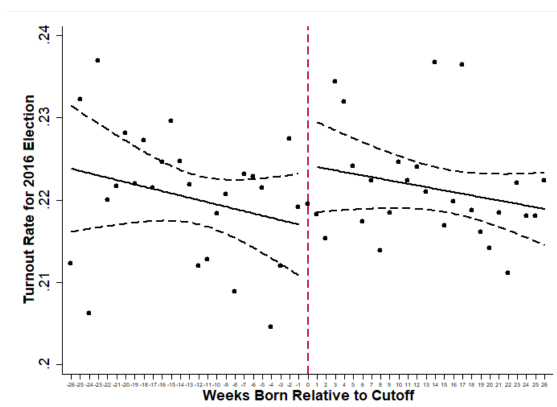
(d) 1999 Election



(e) 2005 Election



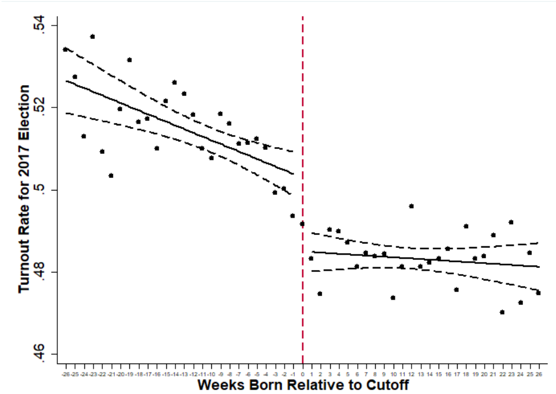
(f) 2009 Election



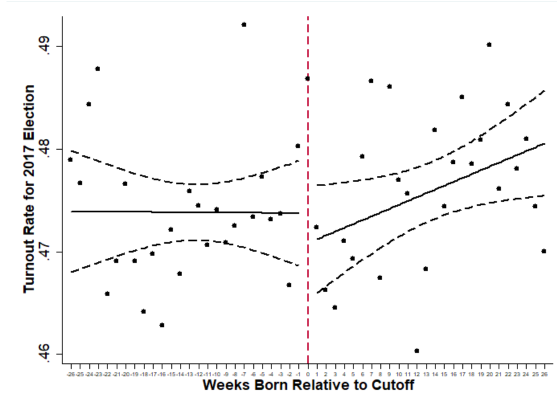
Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL*).
Note: Figure 6 shows graphical evidence of differences in 2016 Presidential election turnout rates in a linear specification across the eligibility cut-off (26-week bandwidth) in the 1988 Plebiscite and the 1989, 1993, 1999, 2005 and 2009 Presidential elections.

Figure 7: Differences in 2017 Election Turnout Rates Across Eligibility Cutoff in Various Elections

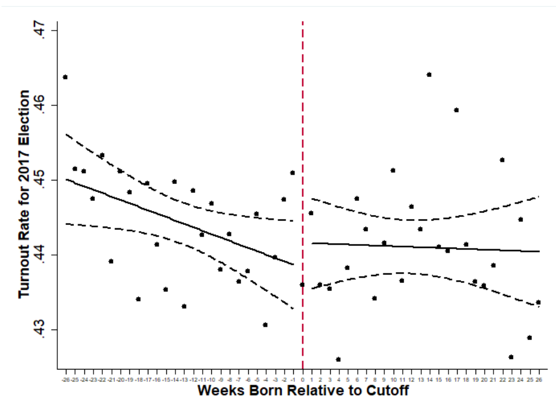
(a) 1988 Plebiscite



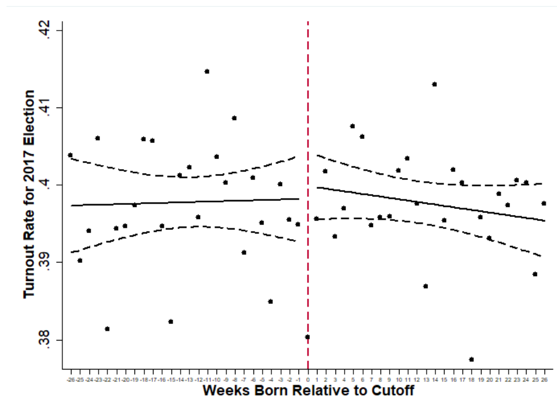
(b) 1989 Election



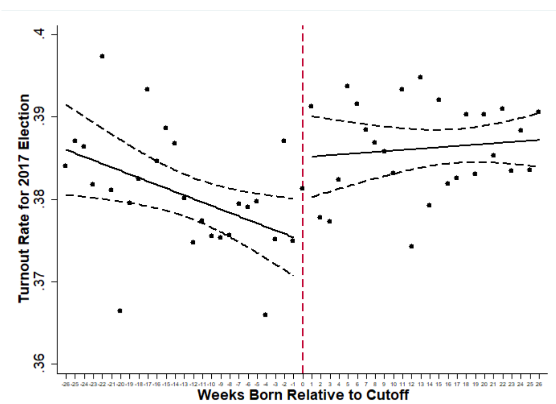
(c) 1993 Election



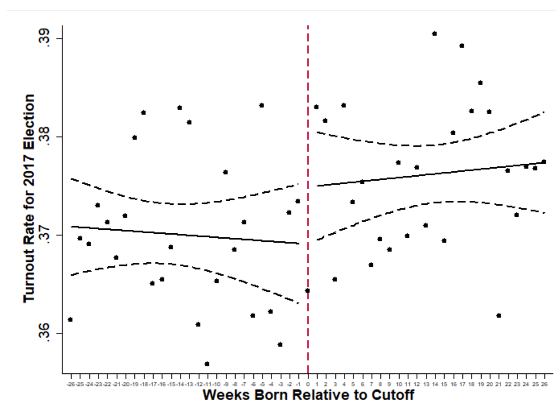
(d) 1999 Election



(e) 2005 Election



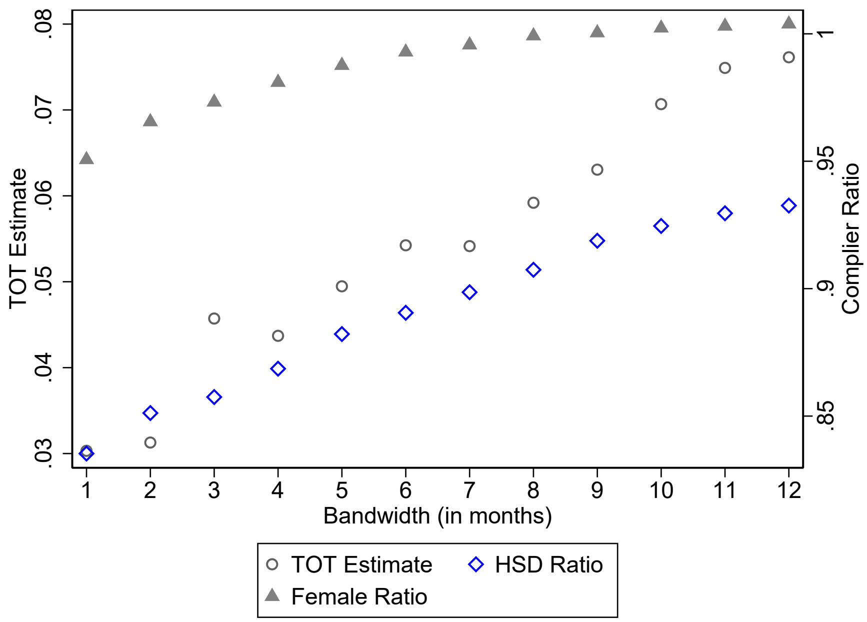
(f) 2009 Election



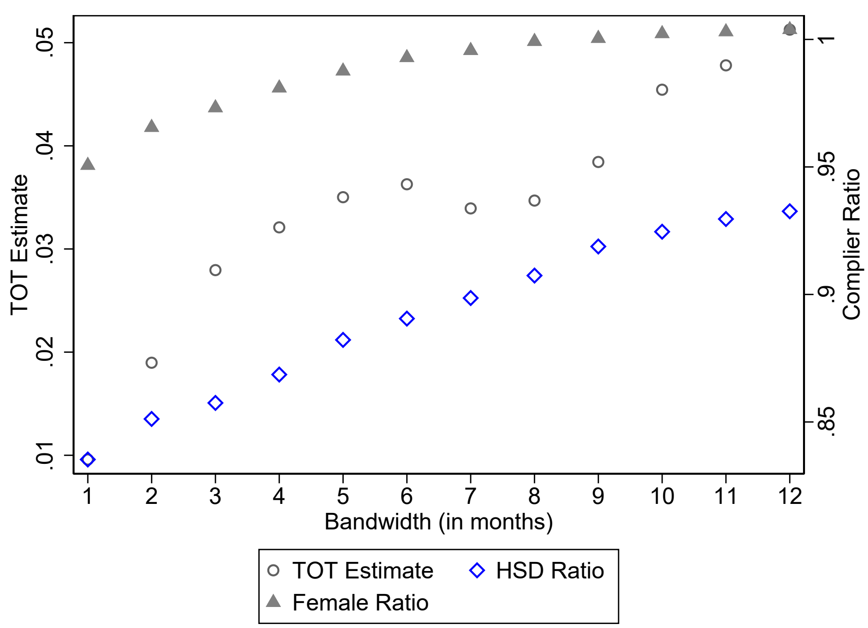
Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Figure 7 shows graphical evidence of differences in 2017 Presidential election turnout rates in a linear specification across the eligibility cut-off (26-week bandwidth) in the 1988 Plebiscite and the 1989, 1993, 1999, 2005 and 2009 Presidential elections.

Figure 8: Treatment on the Treated Effects and Complier Characteristics by Bandwidths

(a) 2013 Presidential Election



(b) 2017 Presidential Election



Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL*). Note: Figure 8 shows graphical evidence of the estimated treatment on the treated effect of plebiscite participation on 2013 and 2017 Presidential election turnout for twelve different bandwidths. It also includes the complier ratio for high school dropouts and females across these bandwidths presented in Tables 10 and A.13.

Appendix

A Appendix Tables and Figures

Table A.1: Optimal Bandwidth Selection: CCT Algorithm

	First Stage (1)	2009 Registration (2)	2013 Turnout (3)	2016 Turnout (4)	2017 Turnout (5)
1988 Plebiscite					
Linear	3.784	9.937	14.28	23.748	16.539
Quadratic	9.56	23.296	29.006	29.271	31.515
Cubic	18.033	36.041	42.592	40.297	45.123
Quartic	30.355	52.081	59.046	55.346	61.288
1989 Presidential Election					
Linear	8.277	11.585	18.865	22.055	15.687
Quadratic	13.308	20.632	24.818	27.273	27.329
Cubic	21.78	32.715	40.338	38.069	42.653
Quartic	23.629	37.083	39.275	43.79	38.39
1993 Presidential Election					
Linear	8.498	10.525	14.411	22.747	16.576
Quadratic	12.87	21.061	26.089	26.851	24.876
Cubic	30.563	32.778	45.328	41.244	45.249
Quartic	45.376	52.251	48.454	48.614	49.004
1999 Presidential Election					
Linear	9.965	28.262	20.584	33.084	31.929
Quadratic	17.217	31.732	26.654	30.95	28.467
Cubic	24.253	54.649	43.668	49.086	36.34
Quartic	22.495	43.549	48.07	55.556	47.93
2005 Presidential Election					
Linear	16.092	22.14	33.194	29.196	21.763
Quadratic	22.844	35.248	34.006	35.017	29.057
Cubic	24.842	39.835	41.989	37.178	47.067
Quartic	32.975	56.525	53.563	51.926	47.822
2009 Presidential Election					
Linear	9.561	9.561	35.774	28.305	23.404
Quadratic	19.132	19.132	23.934	31.985	31.481
Cubic	21.204	21.204	37.351	35.831	33.134
Quartic	32.459	32.459	55.425	55.807	42.208
Differences-in-Discontinuity: Equation (4)					
Linear	12.43	12.86	20.576	23.875	14.947
Quadratic	17.632	19.033	23.017	24.73	26.151
Cubic	32.155	33.52	43.787	38.344	39.074
Quartic	53.004	40.029	42.115	38.338	41.349

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL*).
Note: Table A.1 presents the optimal CCT bandwidth (Calonico et al., 2014) for different specifications of equation (2), including five outcome variables (first stage participation, 2009 registration, 2013, 2016 and 2017 turnout) as well as six upstream elections (1988 Plebiscite and 1989, 1993, 1999, 2005 and 2009 Presidential elections). Moreover, we consider four different polynomials when selecting the optimal bandwidth. The last panel shows the optimal bandwidth for the differences-in-discontinuity regression (equation (4)).

Table A.2: Covariate Balance

	1988 Plebiscite		1989 Election		1993 Election		1999 Election		2005 Election		2009 Election	
	Level	Diff.	Level	Diff.	Level	Diff.	Level	Diff.	Level	Diff.	Level	Diff.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					A. Individual-Level Characteristics							
Male	0.493	-0.003	0.496	-0.002	0.501	0.003	0.5	0	0.508	0	0.505	0.002
	(0.003)	(0.006)	(0.003)	(0.005)	(0.004)	(0.005)	(0.002)	(0.003)	(0.004)	(0.005)	(0.003)	(0.004)
Educational Attainment*												
					26-Week Bandwidth							
HS Dropout	0.358	-0.006	0.327	0.014	0.282	0.017	0.222	0.004	0.126	0.006	0.154	0.008
	(0.003)	(0.007)	(0.004)	(0.005)**	(0.006)	(0.008)**	(0.001)	(0.002)**	(0.001)	(0.002)***	(0.005)	(0.007)
HS Graduate	0.495	0.009	0.51	-0.005	0.521	-0.015	0.559	-0.003	0.602	0.001	0.813	0.000
	(0.005)	(0.007)	(0.001)	(0.004)	(0.003)	(0.004)***	(0.003)	(0.005)	(0.001)	(0.002)	(0.005)	(0.006)
> HS Graduate	0.147	-0.003	0.163	-0.009	0.197	-0.002	0.219	0	0.272	-0.007	0.033	-0.009
	(0.002)	(0.003)	(0.003)	(0.003)***	(0.003)	(0.005)	(0.004)	(0.005)	(0.002)	(0.004)*	(0.001)	(0.006)
					13-Week Bandwidth							
HS Dropout	0.357	0.003	0.332	0.004	0.288	0.004	0.223	0.002	0.128	0.008	0.161	-0.003
	(0.003)	(0.007)	(0.003)	(0.006)	(0.003)	(0.006)	(0.003)	(0.005)	(0.002)	(0.004)*	(0.002)	(0.005)
HS Graduate	0.498	0.001	0.508	-0.001	0.519	-0.004	0.561	-0.010	0.601	0.004	0.806	0.004
	(0.003)	(0.007)	(0.004)	(0.007)	(0.004)	(0.007)	(0.003)	(0.006)	(0.003)	(0.006)	(0.003)	(0.005)
> HS Graduate	0.145	-0.004	0.16	-0.002	0.193	0	0.216	0.008	0.271	-0.012	0.033	-0.001
	(0.002)	(0.005)	(0.003)	(0.005)	(0.003)	(0.005)	(0.003)	(0.005)	(0.003)	(0.006)*	(0.001)	(0.002)
					B. Comuna-Level Characteristics							
Electricity in Home	0.9	-0.001	0.907	-0.003	0.912	-0.005	0.919	-0.005	0.918	-0.004	0.912	-0.005
	(0.004)	(0.005)	(0.003)	(0.005)	(0.003)	(0.005)	(0.003)	(0.005)	(0.003)	(0.005)	(0.003)	(0.005)
Water in Home	0.744	-0.002	0.751	-0.002	0.759	-0.007	0.77	-0.007	0.765	-0.005	0.756	-0.005
	(0.006)	(0.008)	(0.006)	(0.008)	(0.006)	(0.008)	(0.006)	(0.008)	(0.006)	(0.008)	(0.006)	(0.008)
Toilet in Home	0.687	-0.002	0.696	-0.003	0.707	-0.009	0.72	-0.009	0.714	-0.006	0.702	-0.006
	(0.007)	(0.01)	(0.007)	(0.01)	(0.007)	(0.01)	(0.007)	(0.01)	(0.007)	(0.01)	(0.007)	(0.010)
Literacy Rate	0.901	0	0.903	-0.001	0.905	-0.002	0.907	-0.002	0.906	-0.001	0.903	-0.001
	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)
Unemployment Rate	0.088	0	0.088	0	0.087	0	0.086	0	0.087	0	0.088	0
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
TV Ownership Rate	0.844	0.001	0.847	0	0.85	-0.002	0.852	-0.002	0.848	-0.004	0.842	-0.003
	(0.007)	(0.011)	(0.007)	(0.011)	(0.007)	(0.011)	(0.007)	(0.011)	(0.007)	(0.011)	(0.007)	(0.011)
Allende Share	0.37	0.001	0.372	-0.001	0.372	-0.002	0.373	-0.001	0.375	-0.002	0.374	-0.002
	(0.006)	(0.01)	(0.006)	(0.009)	(0.006)	(0.01)	(0.006)	(0.01)	(0.006)	(0.009)	(0.006)	(0.009)
Sample Size	250388		253165		248871		274566		287364		296631	
(*): Sample Size (Education)	185113		195039		191341		216989		218353		218433	

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Table A.2 presents estimates of equation (2) in a linear functional form with a 26-week bandwidth. For education variables, we also use a 13-week bandwidth to avoid to ensure that individuals are in the same academic year. We use relevant covariates as outcome variables. *Level* and *Diff.* refer to α_0 and α_1 in equation (2), respectively. For individual-level covariates, we cluster standard errors at the week level. For education-level covariates, we cluster standard errors at the month level. For comuna-level covariates, we cluster standard errors at the comuna-week level.

Table A.3: Robustness Checks: First-Stage and 2009 Registration Results

Panel A. First-Stage Registration Rates

Upstream Election	1988 Plebiscite			1989 Election			1993 Election			1999 Election			2005 Election			2009 Election		
Bandwidth	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Panel (a). Functional Form: Linear Polynomial																		
Before	0.56	0.612	0.433	0.145	0.118	0.147	0.203	0.229	0.235	0.045	0.051	0.055	0.088	0.105	0.083	0.068	0.088	0.068
	(0.02)***	(0.016)***	(0.011)***	(0.002)***	(0.005)***	(0.002)***	(0.007)***	(0.005)***	(0.003)***	(0.003)***	(0.003)***	(0.002)***	(0.002)***	(0.004)***	(0.003)***	(0.002)***	(0.004)***	(0.002)***
Observations	245205	487056	40164	256697	510154	82775	243912	488826	75923	269271	528369	104890	281837	564578	176946	290900	582406	115225
Panel (b). Functional Form: Quadratic Polynomial																		
Before	0.495	0.55	0.423	0.153	0.132	0.145	0.243	0.195	0.238	0.056	0.05	0.057	0.081	0.086	0.083	0.059	0.066	0.072
	(0.02)***	(0.02)***	(0.009)***	(0.003)***	(0.006)***	(0.002)***	(0.005)***	(0.009)***	(0.005)***	(0.003)***	(0.003)***	(0.003)***	(0.004)***	(0.002)***	(0.004)***	(0.004)***	(0.002)***	(0.004)***
Observations	245205	487056	98433	256697	510154	133849	243912	488826	123682	269271	528369	178338	281837	564578	250228	290900	582406	214525
Panel (c). Functional Form: Cubic Polynomial																		
Before	0.45	0.509	0.419	0.146	0.168	0.144	0.248	0.219	0.259	0.066	0.042	0.062	0.094	0.08	0.093	0.076	0.056	0.075
	(0.016)***	(0.022)***	(0.009)***	(0.003)***	(0.006)***	(0.002)***	(0.008)***	(0.008)***	(0.01)***	(0.006)***	(0.005)***	(0.006)***	(0.003)***	(0.004)***	(0.003)***	(0.005)***	(0.003)***	(0.006)***
Observations	245205	487056	174239	256697	510154	219299	243912	488826	288875	269271	528369	248674	281837	564578	271090	290900	582406	235960
Panel (d). Functional Form: Quartic Polynomial																		
Before	0.422	0.46	0.428	0.142	0.165	0.145	0.22	0.264	0.263	0.043	0.069	0.043	0.093	0.082	0.097	0.069	0.064	0.079
	(0.012)***	(0.015)***	(0.012)***	(0.003)***	(0.009)***	(0.003)***	(0.005)***	(0.011)***	(0.012)***	(0.003)***	(0.006)***	(0.004)***	(0.004)***	(0.005)***	(0.004)***	(0.005)***	(0.004)***	(0.007)***
Observations	245205	487056	279951	256697	510154	237610	243912	488826	418777	269271	528369	228557	281837	564578	355036	290900	582406	355378

Panel B. 2009 Registration Rates

Upstream Election	1988 Plebiscite			1989 Election			1993 Election			1999 Election			2005 Election			2009 Election		
Bandwidth	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Panel (a). Functional Form: Linear Polynomial																		
Before	0.124	0.14	0.108	0.017	0	0.025	0.054	0.063	0.076	0.019	0.016	0.018	0.033	0.04	0.032	0.068	0.088	0.068
	(0.008)***	(0.007)***	(0.007)***	(0.004)***	(0.003)	(0.006)***	(0.006)***	(0.004)***	(0.006)***	(0.003)***	(0.002)***	(0.003)***	(0.003)***	(0.003)***	(0.003)***	(0.002)***	(0.004)***	(0.002)***
Control Mean	0.692	0.684	0.691	0.661	0.665	0.652	0.416	0.415	0.413	0.298	0.293	0.298	0.165	0.164	0.165			
Observations	245205	487056	98433	256697	510154	123649	243912	488826	104262	269271	528369	289901	281837	564578	239804	290900	582406	115225
Panel (b). Functional Form: Quadratic Polynomial																		
Before	0.115	0.127	0.109	0.028	0.015	0.027	0.082	0.049	0.084	0.02	0.02	0.023	0.03	0.031	0.029	0.059	0.066	0.072
	(0.007)***	(0.008)***	(0.007)***	(0.005)***	(0.005)***	(0.006)***	(0.006)***	(0.007)***	(0.007)***	(0.004)***	(0.003)***	(0.003)***	(0.005)***	(0.003)***	(0.004)***	(0.004)***	(0.002)***	(0.004)***
Control Mean	0.692	0.684	0.694	0.661	0.665	0.655	0.416	0.415	0.415	0.298	0.293	0.298	0.165	0.164	0.165			
Observations	245205	487056	218698	256697	510154	210339	243912	488826	197564	269271	528369	319943	281837	564578	376015	290900	582406	214525
Panel (c). Functional Form: Cubic Polynomial																		
Before	0.097	0.112	0.107	0.033	0.03	0.027	0.085	0.069	0.093	0.03	0.017	0.017	0.038	0.03	0.029	0.076	0.056	0.074
	(0.006)***	(0.008)***	(0.006)***	(0.005)***	(0.006)***	(0.006)***	(0.009)***	(0.007)***	(0.008)***	(0.005)***	(0.004)***	(0.004)***	(0.006)***	(0.004)***	(0.005)***	(0.005)***	(0.003)***	(0.006)***
Control Mean	0.692	0.684	0.695	0.661	0.665	0.66	0.416	0.415	0.415	0.298	0.293	0.297	0.165	0.164	0.165			
Observations	245205	487056	333887	256697	510154	321578	243912	488826	306775	269271	528369	528369	281837	564578	431061	290900	582406	235960
Panel (d). Functional Form: Quartic Polynomial																		
Before	0.099	0.099	0.099	0.044	0.041	0.029	0.066	0.093	0.093	0.023	0.028	0.03	0.036	0.031	0.031	0.069	0.063	0.079
	(0.007)***	(0.007)***	(0.007)***	(0.005)***	(0.005)***	(0.006)***	(0.01)***	(0.008)***	(0.008)***	(0.007)***	(0.005)***	(0.005)***	(0.009)***	(0.006)***	(0.006)***	(0.005)***	(0.004)***	(0.007)***
Control Mean	0.692	0.684	0.692	0.661	0.665	0.66	0.416	0.415	0.415	0.298	0.293	0.297	0.165	0.164	0.164			
Observations	245205	487056	487056	256697	510154	359259	243912	488826	488826	269271	528369	448408	281837	564578	564578	290900	582406	355378

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table A.3 presents estimates of equation (2) for first-stage registration and registration by the 2009 election.

Table A.4: Robustness Checks. Regression Discontinuity Estimates: Upstream Elections on 2013 Turnout

Upstream Election	1988 Plebiscite			1989 Election			1993 Election			1999 Election			2005 Election			2009 Election		
Bandwidth	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Panel A. 2013																		
Panel (a). Functional Form: Linear Polynomial																		
Before	0.03	0.038	0.026	0	-0.008	0.003	0.014	0.011	0.022	-0.008	-0.006	-0.009	-0.007	-0.009	-0.006	-0.005	-0.006	-0.007
	(0.005)***	(0.004)***	(0.006)***	(0.003)	(0.002)***	(0.004)	(0.004)***	(0.003)***	(0.004)***	(0.003)***	(0.002)***	(0.003)***	(0.005)	(0.003)***	(0.004)	(0.005)	(0.003)**	(0.004)*
Control Mean	0.504	0.5	0.503	0.489	0.486	0.488	0.41	0.408	0.411	0.364	0.358	0.364	0.344	0.343	0.344	0.315	0.312	0.314
Observations	245205	487056	136524	256697	510154	191578	243912	488826	133171	269271	528369	218527	281837	564578	355036	290900	582406	398822
Panel (b). Functional Form: Quadratic Polynomial																		
Before	0.025	0.034	0.021	0.004	-0.004	0.004	0.025	0.009	0.025	-0.006	-0.013	-0.006	-0.008	-0.006	-0.008	0.001	-0.006	0.004
	(0.006)***	(0.005)***	(0.006)***	(0.005)	(0.003)	(0.005)	(0.004)***	(0.005)*	(0.004)***	(0.004)	(0.004)***	(0.004)	(0.008)	(0.005)	(0.007)	(0.008)	(0.005)	(0.008)
Control Mean	0.504	0.5	0.505	0.489	0.486	0.489	0.41	0.408	0.41	0.364	0.358	0.363	0.344	0.343	0.344	0.315	0.312	0.315
Observations	245205	487056	271177	256697	510154	247191	243912	488826	243912	269271	528369	279692	281837	564578	365408	290900	582406	268437
Panel (c). Functional Form: Cubic Polynomial																		
Before	0.016	0.021	0.02	-0.009	0.008	0.004	0.024	0.027	0.029	0	-0.002	-0.002	-0.006	-0.007	-0.01	0.008	0	0.008
	(0.007)**	(0.005)***	(0.006)***	(0.005)*	(0.005)	(0.006)	(0.006)***	(0.005)***	(0.005)***	(0.004)	(0.004)	(0.004)	(0.012)	(0.008)	(0.009)	(0.009)	(0.007)	(0.008)
Control Mean	0.504	0.5	0.503	0.489	0.486	0.487	0.41	0.408	0.408	0.364	0.358	0.359	0.344	0.343	0.343	0.315	0.312	0.314
Observations	245205	487056	399620	256697	510154	389115	243912	488826	418777	269271	528369	448408	281837	564578	453275	290900	582406	409389
Panel (d). Functional Form: Quartic Polynomial																		
Before	0.026	0.017	0.016	-0.005	0.004	-0.008	0.02	0.027	0.031	-0.005	-0.004	-0.002	0	-0.011	-0.012	0.008	0.005	0.004
	(0.01)***	(0.007)**	(0.006)***	(0.007)	(0.006)	(0.006)	(0.007)***	(0.004)***	(0.005)***	(0.006)	(0.004)	(0.004)	(0.015)	(0.011)	(0.01)	(0.013)	(0.008)	(0.008)
Control Mean	0.504	0.5	0.498	0.489	0.486	0.486	0.41	0.408	0.408	0.364	0.358	0.358	0.344	0.343	0.343	0.315	0.312	0.312
Observations	245205	487056	557003	256697	510154	379020	243912	488826	447969	269271	528369	487850	281837	564578	586456	290900	582406	618523

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Table A.4 presents estimates of equation (2) for each upstream election on 2013 electoral turnout. The column 'Optimal' refers to the estimated optimal CCT bandwidth for the corresponding polynomial presented in Table A.1.

Table A.5: Robustness Checks. Regression Discontinuity Estimates: Upstream Elections on 2016 Turnout

Upstream Election	1988 Plebiscite			1989 Election			1993 Election			1999 Election			2005 Election			2009 Election		
Bandwidth	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Panel (a). Functional Form: Linear Polynomial																		
Before	0.021	0.021	0.02	0.005	-0.003	0.006	0.006	0.005	0.008	-0.005	-0.004	-0.007	-0.001	-0.002	0	-0.007	-0.005	-0.009
	(0.004)***	(0.003)***	(0.004)***	(0.003)*	(0.002)	(0.003)**	(0.004)	(0.003)*	(0.004)**	(0.004)	(0.003)	(0.003)**	(0.003)	(0.002)	(0.003)	(0.004)*	(0.003)*	(0.004)**
Control Mean	0.369	0.368	0.37	0.359	0.358	0.359	0.319	0.314	0.32	0.271	0.266	0.268	0.234	0.233	0.234	0.221	0.219	0.221
Observations	244113	484999	226512	255715	508273	218470	243323	487590	215129	268891	527539	339024	281466	563803	312696	289952	580553	311374
Panel (b). Functional Form: Quadratic Polynomial																		
Before	0.02	0.025	0.018	0.004	0.003	0.005	0.016	0.003	0.015	-0.007	-0.009	-0.003	0.001	0.002	0.001	-0.007	-0.01	-0.005
	(0.005)***	(0.004)***	(0.005)***	(0.004)	(0.004)	(0.004)	(0.006)***	(0.005)	(0.006)**	(0.005)	(0.004)**	(0.005)	(0.004)	(0.004)	(0.004)	(0.007)	(0.005)**	(0.006)
Control Mean	0.369	0.368	0.37	0.359	0.358	0.359	0.319	0.314	0.319	0.271	0.266	0.268	0.234	0.233	0.233	0.221	0.219	0.22
Observations	244113	484999	270003	255715	508273	265198	243323	487590	252387	268891	527539	319458	281466	563803	375461	289952	580553	354208
Panel (c). Functional Form: Cubic Polynomial																		
Before	0.007	0.016	0.012	-0.001	0.008	0.004	0.012	0.018	0.016	-0.004	-0.003	-0.002	-0.004	-0.002	-0.001	0.003	-0.007	-0.002
	(0.005)	(0.005)***	(0.004)***	(0.006)	(0.004)**	(0.005)	(0.007)*	(0.006)***	(0.006)***	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.004)	(0.007)	(0.006)	(0.007)
Control Mean	0.369	0.368	0.37	0.359	0.358	0.359	0.319	0.314	0.316	0.271	0.266	0.267	0.234	0.233	0.234	0.221	0.219	0.221
Observations	244113	484999	369248	255715	508273	367664	243323	487590	379912	268891	527539	398265	281466	563803	396834	289952	580553	397517
Panel (d). Functional Form: Quartic Polynomial																		
Before	-0.017	0.011	0.011	0.006	0.007	-0.003	0.024	0.014	0.013	0.006	-0.005	-0.004	-0.005	0.002	0.002	-0.001	-0.003	-0.003
	(0.008)**	(0.005)**	(0.004)***	(0.008)	(0.005)	(0.006)	(0.007)***	(0.006)**	(0.006)**	(0.006)	(0.006)	(0.006)	(0.007)	(0.005)	(0.005)	(0.01)	(0.008)	(0.007)
Control Mean	0.369	0.368	0.368	0.359	0.358	0.358	0.319	0.314	0.315	0.271	0.266	0.266	0.234	0.233	0.233	0.221	0.219	0.219
Observations	244113	484999	514893	255715	508273	427697	243323	487590	457737	268891	527539	567688	281466	563803	563803	289952	580553	662677

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table A.5 presents estimates of equation (2) for each upstream election on 2016 electoral turnout. The column 'Optimal' refers to the estimated optimal CCT bandwidth for the corresponding polynomial presented in Table A.1.

Table A.6: Robustness Checks. Regression Discontinuity Estimates: Upstream Elections on 2017 Turnout

Upstream Election	1988 Plebiscite			1989 Election			1993 Election			1999 Election			2005 Election			2009 Election		
Bandwidth	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Panel (a). Functional Form: Linear Polynomial																		
Before	0.018	0.027	0.016	0.003	-0.004	0.008	-0.003	-0.006	0.007	-0.002	-0.005	-0.005	-0.01	-0.013	-0.01	-0.006	-0.01	-0.007
	(0.004)***	(0.003)***	(0.004)***	(0.004)	(0.003)	(0.004)**	(0.004)	(0.003)**	(0.005)	(0.003)	(0.003)*	(0.003)*	(0.003)***	(0.002)***	(0.004)**	(0.004)	(0.003)***	(0.005)
Control Mean	0.483	0.482	0.483	0.476	0.474	0.473	0.441	0.435	0.443	0.398	0.393	0.396	0.386	0.383	0.386	0.376	0.372	0.376
Observations	244110	486272	163608	255900	508650	163030	243443	487852	160480	268775	527447	329029	281427	563723	239489	289764	580243	256631
Panel (b). Functional Form: Quadratic Polynomial																		
Before	0.016	0.022	0.013	0.013	-0.002	0.014	0.014	-0.006	0.013	-0.005	-0.004	-0.003	-0.009	-0.013	-0.007	-0.009	-0.01	-0.002
	(0.005)***	(0.004)***	(0.005)***	(0.005)***	(0.004)	(0.005)***	(0.006)**	(0.005)	(0.007)*	(0.005)	(0.004)	(0.005)	(0.006)	(0.004)***	(0.006)	(0.007)	(0.005)**	(0.006)
Control Mean	0.483	0.482	0.485	0.476	0.474	0.476	0.441	0.435	0.441	0.398	0.393	0.397	0.386	0.383	0.385	0.376	0.372	0.375
Observations	244110	486272	296205	255900	508650	265397	243443	487852	233981	268775	527447	289371	281427	563723	312640	289764	580243	343107
Panel (c). Functional Form: Cubic Polynomial																		
Before	0.004	0.009	0.009	0.002	0.015	0.021	0.009	0.013	0.014	-0.008	-0.003	-0.004	-0.004	-0.007	-0.004	-0.01	-0.004	-0.008
	(0.006)	(0.005)*	(0.006)	(0.007)	(0.005)***	(0.006)***	(0.008)	(0.006)**	(0.006)**	(0.006)	(0.005)	(0.005)	(0.008)	(0.006)	(0.006)	(0.007)	(0.007)	(0.008)
Control Mean	0.483	0.482	0.484	0.476	0.474	0.474	0.441	0.435	0.436	0.398	0.393	0.395	0.386	0.383	0.383	0.376	0.372	0.376
Observations	244110	486272	417328	255900	508650	418091	243443	487852	417920	268775	527447	368113	281427	563723	508030	289764	580243	364724
Panel (d). Functional Form: Quartic Polynomial																		
Before	0.013	0.01	0.005	0.008	0.017	0.003	0.01	0.013	0.018	0.002	-0.004	-0.001	0.001	-0.004	-0.004	-0.021	-0.008	-0.012
	(0.007)*	(0.006)*	(0.006)	(0.013)	(0.006)***	(0.008)	(0.007)	(0.007)*	(0.008)**	(0.007)	(0.005)	(0.006)	(0.012)	(0.008)	(0.008)	(0.007)***	(0.007)	(0.007)*
Control Mean	0.483	0.482	0.481	0.476	0.474	0.474	0.441	0.435	0.435	0.398	0.393	0.393	0.386	0.383	0.383	0.376	0.372	0.374
Observations	244110	486272	576709	255900	508650	367980	243443	487852	457980	268775	527447	486985	281427	563723	518990	289764	580243	465555

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL).*
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table A.6 presents estimates of equation (2) for each upstream election on 2017 electoral turnout. The column 'Optimal' refers to the estimated optimal CCT bandwidth for the corresponding polynomial presented in Table A.1.

Table A.7: Estimated Regression Discontinuity Effects of Upstream Election Eligibility on 2013, 2016 and 2017 Turnout

	13-Week Bandwidth			26-Week Bandwidth		
	2013	2016	2017	2013	2016	2017
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. 1988 Plebiscite						
Before	0.026	0.020	0.014	0.030	0.021	0.018
	(0.006)***	(0.005)***	(0.004)***	(0.005)***	(0.004)***	(0.004)***
Control Mean	0.503	0.368	0.484	0.504	0.369	0.483
Observations	132363	131739	131740	250388	249273	249265
Panel B. 1989 Election						
Before	-0.003	0.001	0.004	0.000	0.005	0.003
	(0.004)	(0.004)	(0.005)	(0.003)	(0.003)	(0.004)
Control Mean	0.487	0.356	0.472	0.489	0.359	0.476
Observations	138938	138445	138569	261786	260791	260984
Panel C. 1993 Election						
Before	0.020	0.009	0.007	0.014	0.006	-0.003
	(0.004)***	(0.005)*	(0.006)	(0.004)***	(0.004)	(0.004)
Control Mean	0.41	0.32	0.44	0.41	0.319	0.441
Observations	128641	128336	128406	248871	248262	248386
Panel D. 1999 Election						
Before	-0.006	-0.009	-0.008	-0.008	-0.005	-0.002
	(0.004)	(0.005)*	(0.004)*	(0.003)**	(0.004)	(0.003)
Control Mean	0.364	0.27	0.398	0.364	0.271	0.398
Observations	142265	142107	142010	274566	274187	274071
Panel E. 2005 Election						
Before	-0.005	0.000	-0.007	-0.007	-0.001	-0.010
	(0.008)	(0.004)	(0.006)	(0.005)	(0.003)	(0.003)***
Control Mean	0.345	0.235	0.386	0.344	0.234	0.386
Observations	150043	149869	149843	287364	286995	286954
Panel F. 2009 Election						
Before	0.000	-0.005	-0.009	-0.005	-0.007	-0.006
	(0.007)	(0.006)	(0.006)	(0.005)	(0.004)*	(0.004)
Control Mean	0.314	0.222	0.374	0.315	0.221	0.376
Observations	155248	154694	154575	296631	295661	295466

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL*).
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$
Table A.7 presents estimates of equation (2) using a linear functional form with a 13-week (columns (1)-(3)) and 26-week (columns (4)-(6)) bandwidth across each election cut-off. The results refer to the estimated impacts of upstream election eligibility (1988 Plebiscite, 1989 1993, 1999, 2005 and 2009 Presidential elections) on turnout in the 2013, 2016 and 2017 elections.

Table A.8: Robustness Checks. Fuzzy Regression Discontinuity Estimates: Upstream Elections on 2013 Turnout

Upstream Election	1988 Plebiscite			1989 Election			1993 Election			1999 Election			2005 Election			2009 Election		
Bandwidth	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Panel (a). Functional Form: Linear Polynomial																		
Before	0.054	0.061	0.05	-0.002	-0.071	0.018	0.067	0.049	0.095	-0.175	-0.117	-0.189	-0.083	-0.085	-0.068	-0.073	-0.071	-0.09
	(0.007)***	(0.006)***	(0.01)***	(0.021)	(0.022)***	(0.023)	(0.019)***	(0.013)***	(0.018)***	(0.066)***	(0.046)**	(0.073)***	(0.053)	(0.029)***	(0.042)	(0.069)	(0.037)*	(0.051)*
Control Mean	0.504	0.5	0.503	0.489	0.486	0.488	0.41	0.408	0.411	0.364	0.358	0.364	0.344	0.343	0.344	0.315	0.312	0.314
Observations	245205	487056	136524	256697	510154	191578	243912	488826	133171	269271	528369	218527	281837	564578	355036	290900	582406	398822
Panel (b). Functional Form: Quadratic Polynomial																		
Before	0.05	0.062	0.042	0.027	-0.027	0.025	0.105	0.046	0.105	-0.106	-0.271	-0.104	-0.103	-0.065	-0.098	0.023	-0.088	0.06
	(0.011)***	(0.008)***	(0.011)***	(0.032)	(0.026)	(0.034)	(0.017)***	(0.023)**	(0.017)***	(0.068)	(0.078)***	(0.068)	(0.105)	(0.059)	(0.087)	(0.129)	(0.078)	(0.123)
Control Mean	0.504	0.5	0.505	0.489	0.486	0.489	0.41	0.408	0.41	0.364	0.358	0.363	0.344	0.343	0.344	0.315	0.312	0.315
Observations	245205	487056	271177	256697	510154	247191	243912	488826	243912	269271	528369	279692	281837	564578	365408	290900	582406	268437
Panel (c). Functional Form: Cubic Polynomial																		
Before	0.035	0.042	0.041	-0.059	0.047	0.027	0.096	0.122	0.122	-0.001	-0.048	-0.045	-0.065	-0.089	-0.129	0.107	-0.008	0.128
	(0.014)**	(0.01)***	(0.012)***	(0.036)	(0.029)	(0.034)	(0.023)***	(0.02)***	(0.02)***	(0.056)	(0.087)	(0.069)	(0.131)	(0.097)	(0.112)	(0.122)	(0.126)	(0.123)
Control Mean	0.504	0.5	0.503	0.489	0.486	0.487	0.41	0.408	0.408	0.364	0.358	0.359	0.344	0.343	0.343	0.315	0.312	0.314
Observations	245205	487056	399620	256697	510154	389115	243912	488826	418777	269271	528369	448408	281837	564578	453275	290900	582406	409389
Panel (d). Functional Form: Quartic Polynomial																		
Before	0.061	0.037	0.033	-0.038	0.026	-0.061	0.091	0.103	0.118	-0.122	-0.061	-0.028	-0.001	-0.14	-0.143	0.115	0.082	0.066
	(0.021)***	(0.014)***	(0.013)**	(0.05)	(0.038)	(0.043)	(0.033)***	(0.018)***	(0.02)***	(0.13)	(0.059)	(0.063)	(0.159)	(0.132)	(0.129)	(0.18)	(0.131)	(0.136)
Control Mean	0.504	0.5	0.498	0.489	0.486	0.486	0.41	0.408	0.408	0.364	0.358	0.358	0.344	0.343	0.343	0.315	0.312	0.312
Observations	245205	487056	557003	256697	510154	379020	243912	488826	447969	269271	528369	487850	281837	564578	586456	290900	582406	618523

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table A.8 presents fuzzy regression discontinuity estimates for each upstream election on 2013 electoral turnout. The column 'Optimal' refers to the estimated optimal CCT bandwidth for the corresponding polynomial presented in Table A.1.

Table A.9: Robustness Checks. Fuzzy Regression Discontinuity Estimates: Upstream Elections on 2016 Turnout

Upstream Election	1988 Plebiscite			1989 Election			1993 Election			1999 Election			2005 Election			2009 Election		
Bandwidth	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Panel (a). Functional Form: Linear Polynomial																		
Before	0.037	0.035	0.036	0.034	-0.023	0.041	0.029	0.024	0.038	-0.101	-0.088	-0.149	-0.006	-0.017	0.004	-0.109	-0.058	-0.123
	(0.006)***	(0.005)***	(0.007)***	(0.021)	(0.021)	(0.023)*	(0.021)	(0.014)*	(0.02)*	(0.079)	(0.05)*	(0.068)**	(0.038)	(0.023)	(0.034)	(0.061)*	(0.032)*	(0.057)**
Control Mean	0.369	0.368	0.37	0.359	0.358	0.359	0.319	0.314	0.32	0.271	0.266	0.268	0.234	0.233	0.234	0.221	0.219	0.221
Observations	244113	484999	226512	255715	508273	218470	243323	487590	215129	268891	527539	339024	281466	563803	312696	289952	580553	311374
Panel (b). Functional Form: Quadratic Polynomial																		
Before	0.041	0.046	0.036	0.025	0.019	0.032	0.067	0.015	0.063	-0.13	-0.173	-0.062	0.013	0.025	0.015	-0.126	-0.15	-0.079
	(0.01)***	(0.007)***	(0.009)***	(0.027)	(0.026)	(0.027)	(0.025)***	(0.024)	(0.024)***	(0.089)	(0.077)**	(0.095)	(0.052)	(0.042)	(0.052)	(0.115)	(0.068)**	(0.098)
Control Mean	0.369	0.368	0.37	0.359	0.358	0.359	0.319	0.314	0.319	0.271	0.266	0.268	0.234	0.233	0.233	0.221	0.219	0.22
Observations	244113	484999	270003	255715	508273	265198	243323	487590	252387	268891	527539	319458	281466	563803	375461	289952	580553	354208
Panel (v). Functional Form: Cubic Polynomial																		
Before	0.015	0.031	0.026	-0.007	0.047	0.025	0.048	0.08	0.066	-0.053	-0.083	-0.041	-0.04	-0.028	-0.007	0.042	-0.121	-0.035
	(0.012)	(0.009)***	(0.009)***	(0.041)	(0.026)*	(0.029)	(0.027)*	(0.025)***	(0.023)***	(0.08)	(0.119)	(0.091)	(0.054)	(0.051)	(0.052)	(0.097)	(0.112)	(0.114)
Control Mean	0.369	0.368	0.37	0.359	0.358	0.359	0.319	0.314	0.316	0.271	0.266	0.267	0.234	0.233	0.234	0.221	0.219	0.221
Observations	244113	484999	369248	255715	508273	367664	243323	487590	379912	268891	527539	398265	281466	563803	396834	289952	580553	397517
Panel (d). Functional Form: Quartic Polynomial																		
Before	-0.039	0.025	0.023	0.042	0.04	-0.019	0.108	0.054	0.051	0.14	-0.078	-0.07	-0.057	0.024	0.024	-0.021	-0.048	-0.049
	(0.018)**	(0.01)**	(0.009)**	(0.058)	(0.03)	(0.043)	(0.033)***	(0.024)**	(0.024)**	(0.135)	(0.08)	(0.09)	(0.073)	(0.06)	(0.06)	(0.138)	(0.12)	(0.118)
Control Mean	0.369	0.368	0.368	0.359	0.358	0.358	0.319	0.314	0.315	0.271	0.266	0.266	0.234	0.233	0.233	0.221	0.219	0.219
Observations	244113	484999	514893	255715	508273	427697	243323	487590	457737	268891	527539	567688	281466	563803	563803	289952	580553	662677

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL).*
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table A.9 presents fuzzy regression discontinuity estimates for each upstream election on 2016 electoral turnout. The column 'Optimal' refers to the estimated optimal CCT bandwidth for the corresponding polynomial presented in Table A.1.

Table A.10: Robustness Checks. Fuzzy Regression Discontinuity Estimates: Upstream Elections on 2017 Turnout

Upstream Election	1988 Plebiscite			1989 Election			1993 Election			1999 Election			2005 Election			2009 Election		
Bandwidth	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal	26	52	Optimal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Panel (a). Functional Form: Linear Polynomial																		
Before	0.032	0.044	0.03	0.02	-0.035	0.051	-0.017	-0.028	0.032	-0.037	-0.109	-0.118	-0.115	-0.125	-0.12	-0.085	-0.11	-0.112
	(0.006)***	(0.005)***	(0.007)***	(0.025)	(0.025)	(0.028)*	(0.021)	(0.014)**	(0.022)	(0.077)	(0.055)**	(0.071)*	(0.039)***	(0.024)***	(0.048)**	(0.06)	(0.036)***	(0.069)
Control Mean	0.483	0.482	0.483	0.476	0.474	0.473	0.441	0.435	0.443	0.398	0.393	0.396	0.386	0.383	0.386	0.376	0.372	0.376
Observations	244110	486272	163608	255900	508650	163030	243443	487852	160480	268775	527447	329029	281427	563723	239489	289764	580243	256631
Panel (b). Functional Form: Quadratic Polynomial																		
Before	0.032	0.039	0.025	0.089	-0.019	0.09	0.06	-0.032	0.055	-0.097	-0.074	-0.048	-0.117	-0.154	-0.09	-0.148	-0.149	-0.028
	(0.009)***	(0.006)***	(0.01)**	(0.031)***	(0.032)	(0.03)***	(0.026)**	(0.025)	(0.027)**	(0.087)	(0.077)	(0.086)	(0.074)	(0.047)***	(0.071)	(0.116)	(0.071)**	(0.108)
Control Mean	0.483	0.482	0.485	0.476	0.474	0.476	0.441	0.435	0.441	0.398	0.393	0.397	0.386	0.383	0.385	0.376	0.372	0.375
Observations	244110	486272	296205	255900	508650	265397	243443	487852	233981	268775	527447	289371	281427	563723	312640	289764	580243	343107
Panel (c). Functional Form: Cubic Polynomial																		
Before	0.008	0.017	0.018	0.012	0.089	0.12	0.036	0.06	0.06	-0.114	-0.063	-0.059	-0.042	-0.089	-0.057	-0.132	-0.07	-0.126
	(0.014)	(0.009)*	(0.011)*	(0.049)	(0.028)***	(0.031)***	(0.033)	(0.027)**	(0.027)**	(0.083)	(0.109)	(0.085)	(0.089)	(0.071)	(0.082)	(0.084)	(0.116)	(0.117)
Control Mean	0.483	0.482	0.484	0.476	0.474	0.474	0.441	0.435	0.436	0.398	0.393	0.395	0.386	0.383	0.383	0.376	0.372	0.376
Observations	244110	486272	417328	255900	508650	418091	243443	487852	417920	268775	527447	368113	281427	563723	508030	289764	580243	364724
Panel (d). Functional Form: Quartic Polynomial																		
Before	0.03	0.021	0.01	0.056	0.106	0.024	0.044	0.05	0.067	0.036	-0.062	-0.022	0.01	-0.048	-0.048	-0.302	-0.128	-0.172
	(0.016)*	(0.014)	(0.013)	(0.089)	(0.037)***	(0.06)	(0.033)	(0.029)*	(0.032)**	(0.154)	(0.077)	(0.087)	(0.123)	(0.091)	(0.088)	(0.097)***	(0.112)	(0.102)*
Control Mean	0.483	0.482	0.481	0.476	0.474	0.474	0.441	0.435	0.435	0.398	0.393	0.393	0.386	0.383	0.383	0.376	0.372	0.374
Observations	244110	486272	576709	255900	508650	367980	243443	487852	457980	268775	527447	486985	281427	563723	518990	289764	580243	465555

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL).*
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table A.10 presents fuzzy regression discontinuity estimates for each upstream election on 2017 electoral turnout. The column 'Optimal' refers to the estimated optimal CCT bandwidth for the corresponding polynomial presented in Table A.1.

Table A.11: Estimated Regression Discontinuity Effects of Upstream Election Participation on 2013, 2016 and 2017 Turnout

	13-Week Bandwidth			26-Week Bandwidth		
	2013	2016	2017	2013	2016	2017
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. 1988 Plebiscite						
Before	0.05	0.04	0.027	0.054	0.037	0.032
	(0.010)***	(0.009)***	(0.008)***	(0.007)***	(0.006)***	(0.006)***
Control Mean	0.503	0.368	0.484	0.504	0.369	0.483
First Stage	0.51	0.51	0.509	0.56	0.56	0.559
First Stage F-Stat	528	535	529	752	757	756
Observations	132363	131739	131740	250388	249273	249265
Panel B. 1989 Election						
Before	-0.018	0.004	0.029	-0.002	0.034	0.02
	(0.029)	(0.025)	(0.03)	(0.021)	(0.021)	(0.025)
Control Mean	0.487	0.356	0.472	0.489	0.359	0.476
First Stage	0.149	0.149	0.149	0.145	0.145	0.145
First Stage F-Stat	4504	4721	4446	4507	4489	4347
Observations	138938	138445	138569	261786	260791	260984
Panel C. 1993 Election						
Before	0.087	0.039	0.032	0.067	0.029	-0.017
	(0.018)***	(0.023)*	(0.024)	(0.019)***	(0.021)	(0.021)
Control Mean	0.41	0.32	0.44	0.41	0.319	0.441
First Stage	0.232	0.233	0.232	0.203	0.204	0.203
First Stage F-Stat	7584	7308	7827	797	794	802
Observations	128641	128336	128406	248871	248262	248386
Panel D. 1999 Election						
Before	-0.111	-0.165	-0.142	-0.175	-0.101	-0.037
	(0.07)	(0.089)*	(0.080)*	(0.066)***	(0.079)	(0.077)
Control Mean	0.364	0.27	0.398	0.364	0.271	0.398
First Stage	0.056	0.056	0.056	0.045	0.045	0.045
First Stage F-Stat	657	653	667	264	268	268
Observations	142265	142107	142010	274566	274187	274071
Panel E. 2005 Election						
Before	-0.059	-0.005	-0.079	-0.083	-0.006	-0.115
	(0.084)	(0.042)	(0.062)	(0.053)	(0.038)	(0.039)***
Control Mean	0.345	0.235	0.386	0.344	0.234	0.386
First Stage	0.089	0.089	0.089	0.088	0.088	0.088
First Stage F-Stat	2623	2630	2573	1714	1714	1687
Observations	150043	149869	149843	287364	286995	286954
Panel F. 2009 Election						
Before	0.006	-0.07	-0.128	-0.073	-0.109	-0.085
	(0.099)	(0.085)	(0.088)	(0.069)	(0.061)*	(0.06)
Control Mean	0.314	0.222	0.374	0.315	0.221	0.376
First Stage	0.069	0.069	0.069	0.068	0.069	0.069
First Stage F-Stat	575	568	577	759	753	756
Observations	155248	154694	154575	296631	295661	295466

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL).*
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$
Table A.11 presents estimates of an instrumented regression discontinuity design, where the first stage is given by equation (2) using a linear functional form with 13 (columns (1)-(3)) and 26 (columns (4)-(6)) week bandwidth across each election cut-off. The results refer to the estimated impacts of upstream election participation (1988 Plebiscite, 1989 1993, 1999, 2005 and 2009 Presidential elections) on turnout in the 2013, 2016 and 2017 elections.

Table A.12: Heterogeneous Effects of Upstream Election Eligibility by Gender

	Upstream Election		2009 Registration		2013 Turnout		2016 Turnout		2017 Turnout	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A. 1989 Election										
Before	0.121	0.169	0.017	0.017	-0.006	0.004	0.005	0.005	0	0.005
	(0.004)***	(0.002)***	(0.004)***	(0.007)**	(0.005)	(0.004)	(0.005)	(0.004)	(0.005)	(0.005)
Control Mean	0	0	0.653	0.669	0.537	0.44	0.391	0.327	0.519	0.432
Observations	129223	127474	129223	127474	129223	127474	128877	126838	129124	126776
Panel B. 1993 Election										
Before	0.182	0.223	0.05	0.057	0.015	0.013	0.005	0.008	-0.009	0.003
	(0.008)***	(0.007)***	(0.008)	(0.007)***	(0.005)***	(0.005)**	(0.005)	(0.005)	(0.006)	(0.006)
Control Mean	0	0	0.419	0.412	0.456	0.364	0.353	0.285	0.485	0.396
Observations	122002	121910	122002	121910	122002	121910	121819	121504	121965	121478
Panel C. 1999 Election										
Before	0.049	0.040	0.011	0.028	-0.011	-0.004	-0.002	-0.007	0.002	-0.005
	(0.003)***	(0.003)***	(0.005)***	(0.005)***	(0.005)**	(0.005)	(0.006)	(0.005)	(0.005)	(0.004)
Control Mean	0	0	0.286	0.309	0.405	0.322	0.302	0.239	0.437	0.358
Observations	134462	134809	134462	134809	134462	134809	134416	134475	134498	134277
Panel D. 2005 Election										
Before	0.097	0.079	0.035	0.030	-0.012	-0.003	-0.003	0.002	-0.013	-0.007
	(0.003)***	(0.002)***	(0.004)***	(0.004)***	(0.007)*	(0.005)	(0.004)	(0.004)	(0.005)***	(0.005)
Control Mean	0	0	0.171	0.158	0.379	0.31	0.265	0.204	0.423	0.35
Observations	139339	142498	139339	142498	139339	142498	139304	142162	139394	142033
Panel E. 2009 Election										
Before	0.077	0.06	0.077	0.060	-0.005	-0.005	-0.006	-0.008	-0.003	-0.008
	(0.003)***	(0.002)***	(0.003)***	(0.002)***	(0.006)	(0.006)	(0.006)	(0.004)***	(0.006)	(0.006)
Control Mean	0	0	0	0	0.348	0.282	0.251	0.193	0.415	0.338
Observations	143421	147479	143421	147479	143421	147479	143369	146583	143411	146353

Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL*).
Note: Standard errors in parentheses. Standard errors clustered at the week-of-birth level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Table A.12 presents evidence of heterogeneous effects of upstream eligibility on concurrent upstream election registration, 2009 registration and downstream election participation in a linear, 26-week bandwidth specification.

Table A.13: Complier Characteristics by Upstream Election and Bandwidth

Panel A. 13-Week Bandwidth

Upstream Election	1988 Plebiscite			1989 Election			1993 Election			1999 Election			2005 Election			2009 Election		
	Sample (1)	Compliers (2)	Ratio (3)	Sample (4)	Compliers (5)	Ratio (6)	Sample (7)	Compliers (8)	Ratio (9)	Sample (10)	Compliers (11)	Ratio (12)	Sample (13)	Compliers (14)	Ratio (15)	Sample (16)	Compliers (17)	Ratio (18)
Panel A. Individual Characteristics																		
HS Dropouts	0.348	0.299	0.857	0.328	0.208	0.633	0.285	0.219	0.77	0.22	0.102	0.465	0.129	0.047	0.364	0.158	0.048	0.301
HS Graduates	0.503	0.529	1.05	0.51	0.503	0.986	0.518	0.52	1.003	0.558	0.398	0.713	0.605	0.42	0.694	0.809	0.902	1.114
> HS Graduates	0.148	0.173	1.164	0.162	0.289	1.787	0.197	0.261	1.325	0.222	0.5	2.249	0.266	0.533	2.002	0.032	0.051	1.571
Male	0.495	0.508	1.028	0.494	0.571	1.155	0.501	0.552	1.102	0.5	0.468	0.936	0.507	0.458	0.902	0.507	0.453	0.893
Panel B. Comuna Characteristics																		
Allende Vote	0.365	0.364	0.997	0.366	0.356	0.972	0.366	0.358	0.979	0.367	0.333	0.907	0.369	0.348	0.943	0.371	0.343	0.925
% Electricity	0.901	0.908	1.008	0.907	0.924	1.019	0.909	0.887	0.976	0.916	0.914	0.998	0.916	0.916	1	0.91	0.919	1.009
% Water in home	0.745	0.751	1.008	0.751	0.78	1.039	0.755	0.727	0.964	0.766	0.789	1.03	0.763	0.776	1.018	0.754	0.783	1.039
% TV Ownership	0.865	0.871	1.006	0.87	0.886	1.018	0.872	0.855	0.98	0.877	0.884	1.008	0.877	0.881	1.005	0.872	0.884	1.013
% Toilet in Home	0.688	0.697	1.013	0.696	0.731	1.05	0.701	0.664	0.947	0.714	0.736	1.03	0.711	0.725	1.02	0.7	0.733	1.047
Literacy Rate	0.902	0.903	1.002	0.903	0.91	1.008	0.904	0.899	0.994	0.906	0.913	1.008	0.905	0.909	1.004	0.903	0.911	1.009
Unemployment Rate	0.088	0.088	0.998	0.087	0.084	0.958	0.087	0.088	1.009	0.086	0.078	0.906	0.087	0.082	0.947	0.088	0.081	0.924
Share Compliers			0.615			0.155			0.249			0.061			0.101			0.082
Panel C. Sample Size)																		
Sample Size (Educ.)	97047			100269			96103			109552			111611			111121		
Sample Size	117823			123649			113963			126333			133208			138047		
Ratio	0.824			0.811			0.843			0.867			0.838			0.805		

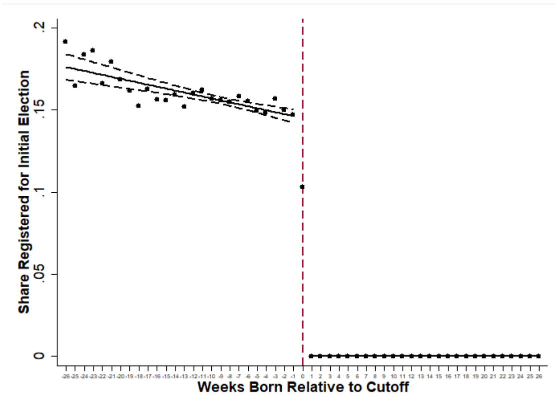
Panel B. 52-Week Bandwidth

Upstream Election	1988 Plebiscite			1989 Election			1993 Election			1999 Election			2005 Election			2009 Election		
	Sample (1)	Compliers (2)	Ratio (3)	Sample (4)	Compliers (5)	Ratio (6)	Sample (7)	Compliers (8)	Ratio (9)	Sample (10)	Compliers (11)	Ratio (12)	Sample (13)	Compliers (14)	Ratio (15)	Sample (16)	Compliers (17)	Ratio (18)
Panel A. Individual Characteristics																		
	Sample	Compliers	Ratio	Sample	Compliers	Ratio	Sample	Compliers	Ratio	Sample	Compliers	Ratio	Sample	Compliers	Ratio	Sample	Compliers	Ratio
HS Dropouts	0.341	0.318	0.933	0.326	0.221	0.679	0.284	0.235	0.827	0.218	0.126	0.577	0.129	0.058	0.452	0.192	0.046	0.242
HS Graduates	0.507	0.524	1.035	0.511	0.523	1.023	0.521	0.536	1.029	0.558	0.466	0.834	0.613	0.446	0.728	0.768	0.853	1.11
> HS Graduates	0.152	0.158	1.035	0.163	0.256	1.567	0.195	0.229	1.174	0.223	0.408	1.828	0.257	0.495	1.925	0.04	0.101	2.511
Male	0.496	0.494	0.996	0.497	0.557	1.122	0.5	0.542	1.083	0.502	0.503	1.002	0.506	0.466	0.923	0.507	0.462	0.911
Panel B. Comuna Characteristics																		
Allende Vote	0.366	0.365	0.998	0.366	0.36	0.983	0.366	0.363	0.993	0.367	0.345	0.939	0.369	0.351	0.951	0.371	0.347	0.936
% Electricity	0.903	0.906	1.003	0.906	0.919	1.015	0.909	0.892	0.982	0.915	0.91	0.994	0.916	0.915	0.999	0.911	0.919	1.01
% Water in home	0.747	0.748	1.001	0.75	0.771	1.029	0.754	0.728	0.965	0.766	0.774	1.011	0.763	0.774	1.015	0.755	0.781	1.034
% TV Ownership	0.867	0.869	1.002	0.869	0.881	1.014	0.872	0.859	0.985	0.877	0.877	1.001	0.877	0.88	1.003	0.873	0.884	1.013
% Toilet in Home	0.691	0.693	1.003	0.695	0.721	1.037	0.7	0.666	0.951	0.714	0.719	1.007	0.711	0.722	1.015	0.702	0.73	1.04
Literacy Rate	0.902	0.903	1	0.903	0.908	1.006	0.904	0.899	0.994	0.906	0.909	1.003	0.905	0.909	1.004	0.903	0.91	1.008
Unemployment Rate	0.088	0.088	1	0.088	0.085	0.973	0.087	0.088	1.018	0.086	0.082	0.948	0.087	0.083	0.957	0.088	0.082	0.939
Share Compliers			0.718			0.215			0.354			0.099			0.132			0.114
Panel C. Sample Size)																		
Sample Size (Educ.)	366706			386733			382522			424834			437883			436478		
Sample Size	477129			499957			478760			518629			553317			570793		
Ratio	0.769			0.774			0.799			0.819			0.791			0.765		

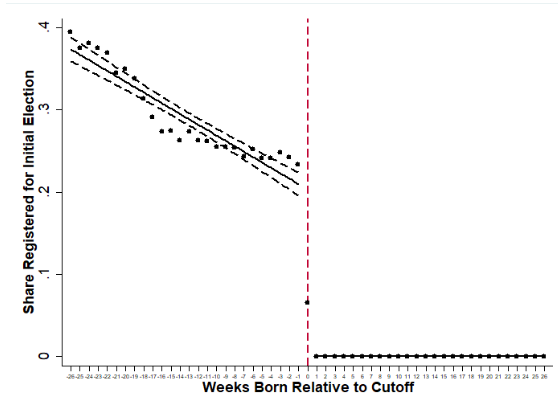
Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL*.
Note: Table A.13 presents complier characteristics by each upstream election and two different bandwidths.

Figure A.1: Differences in First-Stage Registration Across Eligibility Cutoff in Various Elections

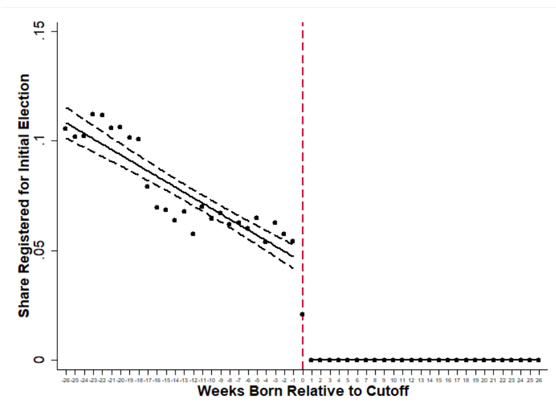
(a) 1989 Election



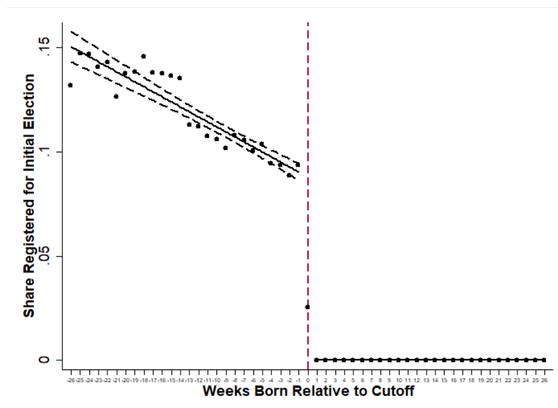
(b) 1993 Election



(c) 1999 Election

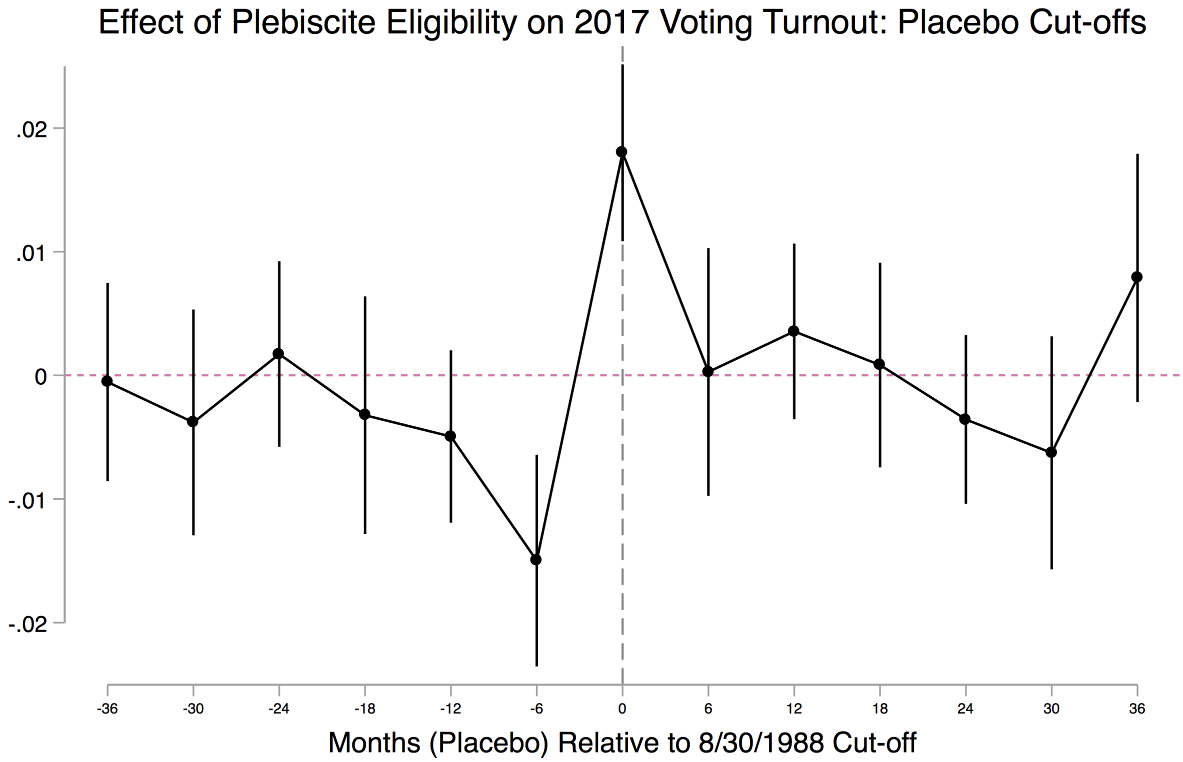


(d) 2005 Election



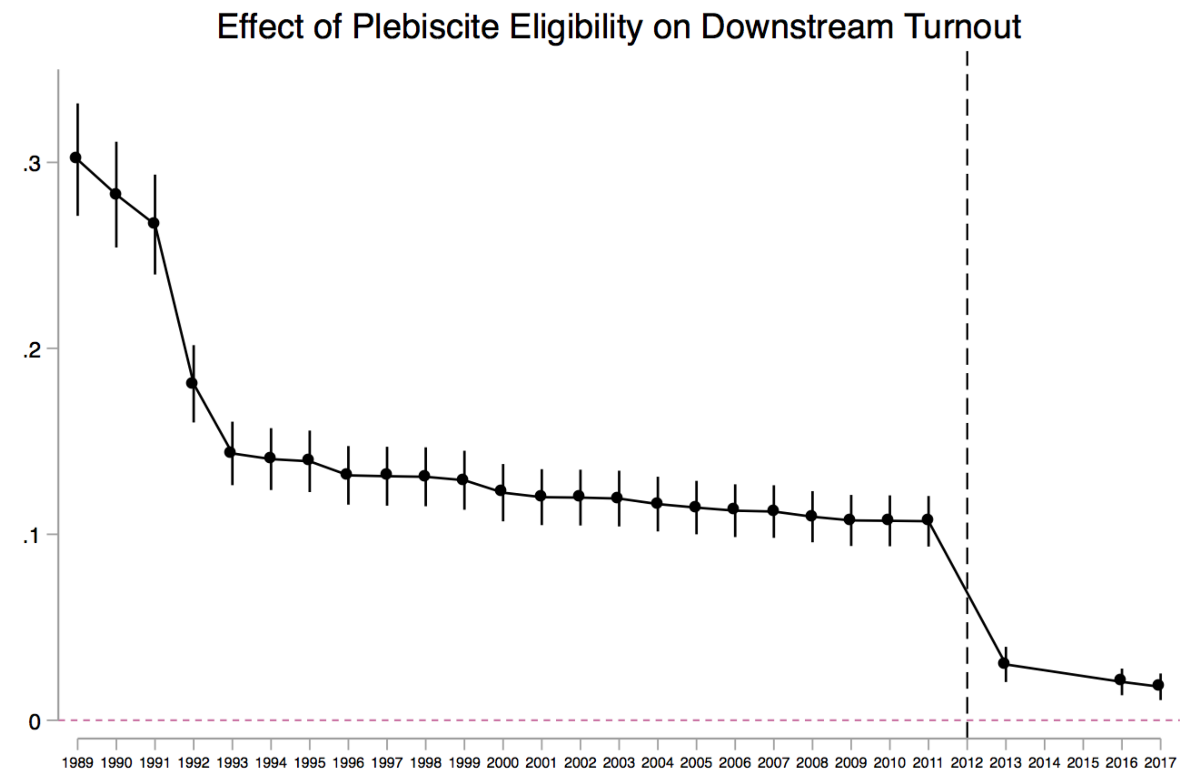
Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Figure A.1 shows graphical evidence of differences in first-stage election registration rates across the eligibility cut-off (26-week bandwidth) in the 1989, 1993, 1999 and 2005 Presidential elections.

Figure A.2: Effect of Plebiscite Eligibility on 2017 Election Turnout: Placebo Cutoffs



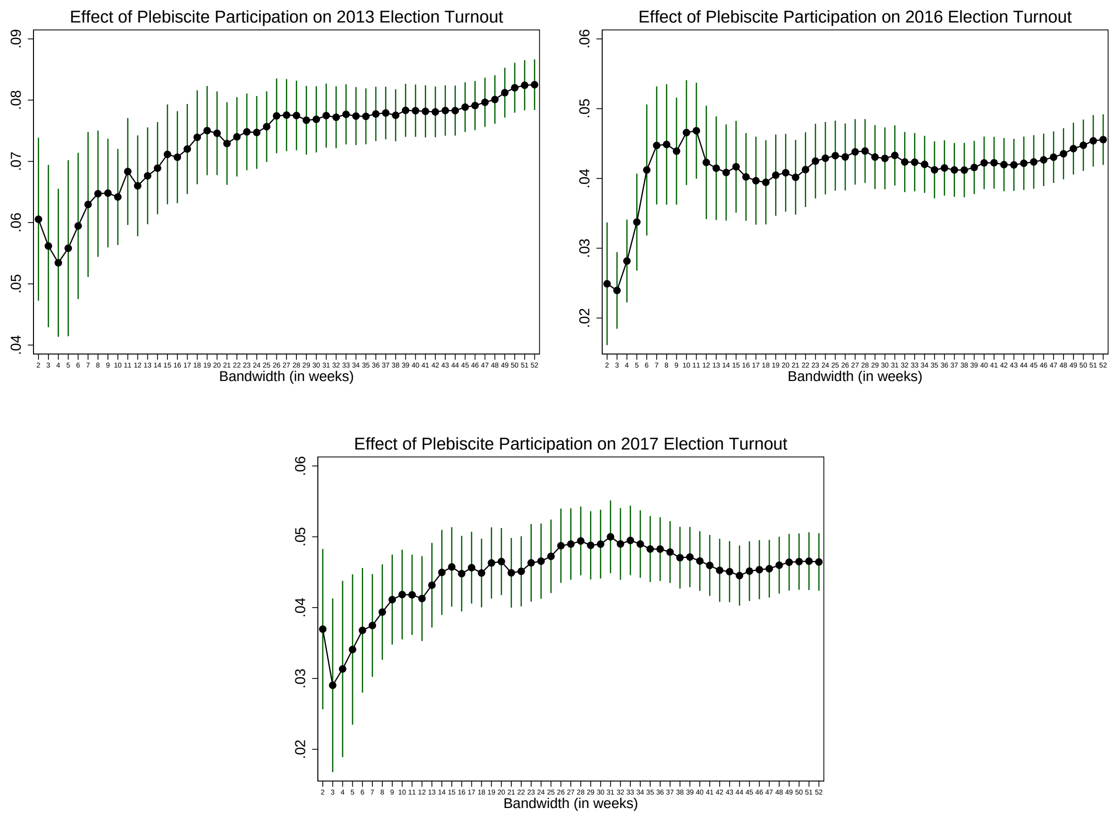
Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*. Note: Figure A.2 shows the estimated effect of Plebiscite eligibility (equation (2) using placebo cutoffs within a three-year window on either side of the cutoff.

Figure A.3: The Effect of Plebiscite Eligibility on Voter Turnout



Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*. Note: Figure A.3 shows graphical evidence of Plebiscite registration rates on differential turnout rates by downstream year. The pre-2009 values correspond to differences in registration rates across the eligibility cut-off deflated by the corresponding election turnout rate — non-election years are deflated by the average turnout rate in the two closest Presidential elections. The post-2009 values correspond directly to the turnout effects presented in Table 5.

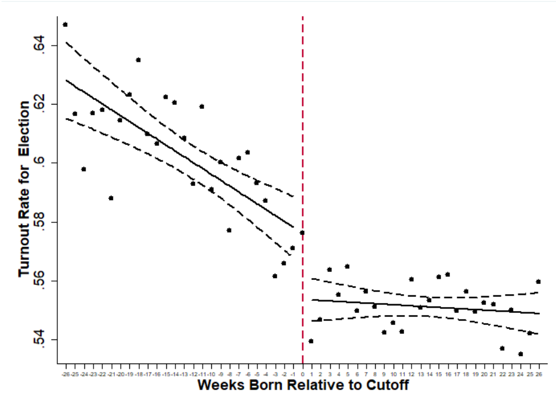
Figure A.4: Effects of Plebiscite Participation on Downstream Electoral Turnout: Robustness to Bandwidth Selection



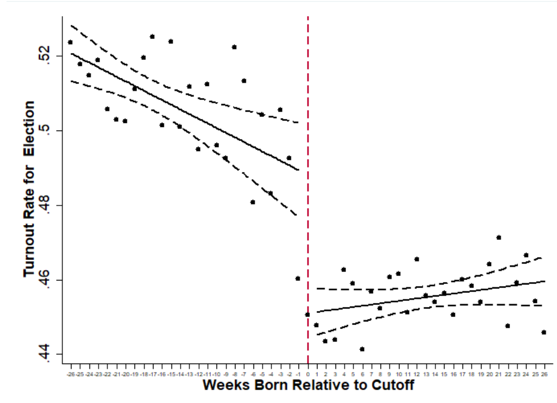
Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Figure A.4 shows the estimated impacts of Plebiscite participation on turnout in the 2013, 2017 Presidential and 2016 municipal elections across the eligibility cut-off in bandwidths ranging from two weeks to one year. The results follow from a linear first-stage specification presented in equation (2) and the instrumental variables specification in Section 5.3.

Figure A.5: Downstream Election Turnout Effects of Plebiscite Eligibility by Gender

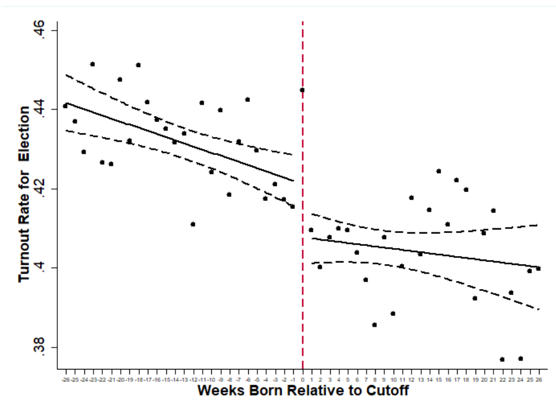
(a) 2013 Election Turnout: Females



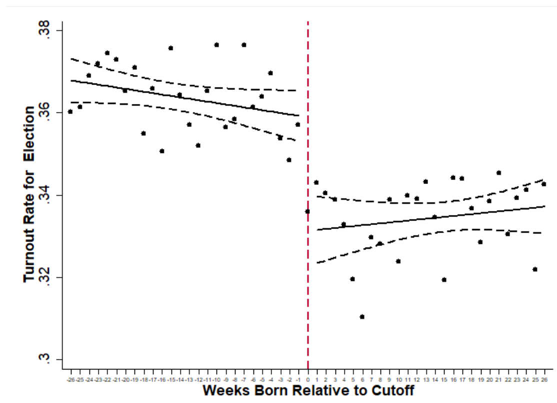
(b) 2013 Election Turnout: Males



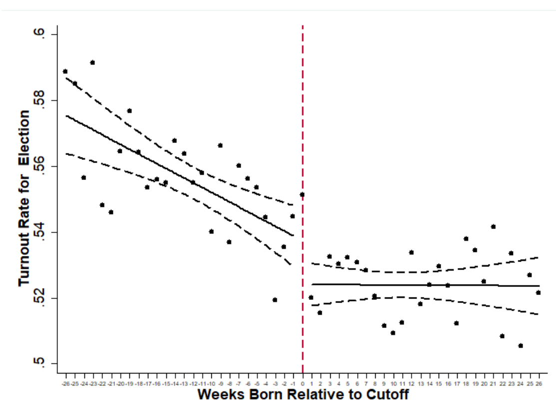
(c) 2016 Election Turnout: Females



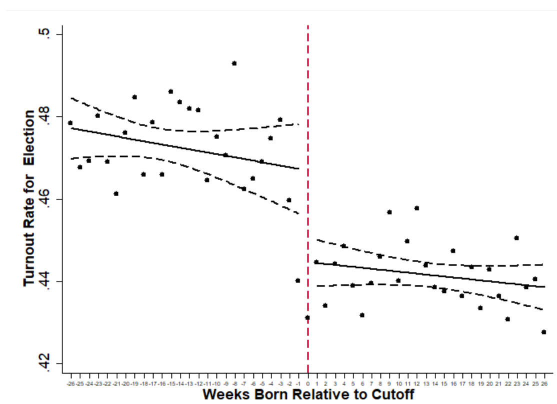
(d) 2016 Election Turnout: Males



(e) 2017 Election Turnout: Females



(f) 2017 Election Turnout: Males



Source: Chile's Electoral Commission (*Servicio Electoral de Chile, SERVEL)*.
Note: Figure A.5 shows graphical evidence of differences in 2013, 2017 Presidential and 2016 municipal election turnout rates across the eligibility cut-off (26-week bandwidth) in the 1988 Plebiscite by gender.