The Electoral Impact of Wealth Redistribution 
Evidence from the Italian Land Reform *

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Abstract

We study the political consequences of a major land reform in Italy, which split large estates and transferred land to small owners. Using a panel spatial regression discontinuity design, we show that the reform benefited the incumbent Christian Democrat party. The electoral benefits persist for four decades. We conjecture that the reform generated a cooperative political equilibrium in which voters in treated towns supported the candidates and the agenda of the incumbent party, and the party promoted the interests of these towns. Analysis of fiscal transfers, public sector employment, and referendum voting supports this hypothesis.

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1 Introduction

The political objective of many large-scale redistribution policies is to establish political support (Acemoglu, 2001). While it is often maintained that successful redistribution during the first years in power can generate lasting political returns and translate into long tenures in office (cf. Kennedy, 1999 for Roosevelt’s US and Galli, 1993 for post-World War II Italy), surprisingly little empirical evidence supports these claims. Moreover, the mechanisms that allow the initial gains to translate into persistent political support remain largely unexplored.

We study the political impact of an important form of wealth redistribution: redistribution of land. Land redistribution is a powerful tool to gain political support in agrarian societies: revolutionary governments of 1790s France, 1920s Russia, and 1940s China all passed ambitious plans of land redistribution during the first years in power. In democratic countries, governments often try to prevent extreme left-wing parties from taking power through land redistribution, as it happened in several Latin American countries in the the 1950s, after the Cuban revolution (Binswanger et al., 1995). In this paper, we study the electoral impact of a large-scale land reform that took place in Italy in the early 1950s, when the Christian Democrat government redistributed land in an effort to stem the rise of Communism in the countryside.

We identify the electoral effect of the reform with a panel spatial regression discontinuity design, using data from several elections. The land reform only targeted towns in well-defined reform areas. This allows us to study differential changes in voting outcomes between treated and control towns close to the borders of these areas. Our empirical design is particularly suited to study the long-term effect of the reform because, unlike approaches that exploit variation in the timing of the implementation, control towns never experience the reform. A few studies have looked at the electoral impact of land titling in Latin America using a difference-in-differences approach (De Janvry et al., 2014; Larreguy et al., 2018). Different from these studies, we can study the persistence of the electoral effects long after the reform is over.

The key identification assumption is that, close to the border, towns on the two sides of the border have parallel trends. Thus, a first challenge is that the Government drew

1Prominent examples of redistribution programs that were successful in creating political support include Franklin Roosevelt’s New Deal policies (Wright, 1974) and Lula’s social programs in Brazil (Zucco Jr., 2013).

2With this strategy, we cannot study the electoral effect of the reform in Sicily and Sardinia, because these two island were entirely included in the reform.

3See also González (2013), who studies the short-term impact of the Chilean land reform on support for Allende in the 1970 elections, using an instrumental variable approach.
some of the borders strategically, to include towns that in 1950 experienced land occupations and riots (Rivera, 1952; Percoco, 2017). Historical accounts suggest that in the South the government used the land reform to check the growth of the Communist party (Calasso, 1952 and documents in the DC archive). In contrast, there is no record of strategic behavior in Northern and Central Italy (De Caro, 1951; Toldo, 1957). Consistent with these accounts, formal tests show that towns on the two sides of the border are on similar pre-trends (and, more generally, balanced on a wide range of observables) in Northern-Central Italy but not in the South. These results indicate that our empirical approach is valid for Northern and Central Italy only, and we focus on these regions throughout the paper.

Christian Democrats (DC), the incumbent party that implemented the reform, experience a four percentage point increase in vote shares in treated towns (from a mean of 35% in the post-reform elections of our sample). The effect materializes during the first elections after the reform, and remains remarkably stable for the following four decades. Christian Democrats’ gains are the mirror image of the electoral losses of the Communist Party, Italy’s second party and direct contender of DC.

The immediate electoral gains are consistent with the observations of a number of contemporary commentators. The persistence may instead be surprising, especially given the falling importance of agriculture in the decades after the reform. We propose an explanation for this persistence: the reform induced a cooperative political equilibrium between the voters and DC. During the implementation of the reform, DC managed land redistribution and gained initial political support in treated towns. After the redistribution, DC governments continued to invest more in these towns. We find that treated towns receive more fiscal transfers from the central government and have a greater share of workers employed in the public sector. In response, voters in treated towns supported DC candidates in general elections as well as the DC policy agenda. Looking at a highly divisive 1974 referendum, in which DC supported the repeal of a law on divorce, we find that voters in treated towns are more likely to vote for the repeal.

We hypothesize that continued investment in treated towns enabled DC to maintain voters’ support, as part of a cooperative strategy in a repeated interaction with voters. The cooperation lasted over 40 years of uninterrupted DC rule, until a major crisis upended Italian politics in 1993-94 and led to the break-up of the Christian Democratic party.

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4 Institute don Luigi Sturzo, Rome: Archivio della Segreteria DC; box 9, folder 10: “land reform”.
5 Discarding portions of the sample for which key identification assumptions are violated is standard in empirical microeconomics (for a prominent example, see, e.g., Dell, 2010).
6 The Christian Democrats dominated post-war Italian politics for almost 50 years: while historians, sociologists and political scientists have long studied DC (Galli, 2007; Marzano, 1996; Giovagnoli, 1996), we
argument clarifies that our results on the persistent impact of the reform should be interpreted as reduced form estimates. The political investments the DC made after the reform may have helped maintain its electoral advantage and the repeated game logic helps explain why DC would continue investing in treated towns after the reform. Importantly, we do not aim to separately identify the “direct” electoral effect of the land reform and the “indirect” effects of the subsequent investments.

Relative to the literature of voters’ response to redistribution (Levitt and Snyder Jr. 1997), we document a 40-years persistence of the effect of the land reform. This persistence is surprising, and contrasts with extensive evidence of short-lived electoral effects of policies (Bechtel and Hainmueller 2011; Zucco Jr. 2013; Achen and Bartels 2017). The logic of the cooperative equilibrium helps reconcile the persistent effects of the land reform with this evidence. In the Italian case, the continued investments in treated towns are key to maintain the initial electoral gains. We suggest a complementarity between the initial reform—a massive redistribution—and the following investments in terms of electoral returns: DC must have found worthwhile to direct additional resources to these towns. This argument may also rationalize the broader finding that central governments often increase the amount of transfers to (marginally) aligned locations (Brollo and Nannicini 2012) or constituencies (Acemoglu 2001).

Land redistribution may also affect voting because land ownership changes voters’ beliefs and attitudes. A large literature shows that wealth is an important determinant of preferences for redistribution (Giuliano and Spilimbergo 2013; Fisman et al. 2015), and that these preferences in turn affect voting (Fisman et al. 2017). Looking at a natural experiment that transferred property rights to some squatters in Buenos Aires, Di Tella et al. (2007) find that squatters who obtained by chance property rights report greater support for free market and individualism. Similarly, De Janvry et al. (2014) find that in Mexico, a land titling program

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7 Explaining long-term persistence with repeated short-run interactions also distinguishes our paper from the large literature on long-term persistence. For instance, Guiso et al. (2010) show that Italian towns with a long history of direct democracy exhibit greater social capital today. Voigtländer and Voth (2012) document 600 years persistence of anti-semitism in German towns. While our effects persist for a shorter period, we provide greater details on the mechanisms generating this persistence.

8 Most empirical studies of land reform focus on economic outcomes, such as agricultural productivity (Montero 2018), poverty reduction (Banerjee et al. 2002, Besley and Burgess 2000), and structural transformation (Galán 2018). We do not observe an impact of the reform on sectoral employment shares or income per capita (measured in the 2000s). We do not have town-level data on agricultural productivity.
promoted by a left-wing government benefited pro-market parties.

We also examine this channel in our setting. We assess whether the 1950 land reform created a class of small landowners who became economically conservative and pro-market as a result of their wealth. We find little evidence for such mechanism. First, we note that economic conservatism can not explain why in treated towns voters support DC agenda in a family policy referendum. Second, we show that in 1961-2001 home-ownership was as common in treated as in control towns. This result speaks against the idea that people living in treated towns held greater wealth as a result of the land reform. Finally, we look for evidence of economic conservatism in the post-1992 elections, when Berlusconi’s party, Forza Italia, ran on a right-wing platform based on tax cuts and other conservative economic policies. Again, we find no evidence of greater support for Forza Italia in treated towns, which suggests that greater economic conservatism can not explain the lasting support for Christian Democrats.

The rest of the paper proceeds as follows. Section 2 provides a background on the land reform. Section 3 describes the data sources. Section 4 presents the empirical strategy and Section 5 the main results. Section 6 sheds light on the mechanisms behind the persistence of the electoral results. Section 7 concludes.

2 Background: the 1950 Land Reform

At the end of World War II, Italian agriculture was backward and poor. Sharecropping and tenant contracts were widespread and most laborers did not own any land. In 1948, there were around 2.5 million landless rural workers and an additional 1.7 million workers who owned estates too small to support one household (Medici 1948 cited by Gullo 1950).

With the end of the Fascist regime, these workers demanded land redistribution, a policy that had been promised before both World Wars. The countryside became fertile ground for Communists’ propaganda: between 1948 and 1951 Communist leaders led rural workers to occupy many uncultivated plots in large estates in the southern part of the country.

9In a different context, Bazzi et al. (2018) show that the aborted Indonesian land reform of the 1960s strengthened Islamist parties years later because it promoted land transfer to Islamic charities. In Indonesia the land reform was eventually revoked, and had an effect on voting and beliefs only indirectly —by promoting these land transfers to religious groups.

10Another channel that may drive the response is that the policy allowed poorly-informed voters to infer the quality of the politicians (Manacorda et al. 2011). While the land reform may help reveal the ability of DC politicians in the 1950s, it seems unlikely that that it provided relevant information about politicians on the ballots 40 years later.
In several occasions clashes with the police turned into riots with fatal casualties (Miceli, 1950; Russo, 1955; Rossi-Doria, 1958). Fearing that a coalition between rural and urban workers would push the Communists to power, the Christian Democrat (DC) government decided to redistribute some of the land. The hope was that limited redistribution would curb the demands for more sweeping reforms and contain the growth of the Communists in the countryside (Rossi-Doria, 1958).

Between May and October 1950, the Italian Parliament approved two separate bills that prescribed land redistribution. The bills targeted nine large reform areas (Figure 1). During the parliamentary discussion and in the bills, the Parliament identified regions with extreme land inequality, and delegated the exact definition of the borders of the reform to the Government (Gasparotto et al., 1950a; Germani, 1950). These borders had to follow the limits of existing towns and could not stray from what was the general understanding of the location of these areas (Gasparotto et al., 1950a; Fanfani, 1952). The DC government decided the precise definition of these borders and made them public in February 1951 through a series of executive orders (D.P.R.66/1951; D.P.R.67/1951; D.P.R.68/1951; D.P.R.69/1951; D.P.R.70/1951).

The land reform of 1950 redistributed land only within a territory of 87.282 km$^2$: around 29% of the country. The Government did not record the debate that led to the inclusion of towns in the reform area. Because the stated objective of the reform was to reduce land inequality, the Government tried to select towns with high concentration of land. While reform areas had on average a greater land inequality (Figure A.2), the Government had only imperfect information on land distribution at the town level, and included several towns where estates were so small that eventually no redistribution took place (Figure A.2 from Prinzi).

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11 A similar process underpins the models of Acemoglu and Robinson (2001, 2000). In their theory, élites respond to the threat of revolution by extending the franchise. See Aidt and Franck (2015) for an empirical test of their theory.

12 Law 230 of 12th May 1950 and law 249 of 28th October 1950, known respectively as legge Sila (L.230/1950) and legge stralcio (L.841/1950, L.841/1950).

13 The areas were: Delta Padano (North East), Maremma (Center-West), Fucino (Center), two separate areas in Campania (Center-South, both managed by the Opera Nazionale dei Combatcenti), a broad area that straddled across Molise, Puglia and Lucania (South-East), Sila (South-West) and the whole territory of Sicily. The entire island of Sardinia was also affected by the land reform, but two separate agencies managed expropriations around Cagliari (in the Comprensorio di Flumendosa) and in the rest of the island.

14 The only exception in the north was the town of Rome, which was only partially treated. In the baseline we consider Rome as treated. In two robustness we show that results are robust to dropping either the city of Rome, or all towns close to sections of the Rome municipality border.

15 The minutes of the Government meeting on January 19, 1951 contain detailed information of the discussions held before and after the land reform bills. In contrast, the minutes only report the approval of the executive orders that established the reform areas (Andreotti, 1951).
The original text of the executive orders also reveals significant clerical mistakes, which seem to originate from the imprecise knowledge of the areas (Segni 1951).

Critics complained that reform areas in the north included several towns where farms were efficient and land distributed evenly (De Caro 1951; Toldo 1957). For the south, many noticed that land occupations during the 1950 made inclusion in the reform area more likely (Rivera 1952; see also Percoco 2017), while landlords close to the DC saw the towns where they owned land excluded from the reform (Calasso 1952). An analysis of the records preserved in the archives of the DC also reveals that out of 36 documents related to the land reform, 33 discussed the political situation in southern towns and only 2 focused on the situation in northern ones. We read these records as evidence that DC manipulated reform borders in the south. In the north however, the same records suggest that manipulation should not be a concern for our empirical strategy. The formal tests in Section 4 support this conclusion.

For each of the nine reform areas, the bills created separate public agencies (enti di riforma) in charge of land redistribution. The bills imposed expropriations of large and inefficient farms. Landowners received compensation for the propriety lost in the form of 25-years fixed-rate government bonds yielding 5% a year. Rural workers who wanted a plot of land had to apply through one of the public bodies that managed the reform, and they purchased the estate with the help of thirty-years public loans at generous rates (3.5%). They could not re-sell the plot before repaying the debt, and could not clear the debt in advance. For their part, expropriated landlords were not allowed to purchase land for 6 years.

The government implemented the reform quickly and expropriated all land before April 1953. Almost everywhere, eligible applicants vastly exceeded available land. Excess demand varied across the country though: in the north, the beneficiary to request ratio was between 60 and 70% (Baldocchi 1978; Capobianco 1992). In the average reform town, 7 owners lost their land to about 200 beneficiaries (Marciani 1966). Beneficiaries were 47% farm workers, 37% tenants and 9% farmers.

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16 Institute don Luigi Sturzo, Rome: Archivio della Segreteria DC; box 9, folder 10: “land reform”. Most of these records insisted on the political opportunity to redistribute land in order to avoid Communist gains in the countryside.

17 The Parliament drew a table that classified agricultural estates along two dimensions: size and productivity. For each category of size and productivity, the table determined the share of land that had to be expropriated: up to 95 percent of the land in large and unproductive estates, none in small or productive farms (Figure A.1 from legge Stralcio L.841/1950).

18 Landowners protested against both the form and the level of compensation (Capua 1952; Pecoraro 1952).

19 The last executive orders of expropriation date March 31, 1953 (D.P.R.153/1953; D.P.R.154/1953).
small landowners (Marciani, 1966). The vast majority of beneficiaries were resident of the town where the land was located (Dickinson, 1954; Rossi-Doria, 1958; Marciani, 1966).

Because the government nominated the officials and regulated these reform agencies, the ruling DC party maintained a firm control of the whole land redistribution process during the years immediately following the reform. This control may have led to favoritism in land allocation (Russo, 1955). Inspection of original application cards reveals that applicants known to be Communist were singled out and denied land.\footnote{See Appendix Figure A.3 from ALSIA archive (Metaponto di Bernalda, Matera).}

Beneficiaries were required to become members of rural cooperatives, and many chose Coldiretti (Toldo, 1957). Coldiretti was very close to the DC and had its own candidates running within DC rosters during elections. In the years following the reform, Coldiretti assisted farmers coordinating the purchase of inputs and the sale of output. Moreover, until 1970, Coldiretti controlled the local health system (casse mutue, Primavera, 2018). While the presence of Coldiretti, their activity was not limited to these zones (Pizzuti, 1967).

3 Data Sources

For this study we combine town-level data from several sources. Here we describe these sources and define the main variables. Appendix B.2 provides additional details on sources and variable construction.

\textbf{Reform towns.} We start from a map of Italian towns in 1951\footnote{We obtain this map after combining a shapefile of Italian towns in 2001 with the list of towns enumerated in the 1951 Census. We create the 1951-2001 correspondence with the help of http://www.elesh.it, a website that uses official documents to reconstruct every change of town boundaries in Italy over the past 160 years.} on which we classify every town included in the 1951 land reform. We find the list of reform towns in the executive orders that enacted the land reform (L.230/1950 and D.P.R.66/1951; D.P.R.67/1951; D.P.R.68/1951; D.P.R.69/1951; D.P.R.70/1951). We create the borders of the reform areas by conflating all contiguous towns inside the reform area. We then use these borders to calculate the distance from the centroid of every town to the closest reform border.

\textbf{Electoral outcomes.} We source electoral outcomes from Istituto Cattaneo, which publishes town-level returns of every election of the lower chamber of the Italian Parliament between 1861 and 2008, along with the results of the 1946 election to the Constitutional Assembly (Corbetta and Piretti, 2009). Our main results focus on elections between 1946 and 1992, but we also use data from earlier (1919-24) and later (1994-2008) rounds.
original data report the number of votes cast for every party in each town and election, along with number of eligible voters and total number of votes cast. We integrate these data with newly digitized town-level returns of the 1974 “referendum on divorce” (Ministero dell’Interno 1977). We define time-consistent geographic units and create a correspondence between the towns listed in each election and the list of towns in 1951.

**Land distribution.** Distribution of land before the reform comes from Medici (1948), a survey that collects town-level information on the value and distribution of land in 1948. The publication was commissioned by the Italian Parliament and served as the basis of the discussion of the land reform. From the original publication we digitized Table II, which reports the number and the value of estates broken down by 11 separate categories of estate value. We use this information to construct the share of estates and the share of land value that the 1950 reform allowed to expropriate. We consider estates that could be expropriated as those with value in one of the top 4 categories of value. All estates in these categories were worth at least £20'000, and the reform bill prescribed expropriation for estates worth £30'000 or more (Appendix Figure A.1). We are not aware of any source that records land distribution in the years immediately after the reform, as even the 1961 agricultural census does not report this information. Therefore, we assess the direct impact of the reform on land distribution with a proxy from the 1961 agricultural census (ISTAT, 1962a), where we find tables with the number of farms by type of management (e.g.: owner-operated, tenant farming, share-cropping). We digitize these tables from the original volumes of the census.

**Economic and demographic characteristics.** Data on economic and demographic characteristics of towns between 1936 and 2001 are from decadal population censuses. ISTAT provides digital records for the years 1971-2001 (ISTAT 1974, 1985, 1995, 2005). We integrate these data with newly digitized records from the censuses of 1936, 1951 and 1961 (ISTAT 1937, 1955a, 1965). From each census, we collect town-level information on: total population, number of men, number of people by age group, number of people in the labor force, number of workers employed in agriculture, manufacturing and the public sector, number of owner-occupied houses.

**Town balance sheets.** We measure transfers from the central government to Italian towns with records from municipal balance sheets. At the end of every fiscal year, Italian towns have to provide the Ministry of Interior with detailed balance sheet records. We found publications summarizing key balance sheet items for every Italian town for the years 1952, 1955 and 1959. For these years, we digitize town-level information on the transfers from the
central government. In our analysis we normalize transfers by 1951 population, as recorded in the census.

**Malaria prevalence.** We use a map by Missiroli (1934) to classify Italian towns where malaria was endemic in 1934. Alberto Missiroli was an Italian physician leader in the research on malaria; his 1934 map was later used for the eradication programs during the Fascism and after World War II. To digitize these data, we superimpose Missiroli’s map to our map and code every town in the malaria areas as having malaria in 1934.

**Geographical controls.** We calculate distance to the coast and to Rome based on the 1951 map of towns. We use FAO-GAEZ (FAO, 2015) data to measure potential yield of wheat and maize, and the US Geological Survey database (USGS, 2005) to measure elevation and slope. Both of these data are defined over a grid covering the entire planet. We join the original rasters to the shapefile of Italian towns by calculating the average value of these variables in every cell that falls inside town limits.

### 4 Empirical Strategy

This section describes our empirical strategy. First, we explain our approach, which combines spatial regression discontinuity and difference-in-differences. Second, we test our identification assumptions.

#### 4.1 Panel Spatial Regression Discontinuity

Evaluating the impact of redistribution policies, including their electoral impact, typically faces major identification challenges. Politicians may target areas with greater returns from redistribution: this would lead to an upward bias of the estimates. Alternatively, they may target areas where they have lower or fading political support, leading to downward bias.

The design of the Italian land redistribution program offers an opportunity to overcome these challenges. Because the reform targeted towns in well-defined reform areas, we can estimate the electoral impact of the policy by comparing changes in voting outcomes in treatment and control towns located in proximity of the reform borders. Formally, we combine a spatial regression discontinuity design (RDD) with difference-in-differences (DD), exploiting the longitudinal nature of our data (see Grembi et al., 2016 for a similar approach applied to the study of fiscal rules).

In our preferred specification, we restrict the sample to towns that are located within 25 km from the reform border. In addition, we perform robustness specifications at alternative
bandwidths of 10 km and 50 km. Figure I Panel B shows 25 km buffers inside (dark red) and outside (orange) the reform areas we consider in the analysis. These buffers include 490 towns. Our empirical strategy is based on the following panel Regression Discontinuity Design equation:

\[
y_{irt} = \sum_{t=1946}^{1992} \alpha_i^0 \cdot d_i + \sum_{t=1946}^{1992} \alpha_i^1 \cdot d_i \times T_i + \sum_{t=1946}^{1992} + \beta_i \cdot T_i + \eta_i + \eta_{rt} + u_{irt} \tag{1}
\]

where \(y_{irt}\) is an electoral outcome in town \(i\), reform area \(r\), election year \(t\); \(d_i\) is the distance of town \(i\) to the closest reform border (our running variable) and \(T_i\) is a dummy equal to one for towns included in the reform. The parameters \(\alpha_i^0\) and \(\alpha_i^1\) are election year-specific coefficients on the distance from the border and its interaction with the treatment. Our parameters of interest are \(\beta_i\): year-specific treatment coefficients. The model also includes town fixed effects, \(\eta_i\), and reform area \(\times\) year fixed effects: \(\eta_{rt}\).

Our empirical strategy identifies the causal effect of the land reform on electoral outcomes under three assumptions. First, parallel trends at the reform border. This is an assumption that is less stringent than the ones that either RDD or DD alone require (i.e.: continuity at the threshold for RDD alone; parallel trends on the entire sample for DD alone). Second, no other contemporaneous policy should affect treated and control towns differentially at the border. Third, the Stable Unit Treatment Value Assumption (SUTVA, Rubin 1974) must hold: redistribution in treated towns should not affect voting in control towns. This assumption would be violated if towns excluded from the reform voted against DC to punish the government. We provide evidence in support of these three assumptions in Section 4.2.

Our strategy estimates the (local) treatment effect of the inclusion of a town in the reform area. This is an “intention to treat” estimate. We do not use variation in the intensity of actual redistribution for two reasons: i) we only have limited data on the intensity of the actual redistribution; ii) actual town-level redistribution is likely to depend on a number of endogenous choices that would compromise identification.

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23 The optimal bandwidth is approximately 17km when using the Calonico et al. (2014) method and approximately 30km when using the Imbens and Kalyanaraman (2012) or the Ludwig and Miller (2007) designs.

24 The discussion in Section I suggests that our empirical strategy is not suitable in the South. Appendix D.4 shows that key identification assumptions do not hold in the South. In particular, pre-trends in vote shares at the border are not parallel.

25 Section 5.4 presents results to alternative specifications.
4.2 Testing the Identification Assumptions

In this section, we test the identification assumptions of our empirical strategy. In section 4.2.1, we look at balance at the border for a number of covariates. While our strategy does not require balance in levels (because we exploit the panel nature of the data), showing that towns on the two sides of the border were similar at the time of the reform provides initial support to our approach. Section 4.2.2 examines pre-trends at the border. Section 4.2.3 discusses other contemporary policies. We address spillovers on control towns in Section 4.2.4 and then more extensively in Section 5.3.1. Section 4.2.5 summarizes the results of these tests.

4.2.1 Balance at the Border

To test the balance of observables at the border, we estimate the following RDD model:

\[ y_{ir} = \alpha^0 d_i + \alpha^1 d_i \times T_i + \beta T_i + \eta_r + \epsilon_{ir} \]  

(2)

**Land distribution: 1948.** We first estimate Equation (2) using the share of expropriable estates as dependent variable. For this purpose, we digitized administrative data from Medici (1948) and used the criteria that identified which estates were eligible for expropriation to define two variables of interest.

Table 1-Panel A shows that the share of expropriable estates is continuous at the border: in our preferred specification with 25 km bandwidth, the treatment coefficient is 0.002 (s.e. = 0.01), from a control mean of 0.013. Results with 10km and 50km bandwidths are similar.

**Vote shares: 1946 and 1948.** Table 1-Panel B presents result on vote shares for the Christian Democrats and the Communist Party in the 1946 and 1948 elections.

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26 The discussion in Section 1 suggests that our empirical strategy is not suitable in the South. Appendix D.4 shows that key identification assumptions do not hold in the South. In particular, pre-trends in vote shares at the border are not parallel.

27 As explained in Section 3, Medici (1948) reports the number and the value of estates broken down by 11 separate categories of estate value. We use this information to construct the share of estates and the share of land that the 1950 reform allowed to expropriate. We consider expropriable estates as those with value in one of the top 4 categories of value. All estates in these categories were worth at least £20’000. The reform bill prescribed expropriation for estates worth £30’000 or more (Appendix Figure A.1).

28 In 1948 the Communist Party run together with the Socialist Party and other smaller parties in the Popular Democratic Front (FDP). Because we cannot separate votes for the Communists and for the Socialists, in 1948 we look at FDP vote shares. Correlation between vote shares of FDP and PCI is 0.85 between the 1946 and 1948 elections and 0.8 between the 1948 and 1953 elections.
vote shares are continuous at the border. The average DC vote share in control towns was 0.31 in 1946 (s.e.=0.15) and 0.43 in 1948 (s.e.=0.17). The RDD coefficients on DC vote shares are -0.025 in 1946 (s.e.=0.025) and -0.028 in 1948 (s.e.=0.028). Figure 2 Panel A presents a bin scatter with graphic evidence of continuity at the border. Similarly, the average PCI vote share in control towns was 0.24 in 1946 and 0.41 in 1948. The RDD coefficients on PCI are 0.021 in 1946 (s.e.=0.031) and 0.035 in 1948 (s.e.=0.034). Figure 2 Panel D shows the bin scatter for the Communist vote share and provides graphic evidence of continuity at the border.

**Geographic and economic variables.** Table 1 Panel C presents results on a number of geographic and economic variables from the 1951 census. All of these variables are continuous at the border. Importantly, potential yields of the two major crops of these areas (wheat and maize) and the share of workers in the agricultural sector are balanced at the border, suggesting that productivity or the number of potential beneficiaries did not drive the definition of the border. In Table 1 Panel C, we also use newly digitized data on town-level malaria prevalence in 1934 (Missiroli, 1934) to show that at the border malaria was not more prevalent in reform areas.

**McCrary test.** Appendix Figure C.5.1 presents the results of a McCrary test on the density of observations (i.e. towns) at the border. The figure shows a discontinuous drop in the number of towns inside the reform areas (t-statistics=-2.07)). While this result may generate concerns of manipulation, we believe that the geometry of the land reform may drive this pattern. Since reform areas are clusters of contiguous towns, we conjecture that there will be a mechanical increase in the number of towns right outside the border. Appendix Figure C.5.2 provides an intuition for the simplest case, where a (fictional) reform targets a single town. In that case, unless the treatment town is completely surrounded by another town, there will be more towns just outside the border. The intuition generalizes to the case where the reform targets clusters comprising multiple towns. Appendix C.5 presents results from a number of different simulations (see also Appendix Figure C.5.3). The results discussed there support our conjecture, and suggest that the discontinuous drop in the number of town at the border is not the result of manipulation, but a mechanical consequence of the geography of convex clusters of towns.
4.2.2 Parallel Pre-Trends at the Border

The key identification assumption of our empirical strategy is the presence of parallel trends at the border. We provide support for this assumption by studying pre-trends of vote shares and census variables.

**Vote shares: 1946-1948.** We first present estimates of (2) when the outcome variable is the change in vote shares of Christian Democrats and Communists from the 1946 elections to the 1948 elections. Table 1-Panel D supports our empirical approach. We find parallel pre-trends between treatment and control towns at the border: the coefficient on the DC pre-trend is -0.03 (s.e.=0.02), from a control mean of 0.12. Figure 2-Panel B presents a bin scatter and shows graphically the continuity at the border. The coefficient on the Communist Party pre-trend is 0.04 (s.e.=0.03), from a control mean of 0.41. Figure 2-Panel E shows the bin scatter for this variable and confirms its continuity at the border.

**Pre-Fascism elections.** One concern is that only two elections took place before the land reform and after World War II. Appendix Figure C.1.1 reports treatment coefficients from a panel RDD regression that includes the 1919, 1921, and 1924 elections (the last ones before the Fascist dictatorship), as well as the 1946 and the 1948 ones (we normalize the coefficient of 1948 to zero).

Parallel trends hold for the Italian Popular Party (PPI), the Catholic Party to whom most of the DC founders belonged before the war (Appendix Figure C.1.1-Panel A). We also look at two left-wing parties: the Italian Socialist Party (PSI) and the Italian Communist Party (PCI). The PSI was the largest left-wing party until 1947: it won relative majorities in the elections of 1919 and 1921 and had his leader Giacomo Matteotti killed in 1924. The Communist party was relatively small before the war: founded in 1921, it collected 4.6% of votes that year and 3.7% in 1924. PSI vote shares exhibit parallel pre-trends (Appendix Figure C.1.1-Panel B). PCI vote shares seem to grow slightly faster in treatment towns, although pre-trends coefficients are not significant (Appendix Figure C.1.1-Panel C). If anything, this would suggest we may be underestimating the negative impact of the reform on PCI vote shares.

**Census variables.** We digitized town-level data from the 1936 and 1951 population censuses. Table 1-Panel E presents estimates of equation (2) on the 1936-51 changes of these variables. Overall, we observe parallel pre-trends both in population and employment.

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29 PSI lost ground to the Communists after 1947, when it split into 2 parties. One of these parties ran together with PCI in 1948. After that year, PSI never received more than 15% of votes. When we look at the effect of the reform on PSI vote shares in 1946-92 we find no significant effect.
variables. The pre-trend analysis of these census variables spans a longer period than the electoral ones (1936-51 vs. 1946-48) and it ends right at the time of the reform (1951). Together with the results of electoral pre-trends, this analysis indicates that no relevant change occurred differentially across the border neither in the decades leading to the reform nor in the few years immediately preceding it.

### 4.2.3 Contemporary Policies

We now discuss the possibility that contemporaneous policies may confound the effect of the reform. In the years following World War II, Italian governments implemented a number of policies to promote economic development. Examples include the post-World War II malaria eradication program (1947-51; see Buonanno et al. [2019]), the Marshall plan (1948-51; see Giorcelli [2019]), the Cassa del Mezzogiorno (1950-84) and the “Home plan” (1949-63). In those years, Italian governments also signed the General Agreement on Tariffs and Trade (1950) and joined the European Coal and Steel Community (1951). Starting from 1975, some Italian regions began receiving money through the European Regional Development Fund. Crucially for our identification, none of these policies targeted exactly the same areas included in the land reform. Moreover, because reform areas did not overlap for the most part with any other administrative unit, any shock that was specific to one of these units would affect both treated and control towns, and it would not compromise our identification.

### 4.2.4 Stable Unit Treatment Value Assumption

The reform could induce a change in voting in control towns relative to a counterfactual where no reform takes place. This may happen if towns that are (barely) left out of the reform areas resent exclusion and punish the incumbent party. If this were the case, SUTVA would not hold.

To investigate this possibility, we study whether, in control towns, support for the incumbent party fell differentially more in those towns that had higher share of agricultural workers. These towns had higher potential benefits from the reform and thus higher potential resentment from exclusion. We find no evidence of this effect. Since this test builds on the discussion of the main results, we postpone a complete treatment to Section 5.3.1.

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30 Consistent with our interpretation, we find marginally significant evidence that in treated towns the support for the incumbent party rose differentially more when agricultural employment share was high. In control towns, we also show that the support for DC did not fall differentially with the share of the town perimeter bordering the treatment area, a proxy for the “visibility” of the reform. Finally, donut-RD regressions further support the SUTVA assumption. Section 5.3.1 presents these results, too.
4.2.5 Discussion

The evidence of this section suggests that the identification assumptions required for the panel RDD hold. Pre-trends are parallel at the border for both electoral and economic variables. In addition, the balance at the border in land distribution, electoral outcomes, geographic variables, and economic variables suggests that towns located just inside the reform areas were similar to those just outside.

5 The Effects of the Reform

The section presents the main results of the paper. As a preliminary step, we show that the reform had an effect on land distribution. We then show that the reform had a large and significant impact on the electoral support for the Christian Democrats, which persists for four decades. Finally, we address several identification threats and describe a number of robustness checks.

5.1 The Effect of the Reform on Farm Management

As a preliminary result, we show that the land reform did impact land distribution in treated areas. The 1961 agricultural census reports how many farms and how many hectares are managed directly by the owner of the farm (as opposed to tenants). This is a proxy for the presence of smallholder agriculture (unfortunately, the 1961 agricultural census did not collect data on farm size).

Table 2 shows the effect of the reform on the share of farms (panel A) and on the share of land managed by the owner (panel B), using the RD model in Equation 2. Columns 1, 3 and 5 report estimates using 25 km, 10 km, and 50 km bandwidths, respectively. Treated towns have on average 10 to 11 percentage points more owner-operated farms, from a control average of about 70 percent. The effect is significant and stable across bandwidths. Similarly, in treated towns, the share of land in owner-operated farms is 11-13 percentage points higher than in control towns, from a control average of 41-47 percent. Both sets of results are robust when we control for the 1948 share of expropriable farms (columns 2, 4 and 6), which was balanced between treatment and control (see Table 1-Panel A). Taken together, these results point to a strong and significant impact of the reform on farm ownership.
5.2 The Electoral Effect of the Reform

We now present our main results on the effect of the land reform on support for Christian Democrats and Communists.

**Preliminary graphical evidence.** We start with graphical evidence of the discontinuity at the border. Figure 2-Panel C shows the change in the average Christian Democrats (DC) vote share from pre-reform elections (1946-48) to post-reform elections (1953-92) as a function of the distance to the reform border. The graph highlights that in 1953-92 Christian Democrats lost about 6 p.p. relative to their average in the elections of 1946 and 1948. DC experienced smaller losses in towns that redistributed land: the discontinuity at the border is large, and it indicates that reform towns cast about 4 p.p. more votes in favor of DC than control towns.

Figure 2-Panel F repeats the exercise for the Communist party (PCI). The results are the mirror image of those for DC: the share of the Communist party fell by about 8 p.p. between 1953-92 relative to the average in the elections before the reform (1946-48). The losses were larger in towns immediately inside the reform border though: on average reform towns cast about 3.5 p.p. fewer votes in favor of the Communists. The gains of DC are slightly larger than the losses of PCI, suggesting that the reform may have convinced to switch to DC supporters of other parties too.

**Panel RD estimates.** Next, we estimate Equation (1) for elections 1946-92. Figure 3-Panel A reports point estimates and 95% confidence intervals for $\beta_t$: the effect of the land reform on DC vote shares in every election. The sample consists of 482 towns within 25 km from the reform border in the north. The baseline year is 1948, the last election before the reform. The treatment coefficient in the 1946 election indicates that treated and control towns at the border were on parallel pre-trends. The treatment coefficient in the 1953 election suggests that in treated towns Christian Democrats vote share increased by 4 percentage points during the first election after the land reform, from a control mean of 36.4% (i.e., an 11 percent increase). The effect is large and precisely estimated. Furthermore, the gain remains large and stable for the next 40 years (between 1953 and 1992, DC vote share in control towns ranges between 29% and 36%).

Figure 3-Panel B reports the point estimates of $\beta_t$ in Equation (1) when the dependent variable is the share of votes for the Italian Communist Party (PCI). The figure illustrates

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31 We could not match election data for eight of the 490 towns in our 25 km bandwidth.
that DC gains match almost one-to-one PCI losses: between 1953 and 1992, the Communists received about 3.5 p.p. fewer votes in treated towns relative to control towns on the other side of the border (during the same years, the PC vote share ranges between 29% and 40%). The reform did not affect voters’ turnout (Appendix Figure D.1.1).

Table 3 Panel A presents results from the Panel RDD estimation where we pool together all the post-reform election. Table 3 Panel B presents regression estimates by decade. Column 1 looks at the effect of the reform on DC vote share and column 4 on PCI vote share. The other columns show results with alternative bandwidths of 10 km (columns 2 and 5) and 50 km (columns 3 and 6). Results are qualitatively similar across specifications, though in the case of PCI they are estimated less precisely in the 10 km bandwidth. The larger effect on DC votes suggests that voters who switched to the Christian Democrats came from more than one party.

Our estimates of the positive electoral impact of the reform on the Christian Democrats vote share in the first few years after its implementation are in line with a number of anecdotes and descriptive statistical evidence produced by researchers at the time. Amintore Fanfani, one of the Christian Democratic leaders and then Ministry of Agriculture, noted in 1956 that “in the reform areas, the Scudo Crociato [the DC symbol: a crusader shield] shines while the hammer and sickle rust” (Ufficio centrale per i problemi del lavoro della Dc [1956]). An academic study of 1957 records the gains that DC made in the elections following the reform (Toldo [1957]). In one dramatic episode, 220 PCI members publicly tore down their membership cards and joined the Christian Democratic party (Il Mattino [1951]).

**Persuasion rate.** To assess the magnitude of the electoral effects, we follow DellaVigna and Gentzkow (2010) and compute the *persuasion rate* of the reform. The persuasion rate is the percentage of beneficiaries who start voting DC among the beneficiaries who were not already voting for DC. We find a persuasion rate of 0.64: out of three people who received

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321992 elections are an exception. In 1992, there is a substantial decrease in turnout rate, possibly in response to early scandals about the major parties. This decrease was stronger in treated towns (marginally significant).

33For the persuasion rate $p$ we adapt equation (1) of DellaVigna and Gentzkow (2010) to:

$$p = \frac{dc^T - dc^C}{b^T - b^C} \cdot \frac{1}{1 - dc^0}.$$  

In this equation, $dc^T$ and $dc^C$ are the DC vote share in treated and control towns, $b^T$ and $b^C$ are the share of people who benefited from the reform in treated and control towns, and $1 - dc^0$ is the share of people who would not vote DC if there was no reform. We use the following numbers in our calculations: $dc^T dc^C = 0.04$, the effect of the reform on DC vote share; $dc^0 = 0.43$ the share of DC in control towns before the reform;
land and were not already DC voters, two started voting for DC as a result of the reform. The effect is large but plausible, given the magnitude of the asset transfer. We also note that any positive spillover on non-beneficiaries (e.g. on beneficiaries’ relatives or workers the new owners hire) or a cost for those potential beneficiaries who did not get the land would imply a lower persuasion rate among those households who received the land.

To sum up, the analysis suggests large electoral gains for the Christian Democrats, the incumbent party that implemented the land reform. These gains are large and persistent over forty years. While the short-term effects are in line with contemporary commentators, the longer-term impact is more surprising. In Section 6 we shed light on the dynamics of this persistence.

5.3 Threats to Identification

We now consider two possible threats to identification: violations of the SUTVA and differential migration from treated towns.

5.3.1 Violations of the SUTVA

Higher vote shares for DC in the reform areas may indicate stronger support among the voters of treated towns: this is our preferred interpretation. However, the reform may also create resentment in control towns, thus causing a reduction in DC support in these towns. This would violate SUTVA and threaten our identification. We propose three approaches to mitigate this concern.

**Diff-in-diff with heterogeneity by share of agricultural workers.** If resentment were a factor, the reduction in support for the Christian Democrats would likely be higher in towns with a higher share of agricultural workers, as these workers would have higher benefits from the reform. To test this hypothesis, we adopt a difference-in-differences strategy and

\[ b^C = 0, \text{ the share of beneficiaries in control towns; } b^T = 0.11, \text{ the share of net beneficiaries in treated towns.} \]

The share of net beneficiaries in treated towns is equal to the number of households receiving land in the average reform town (244) minus the average number of landlords expropriated (7). We assume that every household casts three votes, so that the average town has \((244 - 7) \times 3 = 579\) net beneficiaries. 6500 voters live in the average town, so net beneficiaries over voters is about 0.11.

\[ ^{34}\text{In a notable study, DellaVigna and Kaplan (2007) find a persuasion rate of Fox News between 3 and 28 percent.} \]
study heterogeneity by the pre-reform share of agricultural workers\(^{35}\)

\[
y_{irt} = \eta_i + \eta_{rt} + \beta \cdot Post_t \times T_i \\
+ \gamma \cdot Post_t \times \frac{L^a_i}{L_i} + \delta \cdot Post1950_t \times \frac{L^a_i}{L_i} \times T_i + u_{irt}
\]

In Equation (3), \(Post_t\) is a dummy equal to 1 in every election after 1950 and \((L^a_i/L_i)\) is the share of workers employed in agriculture in 1951. If resented potential beneficiaries in control towns punished DC, we would expect \(\gamma\) to be negative.

As a preliminary step, Table E.1 Column 1 reports the result of a simple diff-in-diff, without heterogeneity. We compare pre-reform elections (1946, 48) with the first two elections after the reform (1953, 58). The DC vote share increases differentially by 3.1 percentage points in treated towns, a result quantitatively similar to our panel RDD results. Column 2 then shows that in control towns, places with high and low share of agricultural workers showed similar support for DC after the reform (\(\gamma=0.021\), s.e.=0.016).\(^{36}\) Similarly, for PCI none of the interactions in the diff-in-diff is significant (Column 5). These estimates support our interpretation of the main results: the increase in support for DC in treated towns, as opposed to the reduction in control towns, drives the panel RDD estimates.

**Diff-in-diff with heterogeneity by exposure to the reform.** Second, we explore a different source of heterogeneity. If resentment were driving our results, we would expect a higher reduction in DC vote share in those control towns where the reform is very visible. We proxy visibility with the *portion* of the town border that overlaps with the reform area. For this exercise, we restrict the sample to those towns with at least a portion of their town limit on the border of the reform areas. Column 3 of Table E.1 reports the estimates of a modified version of Equation (3), where we interact \(Post_t\) and \(T_i\) with the share of the town limits located on the reform border \((B^T_i/B_i)\). The positive and insignificant coefficient on the interaction between \(Post_t\) and \(B^T_i/B_i\) suggests that control towns where the reform was more visible did not vote against DC after the reform. Similarly, the negative and insignificant coefficient of the same interaction when the dependent variable is PCI vote share speaks against greater gains of the Communists in these towns (Column 6). Overall, these regressions suggest again that resentment in control towns is unlikely to drive our main results.

\(^{35}\)We include towns in a 25 Km bandwidth. We do not have enough power to perform heterogeneity analysis with a Panel RDD.

\(^{36}\)In addition, in treatment areas, towns with a strong presence of agricultural workers experience an differential increase in the electoral support for DC, though this is not significant (\(\delta=0.051\), s.e.=0.036).
Donut Panel RDD. In the last exercise of this section, we estimate Equation (1), but drop towns close to the reform border. Similar to the previous exercise, if voters in control towns resented the reform and punished DC after 1950, we expect this effect to be larger close to the border, where voters were likely to be more aware of the reform. If this were true, dropping towns close to the border should shrink the estimated effect of the reform, because it would remove those towns where punishment against DC was stronger. In contrast, if the coefficient remains stable after dropping towns close to the border, it would be evidence that this mechanism is not important. Table E.2-Column 1 reports our baseline results: this is the increase in the support for DC after 1950 in treated towns within 25 km from the border. In Columns 2 through 4 of Table E.2, we estimate the same regressions after dropping towns that are within 1.5, 2.5 and 5 km from the border. Across these samples, the point estimate remains stable. Columns 5 through 8 show that also the impact of the reform on the Communist party is robust to dropping towns close to the border. These results suggest again that resentment against DC in control towns closely exposed to the reform does not drive our results.

5.3.2 Migration

The reform may also impact migration from or to reform areas. Here we present several pieces of evidence that suggest that migration is unlikely to drive our results.

Changes in Population. The reform may affect political outcomes through permanent changes to the population. We explore this channel in the analysis below. First, we estimate (1) with the log of the number of eligible voters as dependent variable. Appendix Figure F.1.1-Panel A shows the estimated $\beta_t$. While none of these coefficients is significant, they suggest that treatment towns experienced higher (though insignificant) out-migration in the decades following the reform. Population Composition. Second, we test for differential changes in the composition of the population in treatment areas by looking at a number of characteristics of the pop-
ulation from decadal censuses. Appendix Table F.1 presents the results. The reform had no significant impact on the share of workers employed in agriculture and manufacturing (columns 1 and 2), on the labor force participation (column 3), on the share of male in the population (column 4), and on the age structure of the population (columns 5-8). This suggests that observed out-migration was homogenous across groups, and it did not draw more people from any specific sub-population (based on observables).

**Discussion.** Migration is unlikely to explain our main electoral results for several reasons. First, and most importantly, the pattern of treatment effects on population changes do not match those on electoral results: the overall pattern uncovered in Figure F.1.1 Panel A suggests that differential out-migration was small right after the reform, and then it grew over the following decades. In contrast, Figure 3 shows that support for the Christian Democrats in treated towns increased sharply immediately after the reform, and then remained stable over the following forty years.

Second, Figure F.1.1 Panel B reports the $\beta_t$ of equation (1) when the dependent variable is the log of the absolute number of DC votes. In 1953 and 1958, the absolute number of DC votes increased by 6 to 7 log-points ($p$-value = 0.03 for 1953 and 0.16 for 1958). This suggests that the potential flow of non-DC supporters out of treated towns would not be sufficient to explain the results.

Third, since the number of people who applied for land was substantially larger than the number of land parcels, the vast majority of beneficiaries were previous resident of the treatment towns (Dickinson, 1954, Rossi-Doria, 1958). For this reason, it is unlikely that the reform attracted new DC supporters. While we cannot observe individual political preferences, the lack of changes in population composition (by employment sector, age, or gender) is consistent with this interpretation.

### 5.4 Robustness

We have already shown that our results are robust to alternative bandwidths (Table 3). Here, we show that they also survive a battery of robustness tests.

**Alternative Specifications.** In Appendix Table C.1 we experiment with different specifications. Columns 1-4 report results for DC vote share, columns 5-8 results for PCI vote shares. In columns 1 and 5 we include province $\times$ decade fixed effects; in columns 2 and

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40 When the dependent variable comes from the decadal censuses we estimate the effect relative to the 1951 census. This census was taken before land expropriations started and it is likely to capture population characteristics before the reform.
6 we drop provincial seats from the sample; in columns 3 and 7 we control for a 2nd order polynomial in distance interacted with decades; in columns 4 and 8 we estimate a flexible polynomial in latitude and longitude interacted with decades (as in Dell 2010). Results from these specifications are similar to our baseline although the effect on PCI vote shares becomes insignificant when we add the second order polynomial.

Finally, we split the reform border into 10 segments and assign every town to one of these segments (Appendix Figure C.3.1). We then estimate the effect of the reform after dropping towns close to each of these 10 segments. Figure C.3.2 presents the results for DC (Panel A) and for PCI (Panel B): p-values range from 0.002 to 0.101 for DC and from 0.008 to 0.143 for PCI. Overall, results appear very robust for DC. The effect of the reform on PCI may be slightly weaker because voters who started voting for DC switched from more than one party.

**Placebo Borders.** Appendix Figure C.4.1 presents the results of the following experiment. We simulate 20 fictitious reforms, by moving the reform border inside and outside the reform area in steps of 2.5 km. For each of these fictitious reforms, we estimate a single coefficient for the impact of the reform on the DC vote share. In Figure C.4.1-Panel A we plot the 20 coefficients of these regressions (on the y-axis) against the location of the fictitious border (on the x-axis). In the same graph we also report the real coefficient, obtained when we use the actual border of the reform (in red). In Figure C.4.1-Panel B, we repeat the exercise but plot the $t$-statistics of our coefficients. The figure shows that the $t$-statistics estimated on the real border is higher than every other $t$ estimated on fictitious borders. The $\beta$ of the real border is the second highest, with the highest $\beta$ estimated on a fictitious border located 22.5 km to the inside of the reform border. In Figure C.4.2 we repeat the same exercise estimating the impact of the reform on the Communists vote share. The (negative) coefficients and the $t$-statistics estimated with the real border of the reform are below any of the statistics estimated with the placebo borders. Taken together, these results show that the actual border of the reform is the only source of discontinuity in the sample we consider.

6 Explaining the Long-Term Electoral Effect

The electoral impact of land redistribution remains stable over the four decades following the 1950 land reform. This is surprising in light of the large literature documenting voters’
short memory and the temporary nature of electoral benefits of public policies.\footnote{Evidence from Germany (Bechtel and Hainmueller, 2011), Brazil (Zucco Jr, 2013), Mexico (Díaz-Cayeros 2009), the United States (Achen and Bartels 2004) as well as cross-country analysis (Duch and Stevenson 2006) indicates that the political returns of redistribution policies are short-lived, because voters forget quickly the politicians who passed these reforms.\footnote{Between 1951 and 1991 population grew on average by 46% in treated towns. During the same period, the share of workers employed in agriculture fell from 65% to 18% (Figure D.2.1 Panel A). Also mechanical persistence of electoral preferences is unlikely to explain the stable effect of the reform over 40 years: the town-level correlation of voting results between the 1953 and the 1992 elections is only about 25% (Figure D.2.1 Panel B).} The persistence is even more remarkable as it occurred in spite of population growth and of the decline of the agricultural sector.\footnote{Between 1951 and 1991 population grew on average by 46% in treated towns. During the same period, the share of workers employed in agriculture fell from 65% to 18% (Figure D.2.1 Panel A). Also mechanical persistence of electoral preferences is unlikely to explain the stable effect of the reform over 40 years: the town-level correlation of voting results between the 1953 and the 1992 elections is only about 25% (Figure D.2.1 Panel B).}

This section proposes an explanation for the persistent effect of the Italian land reform: we hypothesize that the reform induced a Cooperative Political Equilibrium between Christian Democrats and voters in treated towns. Immediately after the reform, the Christian Democrats managed land redistribution and gained political support. In the following decades, Christian Democrat governments continued to invest more in these towns, transferring more resources to municipal governments and expanding public sector employment.

Besides explaining the main electoral results of the previous section, sustained investment may also explain why Christian Democrats found in treated town greater support for their policies. This is what we observe in 1974 for instance, when a highly divisive referendum asked whether to repeal a law regulating divorce. Christian Democrats actively campaigned for the repeal, which received greater support in reform areas. These results suggest that, following the land reform, politicians and voters were able to sustain a long-term cooperation (featuring investments in treated towns and continued electoral support), consistent with a repeated game logic.

The next subsection discusses aspects of the cooperative political equilibrium. In Section 6.2 we consider another plausible explanation to the 40-years persistence: namely, that land redistribution created a class of small landowners who became more economically conservative and pro-market as a result of their wealth (Di Tella et al., 2007). We look for evidence of greater economic conservatism in the elections of 1994, 1996 and 2001, when Berlusconi’s party, Forza Italia, ran on a right-wing platform based on tax cuts and liberalization. We find no evidence of greater support for Forza Italia in treated towns, which suggests that greater economic conservatism is unlikely to explain the lasting support for Christian Democrats.
6.1 A Political Cooperative Equilibrium

This section first describes several channels through which Christian Democrats coursed and rewarded voters in treated towns during and after the reform. It then studies voters’ support for Christian Democrat family policies. Finally, we interpret these results as part of a cooperative equilibrium in a repeated game between the incumbent party and the voters.

6.1.1 Christian Democrats Investment in Treated Towns

*The Land Allocation Process.*

The Christian Democratic government delegated allocation of expropriated land to *Enti di Riforma* (“Reform Boards”): new government agencies led by leading Christian Democratic personalities. These agencies were relatively free to select beneficiaries: although the law specified eligibility criteria to receive the land, the high number of applications meant that the agencies had to decide among many qualified applicants (Baldocchi 1978; Prinzi 1956; Capobianco 1992; Marciani 1966). Politics influenced these decisions: we obtained copies of original documents used to evaluate land applications, and many of them had political affiliations of applicants pencilled on the side (Appendix Figure A.3). Journalists at the time observed how the boards often favored applicants who moved closer to the Christian Democratic party (Russo 1955). In one famous instance, a group of beneficiaries tore down their Communist membership cards and publicly joined the Christian Democratic party (Il Mattino 1951). The *Enti di Riforma* remained active for three decades after the reform. During the first years they could evict beneficiaries on probation. Later, they collected monthly instalments on beneficiaries’ mortgages and were responsible for investing in infrastructure and land improvement projects. Christian Democrats always remained in control of these agencies.

Christian Democrats could also influence beneficiaries of the land reform through the *Coldiretti*, an association of small landowners. Most beneficiaries joined this organization because the reform law required them to join one cooperative, and *Coldiretti* was the largest. *Coldiretti* had great influence on its members because it assisted in the purchase of inputs

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43 In 1951 the government appointed Bruno Rossi as president of the *Ente Delta Padano* and Giuseppe Medici as president of *Ente Maremma* (D.P.R. 29 marzo 1951 a D.P.R. 29 marzo 1951 b). The former was close to the Christian Social wing of DC (Cazzola 2011), while the latter was a DC senator.

44 All the presidents of the *ente Maremma* between 1951 and 1970 (Coradeschi 1998) and all the presidents of the *ente Delta Padano* between 1951 and 1957 (Cazzola 2011) were either Christian Democrat members or very connected to the party.
and in the sale of output, it offered credit, and, until 1970, it provided health insurance (Primavera, 2018). The Coldiretti and the Christian Democratic party were heavily connected. For instance, many Coldiretti members served in the Italian Parliament within the ranks of DC (Associazione Ex-Parlamentari della Repubblica, 2000).

**Fiscal Transfers.** Transfers from central to local governments are key for public good provision and political competition. The Italian government started financing local public goods through grants to municipalities in the late forties (Giarda, 2000). Theory suggests that such transfers can respond to political incentives (Grossman, 1994): an intuition confirmed for many countries (Levitt and Snyder Jr., 1995; Brollo and Nannicini, 2012), including for Italy (Alesina et al., 1995).

Using the panel RDD of Equation [1] we test whether reform towns receive more fiscal transfers from the central government. For this purpose, we use data on town-level fiscal transfers from municipal balance sheets. Every year, each Italian town has to return to the Ministry of the Interior a complete balance sheet. The Italian National Institute of Statistics published the balance sheets of all Italian towns for the years 1952, 1955 and 1959, which we digitized.\footnote{The publication was discontinued after 1959.}

RDD analysis shows that treated and control towns had similar level of (log) municipal transfers per capita in 1952 ($\beta = -0.14$, s.e.=0.13). Figure 4-Panel A also shows that the reform had no impact on transfers in 1955, around the end of the land reform, and 2 years after the first post-reform Parliament had taken office. These results suggest that treated towns did not receive transfers differentially during the implementation of the reform. In contrast, in 1959, we find a sizable and marginally significant difference between treatment and control towns, ($\beta = 0.27$, S.E.=0.116, p-value = 0.097). This result points to additional Christian Democrat investments in treated towns after the land reform was completed.

**Public Sector Employment.** Governments’ patronage in public sector employment is common everywhere (Grindle, 2012). The practice was widespread in post-war Italy, where governments routinely appointed political supporters to public offices (Ferrera, 1996; Golden, 2003; Alesina et al., 2001). This evidence suggests that public sector employment could be another strategy to court voters in reform areas, once the land reform is over. We test this idea estimating Equation [1] with the share of public sector workers as dependent variable.

Figure 4-Panel B presents the results. In treated towns, the share of public sector employment was not significantly different at the time of the reform ($\beta = -0.01$, s.e.=0.01). Treated
towns experience a differential increase in public sector employment in each of the decades following the reform, though the coefficients are only significant in 1961 ($\beta = 0.007$, s.e.=0.004, p-value=0.05) and 1981 ($\beta = 0.02$, s.e.=0.01, p-value=0.04)). In 1981, the year with the highest coefficient, the treatment effect is one-third of the average in control towns. When we pool the post-reform data, the treatment coefficient is 0.009 (s.e.=0.005, p-value=0.11). The results are consistent with the idea that Christian Democrats hired more public servant in treated towns to reward their voters, though the noise in the estimates advise caution.

6.1.2 Voters’ Choices

1974 Family Policy Referendum. Results in Section 5 document a persistent effect of the land reform on Christian Democrat vote shares in the general elections. Can the logic of the political cooperative equilibrium extend to the Christian Democratic agenda, with voters in treated towns endorsing political issues important to DC? A 1974 referendum gives us the opportunity to test this hypothesis. In 1970, Law n.898 (the so-called Legge Fortuna-Baslini) introduced the divorce in Italy. Shortly thereafter, Catholic groups promoted a referendum to repeal the law. During a highly divisive campaign, Christian Democrats passionately sided with the repeal, but ultimately lost by a margin of 3-to-2.

Using the panel RDD approach of Equation (1), we test whether support for the repeal of divorce in the 1974 referendum was higher in treatment towns. For comparability, we report the effect of the reform on the 1974 referendum along with its effect on Parliament elections for every decade between 1940 and 1990. Panel A in Figure 5 shows that repeal received 2.5 percentage points more preferences in treated towns, from an average of 36% in control towns. The effect is quantitatively sizable and marginally significant (p-value=0.11).

These results suggest that voters in treated towns offer greater support to both Christian Democrat candidates and Christian Democrat political agenda. Importantly, because the 1974 referendum asked about a family policy, the greater support in treated town is unlikely to derive from economic conservatism among the new land-owners that the reform had created. We further elaborate on this point in Section 6.2.

The cooperative political equilibrium was maintained over 40 years of uninterrupted rule of the Christian Democratic party. It lasted until a major crisis upended Italian politics in 1993-94. The crisis led to the break-up of the Christian Democratic party, and ushered in power Berlusconi, the leader of the newly founded Forza Italia. Christian Democrats split in several smaller parties, which ran under different coalitions in the following elections. Appendix Figure D.3.1 shows, in elections between 1992 and 2001, these parties do not
have significantly higher vote share in treated towns, possibly because Christian Democrat politicians could no longer sustain cooperation. However, measurement issues and large confidence intervals should make one careful when interpreting these results.\footnote{46}

6.1.3 Discussion

The evidence in this section suggests that Christian Democrats continued investing in land reform towns over the four decades during which they governed Italy. It also shows evidence that voters in treated towns reciprocated by supporting some of the Christian Democrat broad political agenda. Voters’ support ends after the crisis of the Italian political system, at a point when Christian Democrat politicians where no longer able to guarantee continued investment in treated towns.

We interpret these findings through the logic of a simple repeated game. After the initial land reform, continued investment enabled the incumbent party to maintain voters’ support, as part of a cooperative strategy in a repeated interaction between Christian Democrats and voters. This interpretation may explain persistent electoral gains in reform areas even in the presence of “short memory voters” \cite{Bechtel and Hainmueller, 2011}, and even in an environment in which agriculture had become marginal and many of the original beneficiaries had passed away.

A repeated game logic may also explain why, for Christian Democrats, the political returns of investing were higher in treated than in control towns. It suggests complementarity between the initial investment (the land reform) and subsequent investments (fiscal transfers and public sector employment). A repeated game logic may also rationalize the broader finding that central governments often increase the amount of transfers to (marginally) aligned locations \cite{Brollo and Nannicini, 2012}.

The evidence of this section clarifies that our results on the persistent impact of the reform should be interpreted as reduced form estimates. The political investments the DC made after the reform may have helped maintain its electoral advantage. The repeated game logic helps explain why DC would continue investing in treated towns after the reform. Importantly, we do not aim to separately identify the “direct” electoral effect of the land reform and the “indirect” effects of the subsequent investments.

\footnote{For instance, in several elections (e.g. 1994 and 1996), candidates from several of these new Christian Democrat parties ran in the lists of major center-right or center-left parties. Thus, we cannot observe vote shares for these Christian Democrat parties separately from the other parties.}
6.2 Economic Conservatism

We now turn to a different channel of persistence: economic conservatism. Evidence from other countries shows that wealthier voters become economically conservative (Di Tella et al., 2007), endorsing parties that promote free markets and oppose redistribution (De Janvry et al., 2014). This phenomenon may offer another plausible explanation to the persistent effect of the reform, because beneficiaries of the land redistribution became richer than control farmers who did not receive land. Both the original beneficiaries and their children may then be more conservative than families on the other side of the border simply because they had more wealth. However, economic conservatism can not explain why in treated towns voters support DC agenda in a family policy referendum. In this section, we present two additional pieces of evidence that speak against this interpretation.

Home ownership. First, the premise of the economic conservatism argument is that voters are richer in treated than in control towns. We look at relative wealth of towns at the border using the home-ownership rate and estimate Equation 1 with home-ownership as dependent variable. Table 4 reports results for three different bandwidths. The treatment coefficients in the five decades following the reform are small and never significant. This evidence speaks against greater wealth of treated towns.

Support for Forza Italia. Second, between 1946 and 1994 the Christian Democrats were the only major right-of-center party. Thus, larger DC shares in treated towns may be either the result of the cooperative political equilibrium or an indication of greater support for right-wing policies. Until 1994 we have no way to tell the two effects apart. However, we can glean the underlying attitudes of voters from 1994 on, when the new party of Berlusconi started competing on a strong pro-market platform. If richer voters in treated towns favor more conservative policies, from 1994 on we expect greater support for Berlusconi at the border.

We test this idea with the RDD model and data on Berlusconi’s party vote shares in the elections of 1994, 1996 and 2001. Table 5 reports the treatment coefficient on Forza Italia vote share in the sample of towns 25 Km from the border. Treatment coefficients are small and insignificant in each election year. Moreover, controlling for the Christian Democrat vote share in 1948 has no effect on point estimates (columns 2, 4 and 6). This evidence is thus inconsistent with persistent right-wing attitudes in treated towns.

To sum up, results in this section speak against economic conservatism as the main source
of persistence for two reasons. First, support for Christian Democrats did not translate in support for the next right-wing party after 1994. Second, available data does not suggest that treated towns became richer.

7 Conclusions

We study the electoral impact of the Italian land reform, which redistributed land within well-defined reform areas. We identify the causal effect of the reform with a spatial RD, and compare treated towns just inside the reform border with control towns just outside of it. We find that the party that promoted the reform, the Christian Democrats, gains 4 percentage points in treated towns after the reform. The gains persist for over 40 years.

We argue that the persistence is the result of continued investment of DC governments in treated towns, and we bring evidence that these towns receive larger fiscal transfers and employ more workers in the public sector. For their part, voters in treated towns also support Christian Democrats’ agenda, as newly digitized data from the 1974 divorce referendum indicate. We propose the idea of a cooperative political equilibrium to explain the repeated cooperation between DC politicians and voters in treated towns years after the reform.

Our results suggest that, in order to enjoy long-term gains from redistribution policies, a party must be able to continue investing in the constituencies targeted by the initial policy. This logic induces complementarities among electoral “investments” taking place at different times in the same place. We think this is an interesting insight and we leave it to future research.
References


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Figures

Figure 1: Reform Areas and Buffers

Notes: Panel A: land reform areas as defined in the 1951 Law. In dark red the areas of Delta Padano (north-east) and Maremma (center-west). In light brown the areas of Fucino (centre), Opera Combattenti (south-west), Puglia and Lucania (south-east), Sila (south). In pink the islands of Sicily and Sardinia. Panel B: 25 km buffers inside and outside the border of Delta Padano and Maremma.
Figure 2: Balance, pre-trends and effect of reform: graphical evidence

Notes: The Figure presents graphical evidence on the panel RDD. On the y-axes we plot electoral outcomes; on the x-axes the distance to the border. In each panel, we bin data in 4 km intervals. Treated towns have positive distance and control towns have negative distance. The red lines report linear fits from regressions of the outcome on the distance from the border (separately for the two sides of the discontinuity). Panel A: dependent variable is Christian Democrats (DC) vote share in 1948 (the last election before the land reform). Panel B: dependent variable is change in DC vote share between the 1946 and 1948 (the two elections before the land reform). Panel C: dependent variable is change in DC vote share between pre- (1946-48) and post-reform elections (1956-92). Panels D-F: repeat the analysis for the Communist Party (PCI). For PCI we use the vote share of the Popular Democratic Front (FDP) in 1948 and the vote share for the Democratic Party of the Left (PDS) in 1992. Electoral data are from Corbetta and Piretti (2009). The sample consists of all towns within 32 Km from the reform borders of Delta Padano and Maremma.
Figure 3: The Electoral Impact of the Reform: Panel Regression Discontinuity Results 1946-92

Notes: The Panels display coefficients $\beta_t$ from the panel RDD Equation (1), which controls for year $\times$ reform area and town fixed effects. The omitted category is the $\beta$ of 1948. Panel A: dependent variable is Christian Democrat (DC) vote share. Panel B: dependent variable is Communists (PCI) vote share. For PCI we use the vote share of the Popular Democratic Front (FDP) in 1948 and the vote share for the Democratic Party of the Left (PDS) in 1992. Electoral data are from Corbetta and Piretti [2009]. Units of observation are town-years. The sample consists of all towns within 25 Km from the reform borders of Delta Padano and Maremma. The vertical lines mark the 1951 land reform. We estimate standard errors clustered at the town level and plot 95% confidence intervals as bars around the coefficients.
Notes: The Panels display coefficients $\beta_t$ from the panel RDD Equation 1, which controls for year $\times$ reform area and town fixed effects. Panel A: the omitted category is the $\beta$ of 1952 and the dependent variable is logarithm of per capita fiscal transfers from the central government to the municipal governments (available only for 1952, 1955 and 1959). Sources of municipal transfers are ISTAT (1955b), ISTAT (1957) and ISTAT (1962b); source of 1951 population is ISTAT (1955a). Panel B: the omitted category is the $\beta$ of 1951 and the dependent variable is share of public sector workers. Source is the decadal population censuses ISTAT (1937, 1955a, 1965, 1974, 1985, 1995, 2005). The sample consists of all towns within 25 Km from the reform borders of Delta Padano and Maremma. The green vertical lines mark the 1951 land reform. In Panel B, the grey vertical line marks the year in which the first post-reform Parliament took office. We estimate standard errors clustered at the town level and plot 95% confidence intervals as bars around the coefficients.
Figure 5: 1974 Referendum on the Repeal of Divorce

Notes: The Figure displays coefficients $\beta_t$ from the panel RDD Equation (1), which controls for year $\times$ reform area and town fixed effects. We estimate $\beta$ for separate decades as well as for the 1974 divorce referendum. The omitted category is the $\beta$ of the elections of 1946 and 1948. We include the 1992 election in the 1980s decade. The dependent variable is Christian Democrat (DC) vote share in every year except 1974; the source is Corbetta and Piretti (2009). In these years, we plot the $\beta$ in black. In 1974 dependent variable is share of “yes” votes in the divorce referendum; the source is Ministero dell’Interno (1977). In this year, we plot the coefficient in blue. Units of observation are town-years. The sample consists of all towns within 25 Km from the reform borders of Delta Padano and Maremma. The vertical lines mark the 1951 land reform. We estimate standard errors clustered at the town level and plot 95% confidence intervals as bars around the coefficients.
Table 1: Balance and Pre-Trends at the Border

<table>
<thead>
<tr>
<th></th>
<th>Preferred Bandwidth &lt; 25km (N=490)</th>
<th>Alternative Bandwidth &lt; 10km (N=222)</th>
<th>Alternative Bandwidth &lt; 50km (N=863)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control mean</td>
<td>( \beta )</td>
<td>[s.e.]</td>
</tr>
<tr>
<td>A: Balance Land Distribution 1948</td>
<td>0.013</td>
<td>0.002</td>
<td>[0.010]</td>
</tr>
<tr>
<td>Share of Expropriable Estates 1948</td>
<td>0.310</td>
<td>-0.025</td>
<td>[0.025]</td>
</tr>
<tr>
<td>B: Balance Vote Shares 1946 &amp; 1948</td>
<td>0.431</td>
<td>-0.028</td>
<td>[0.028]</td>
</tr>
<tr>
<td>Christian Democrats (DC) 1946</td>
<td>0.243</td>
<td>0.021</td>
<td>[0.031]</td>
</tr>
<tr>
<td>Communists (PC) 1946</td>
<td>0.408</td>
<td>0.035</td>
<td>[0.034]</td>
</tr>
<tr>
<td>C: Balance Geography and Census 1951</td>
<td>44.12</td>
<td>0.969</td>
<td>[2.761]</td>
</tr>
<tr>
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<td>13.63</td>
<td>[13.03]</td>
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<td>Distance from Rome</td>
<td>1.530</td>
<td>-0.020</td>
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<tr>
<td>Elevation</td>
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<td>Wheat Suitability</td>
<td>4.432</td>
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<td>[0.054]</td>
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<tr>
<td>Maize Suitability</td>
<td>6.193</td>
<td>-0.187</td>
<td>[0.138]</td>
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<td>Malaria (1932)</td>
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<td>[0.088]</td>
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<tr>
<td>Log Population</td>
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<td>[0.161]</td>
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<tr>
<td>Share Active Population</td>
<td>0.530</td>
<td>-0.009</td>
<td>[0.013]</td>
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<tr>
<td>Share Agricultural Workers</td>
<td>0.645</td>
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<td>[0.034]</td>
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<tr>
<td>Share Manufacturing Workers</td>
<td>0.144</td>
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<td>[0.021]</td>
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<tr>
<td>Share Public Sector Workers</td>
<td>0.052</td>
<td>-0.010</td>
<td>[0.007]</td>
</tr>
<tr>
<td>D: Pre-Trends Vote Shares 1948-46</td>
<td>0.122</td>
<td>-0.003</td>
<td>[0.015]</td>
</tr>
<tr>
<td>Christian Democrats (DC)</td>
<td>0.165</td>
<td>0.014</td>
<td>[0.019]</td>
</tr>
<tr>
<td>Communists (PC)</td>
<td>0.075</td>
<td>-0.021</td>
<td>[0.023]</td>
</tr>
<tr>
<td>Log Workers</td>
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<td>-0.024</td>
<td>[0.031]</td>
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<tr>
<td>Share Active Population</td>
<td>0.080</td>
<td>-0.006</td>
<td>[0.013]</td>
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<td>Share Agricultural Workers</td>
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<td>-0.016</td>
<td>[0.015]</td>
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<tr>
<td>Share Manufacturing Workers</td>
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<tr>
<td>Share Public Sector Workers</td>
<td>0.025</td>
<td>-0.005</td>
<td>[0.004]</td>
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</table>

Notes: The columns beneath \( \beta \) report the coefficient of separate regressions of the RDD specification in Equation (2). Dependent variables are specified on the first column, and their average in control towns is reported in the columns beneath “Control mean”. Refer to Appendix B for a detailed description of each of these variables and their sources. Units of observation are towns. The sample consists of all towns close to the reform borders of Delta Padano and Maremma. We report estimates for the preferred bandwidth (25 Km) and two alternative bandwidths (10 Km and 50 Km). In Panel A, the sample is approximately 17% smaller due to missing data in Medici (1948). The columns beneath “[s.e.]” report heteroscedastic robust standard errors. *p<0.1, **p<0.05, ***p<0.01.
<table>
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<td>(4)</td>
<td>(5)</td>
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A. Share of Farms Managed by the Farm Owner

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<tr>
<th>Treatment</th>
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<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
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</tr>
<tr>
<td></td>
<td>0.100</td>
<td>0.097</td>
<td>0.112</td>
<td>0.118</td>
<td>0.133</td>
<td>0.078</td>
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<tr>
<td></td>
<td>0.032</td>
<td>0.031</td>
<td>0.052</td>
<td>0.054</td>
<td>0.025</td>
<td>0.028</td>
</tr>
<tr>
<td>Mean Y control towns</td>
<td>0.722</td>
<td>0.722</td>
<td>0.713</td>
<td>0.713</td>
<td>0.716</td>
<td>0.716</td>
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B. Share of Land Managed by the Farm Owner

<table>
<thead>
<tr>
<th>Treatment</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
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<tr>
<td></td>
<td>0.125</td>
<td>0.118</td>
<td>0.133</td>
<td>0.112</td>
<td>0.083</td>
<td>0.032</td>
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<td></td>
<td>0.038</td>
<td>0.036</td>
<td>0.062</td>
<td>0.060</td>
<td>0.031</td>
<td>0.032</td>
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<tr>
<td>Mean Y control towns</td>
<td>0.440</td>
<td>0.440</td>
<td>0.410</td>
<td>0.410</td>
<td>0.467</td>
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1948 Land Distribution Control No Yes No Yes No Yes

Observations 489 489 222 222 859 859

Notes: The Table reports coefficients $\beta$ of separate regressions of the RDD specification in Equation (2). Panel A: dependent variable is share of farm managed by the farm owner in 1961. Panel B: dependent variable is the share of land managed by the farm owner in 1961. Columns 2, 4 and 6 control for 1948 share of expropriable estates. Source of 1961 farm management is [ISTAT 1962a]; source of 1948 share of expropriable estates is [Medici 1948]. The publication of the 1961 agricultural census does not report land distribution. Units of observation are towns. The sample consists of all towns close to the reform borders of Delta Padano and Maremma. We report estimates for the preferred bandwidth (25 Km) and two alternative bandwidths (10 Km and 50 Km). Heteroschedastic robust standard errors in parentheses. $^*p<0.1$, $^{**}p<0.05$, $^{***}p<0.01$. 

Table 3: The electoral impact of the land reform.

<table>
<thead>
<tr>
<th></th>
<th>Christian Democrats</th>
<th>Communist Party</th>
</tr>
</thead>
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<tr>
<td></td>
<td>Preferred Bandwidths</td>
<td>Preferred Bandwidths</td>
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<tr>
<td></td>
<td>&lt; 25km</td>
<td>&lt; 10km</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
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</tbody>
</table>

**Panel A: Pooled Results**

<table>
<thead>
<tr>
<th>Treatment × Post</th>
<th>0.044***</th>
<th>0.052**</th>
<th>0.035***</th>
<th>-0.031**</th>
<th>-0.013</th>
<th>-0.024*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[0.015]</td>
<td>[0.025]</td>
<td>[0.012]</td>
<td>[0.015]</td>
<td>[0.026]</td>
<td>[0.013]</td>
</tr>
</tbody>
</table>

**Panel B: Results by Decade**

<table>
<thead>
<tr>
<th>Treatment × 1950s</th>
<th>0.041***</th>
<th>0.045*</th>
<th>0.031***</th>
<th>-0.032**</th>
<th>-0.005</th>
<th>-0.020*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[0.013]</td>
<td>[0.024]</td>
<td>[0.011]</td>
<td>[0.013]</td>
<td>[0.022]</td>
<td>[0.011]</td>
</tr>
<tr>
<td>Treatment × 1960s</td>
<td>0.037**</td>
<td>0.053*</td>
<td>0.028**</td>
<td>-0.036**</td>
<td>-0.019</td>
<td>-0.032**</td>
</tr>
<tr>
<td></td>
<td>[0.016]</td>
<td>[0.027]</td>
<td>[0.013]</td>
<td>[0.015]</td>
<td>[0.026]</td>
<td>[0.013]</td>
</tr>
<tr>
<td>Treatment × 1970s</td>
<td>0.047***</td>
<td>0.061**</td>
<td>0.037***</td>
<td>-0.034**</td>
<td>-0.018</td>
<td>-0.028**</td>
</tr>
<tr>
<td></td>
<td>[0.016]</td>
<td>[0.025]</td>
<td>[0.013]</td>
<td>[0.016]</td>
<td>[0.028]</td>
<td>[0.014]</td>
</tr>
<tr>
<td>Treatment × 1980s</td>
<td>0.048***</td>
<td>0.046</td>
<td>0.041***</td>
<td>-0.024</td>
<td>-0.008</td>
<td>-0.017</td>
</tr>
<tr>
<td></td>
<td>[0.018]</td>
<td>[0.028]</td>
<td>[0.015]</td>
<td>[0.019]</td>
<td>[0.032]</td>
<td>[0.015]</td>
</tr>
</tbody>
</table>

Mean Y Control Group | 0.36 | 0.34 | 0.38 | 0.33 | 0.34 | 0.31 |
Number of Towns | 490 | 222 | 863 | 490 | 222 | 863 |
Observations | 5838 | 2651 | 10233 | 5838 | 2651 | 10233 |

Notes: The Table reports coefficients $\beta_t$ from the panel RDD Equation (1), which controls for year × reform area and town fixed effects. Panel A reports a single coefficient for treated towns in the post-reform years (1953-92). Panel B reports separate $\beta_t$ for each decade after the reform until the 1980s. In these regressions, we include the 1992 election in the 1980s decade. In both panels the omitted category is the $\beta$ of the elections of 1946 and 1948. Columns 1-3: dependent variable is Christian Democrat (DC) vote share. Columns 4-6: dependent variable is Communist (PCI) vote share. For PCI we use the vote share of the Popular Democratic Front (FDP) in 1948 and the vote share for the Democratic Party of the Left (PDS) in 1992. Electoral data are from Corbetta and Piretti (2009). Units of observation are town-years. The sample consists of all towns close to the reform borders of Delta Padano and Maremma. We report estimates for the preferred bandwidth (25 Km) and two alternative bandwidths (10 Km and 50 Km). Standard errors clustered at the town level in parentheses. *p<0.1, **p<0.05, ***p<0.01.
Table 4: The impact of the reform on home ownership.

<table>
<thead>
<tr>
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<th>Preferred Bandwidth</th>
<th>Alternative Bandwidths</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>&lt;25km (1)</td>
<td>&lt;10km (2)</td>
</tr>
<tr>
<td>Treatment × 1961</td>
<td>0.001</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>[0.003]</td>
<td>[0.004]</td>
</tr>
<tr>
<td>Treatment × 1971</td>
<td>-0.005</td>
<td>-0.009</td>
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<tr>
<td></td>
<td>[0.005]</td>
<td>[0.009]</td>
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<tr>
<td>Treatment × 1981</td>
<td>-0.006</td>
<td>-0.009</td>
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<tr>
<td></td>
<td>[0.006]</td>
<td>[0.011]</td>
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<tr>
<td>Treatment × 1991</td>
<td>-0.005</td>
<td>-0.005</td>
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<tr>
<td></td>
<td>[0.009]</td>
<td>[0.014]</td>
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<td>Treatment × 2001</td>
<td>-0.003</td>
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<td>[0.009]</td>
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<tr>
<td>Mean Y Control Group</td>
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<td>0.19</td>
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<td>Number of Towns</td>
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<td>222</td>
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<tr>
<td>Observations</td>
<td>2940</td>
<td>1332</td>
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Notes: The Table reports coefficients $\beta_t$ from the panel RDD Equation (1), which controls for year × reform area and town fixed effects. Dependent variable is per capita homes occupied by the owner. The omitted category is the $\beta$ of the elections of 1951. Source is the decadal population censuses (ISTAT, 1937, 1955a, 1965, 1974, 1985, 1995, 2005). Units of observation are town-years. The sample consists of all towns close to the reform borders of Delta Padano and Maremma. We report estimates for the preferred bandwidth (25 Km) and two alternative bandwidths (10 Km and 50 Km). Standard errors clustered at the town level in parentheses. *p<0.1, **p<0.05, ***p<0.01.
Table 5: The impact of the reform on Forza Italia vote share.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
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<td>(4)</td>
<td>(5)</td>
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<td>-0.001</td>
<td>0.004</td>
</tr>
<tr>
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<td>[0.009]</td>
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<tr>
<td>Mean Y Control Group</td>
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<td>0.14</td>
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<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
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<td>482</td>
<td>490</td>
<td>482</td>
<td>490</td>
<td>482</td>
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</tbody>
</table>

Notes: The Table reports coefficients $\beta$ of separate regressions of the RDD specification in Equation (2). Columns 2, 4 and 6 control for Christian Democrat vote share in 1948. Dependent variable is Forza Italia vote share (Berlusconi’s party). Columns 1-2: election year is 1994; columns 3-4: election year is 1996; columns 5-6: election year is 2001. Electoral data are from [Corbetta and Piretti 2009]. Units of observation are towns. The sample consists of all towns within 25 Km to the reform borders of Delta Padano and Maremma. The towns of Bieda (Viterbo province), Colle di Tora, Contigliano (Rieti), Rocca Santo Stefano (Rome), Rosolina (Rovigo), San Vincenzo (Livorno), Santa Luce Orciano (Pisa) and Stroncone (Terni) have missing data in the 1948 elections. Heteroschedastic robust standard errors in parentheses. *$p<0.1$, **$p<0.05$, ***$p<0.01$. 

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Appendix

A  The 1950 Italian Land Reform

Figure A.1: Expropriation Criteria

<table>
<thead>
<tr>
<th>Scansioni di reddito imponibile totale</th>
<th>Lire</th>
<th>0</th>
<th>500</th>
<th>800</th>
<th>1000</th>
<th>4000</th>
<th>5000</th>
<th>6000</th>
<th>7000</th>
<th>8000</th>
<th>10000</th>
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<tr>
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<td>0</td>
<td>15</td>
<td>30</td>
<td>55</td>
<td>70</td>
<td>85</td>
<td>90</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>Da oltre 30,000 a 60,000</td>
<td></td>
<td>0</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>70</td>
<td>75</td>
<td>80</td>
<td>85</td>
<td>90</td>
<td>95</td>
</tr>
<tr>
<td>&gt; 60,000 a 100,000</td>
<td></td>
<td>35</td>
<td>40</td>
<td>47</td>
<td>55</td>
<td>60</td>
<td>65</td>
<td>70</td>
<td>75</td>
<td>80</td>
<td>85</td>
</tr>
<tr>
<td>&gt; 100,000 a 200,000</td>
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<td>45</td>
<td>50</td>
<td>55</td>
<td>60</td>
<td>65</td>
<td>70</td>
<td>75</td>
<td>80</td>
<td>85</td>
<td>90</td>
</tr>
<tr>
<td>&gt; 200,000 a 300,000</td>
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<td>57</td>
<td>60</td>
<td>65</td>
<td>70</td>
<td>75</td>
<td>80</td>
<td>85</td>
<td>90</td>
<td>95</td>
</tr>
<tr>
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<td>66</td>
<td>71</td>
<td>76</td>
<td>80</td>
<td>85</td>
<td>90</td>
<td>90</td>
<td>95</td>
</tr>
<tr>
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<td>70</td>
<td>76</td>
<td>78</td>
<td>80</td>
<td>85</td>
<td>90</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>&gt; 500,000 a 600,000</td>
<td></td>
<td>68</td>
<td>74</td>
<td>79</td>
<td>82</td>
<td>85</td>
<td>90</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>&gt; 600,000 a 700,000</td>
<td></td>
<td>72</td>
<td>78</td>
<td>82</td>
<td>85</td>
<td>90</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>&gt; 700,000 a 800,000</td>
<td></td>
<td>76</td>
<td>82</td>
<td>86</td>
<td>90</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>&gt; 800,000 a 900,000</td>
<td></td>
<td>82</td>
<td>86</td>
<td>90</td>
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<tr>
<td>&gt; 900,000 a 1,000,000</td>
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<td>90</td>
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<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>&gt; 1,000,000 a 1,200,000</td>
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<td>90</td>
<td>92</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>Oltre 1,200,000</td>
<td></td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
</tbody>
</table>

Notes: Annex to the 1951 Law. The Table specifies the share of land to be expropriated for different estates. On the x-axis estates are ranked according to their productivity (average taxable income per ha: on the left the most productive, on the right the least productive). On the y-axis estates are ranked according to size (total taxable income: at the top the smallest, at the bottom the largest). Every cell specifies the percentage of land to be expropriated (in percentage).
Figure A.2: Expropriation and redistribution maps.

Notes: Panel A: share of estates producing income above £20'000. Source: Medici (1948). Panel B: colored towns are included in the area of Puglia and Lucania. Towns marked in black were included in the reform area, but did not expropriate any land. Source: Prinzi (1956).
Notes: Example of rejected applications. On the left: on the top-left corner “Rosso” identifies the applicant as “red” (i.e. communist). On the right: last sentence on the report reads: “It turns out that the above family is politically close to the extreme left”. Source: ALSIA archive. We thank Eleonora Cesareo for sharing this material with us.
B Data Appendix

B.1 The Map of Italian Towns in 1951

We construct our data from a 1951 map of Italy. We create this map by combining two complete lists of towns, one from 1951 and one from 2001, with a shapefile of 2001 Italian towns. We use province and town name to match the two lists and construct the 1951 map taking into account merging and splitting events that happened between 1951 and 2001. We end up with a map and a dataset of 7792 towns. We drop 7 towns less than 50 km far from a reform border because they were merged into another town and it is not possible to reconstruct their borders in 1951. We compute the distance between the town centroid and each reform area border and assign each town to its closest reform area. We take into account splitting and merging events to add data from years after 1951. In the case of a town splitting after 1951, we aggregate the data for the towns that were a unique entity in 1951. When more towns merged after 1951, we assign weights based on population or area and we match the weighted measures to the relevant 1951 towns. This procedure causes variables for different years to have a different number of observations.

B.2 Variable Construction

Treatment

Treated town. Treated towns lie inside reform areas. In these towns, reform bodies had the power to expropriate and redistribute land. The list of treated towns is specified in the executive orders enacting the land reform (D.P.R.66/1951, D.P.R.67/1951, D.P.R.68/1951, D.P.R.69/1951, D.P.R.70/1951, D.P.R.264/1951, D.P.R.265/1951).

Distance to reform border. We define continuous reform borders by conflating all contiguous towns inside reform areas. We then use ArcGIS to compute the distance between the centroid of each town and the closest reform area border.

Electoral outcomes

Town-level electoral results in 1919-24 and 1946-2001 come from Corbetta and Piretti (2009). We correct vote shares larger than 100% with data from the Ministry of the Interior.

49 We find these lists on http://www.elesh.it.
50 From ISTAT. ISTAT provides a shapefile for 1991 towns, but ELESHT website does not have a 1991 list of towns.
51 Nicastro, Sambiase and Sant’Eufemia Lamezia were joined into Lamezia Terme; Carrara San Giorgio and Carrara Santo Stefano were joined into Due Carrare; Contarina and Donada were joined into Porto Viro. Other small holes in our map, inside the 50km buffer, are caused by towns created from territories that in 1951 were part of several towns. For example: Semproniano was created in 1963 with territories taken from Manciano, Roccalbegna and Santa Fiora; Sellia Marina was created in 1957 with territories from Albi, Soveria Simeri, Sellia, Cropani and Magisano.
1946 elections nominated members of the Constitutional Assembly. For the years 1919-24

**DC vote share: 1946-92.** Vote share is total DC votes divided the total number of votes cast.

**log DC votes: 1946-92.** The variable is the natural logarithm of total DC votes. We made no adjustment for zeros as there were none.

**PCI vote share: 1946-92.** We use the total votes for the Popular Democratic Front (FDP) in 1948. We use the total votes for the Democratic Party of the Left (PDS) in 1992. In all other years we use total votes for the Communist Party (PCI). Vote share is total of the votes of one of these parties divided the total number of votes cast.

**log PCI votes: 1946-92.** The variable is the natural logarithm of total PCI votes. We made no adjustment for zeros as there were none.

**DC vote share: 1919-24.** We take the Italian Popular Party (PPI) to be the Christian Democrats in 1919, 1921 and 1924. Vote share is total PPI votes divided the total number of votes cast.

**PSI vote share: 1919-48.** The Socialist Party ran under the name of Italian Socialist Party (PSI) in 1919, Official Socialist Party (PSU) in 1921 and United Socialist Party (PSU) in 1924. After the war, it ran as Italian Socialist Party (PSI) in 1946 and together with the Communist Party in the Popular Democratic Front (FDP) in 1948. Vote share is total votes for one of these parties divided the total number of votes cast.

**PCI vote share: 1921-48.** The Communist Party (PCI) was founded in 1921 and ran in both 1921 and 1924 elections. After the war, it ran as Italian Communist Party (PCI) in 1946 and together with the Socialist Party in the Popular Democratic Front (FDP) in 1948. Vote share is total votes for one of these parties divided the total number of votes cast.

**Share “yes” in divorce referendum: 1974.** Town-level returns from the 1974 divorce referendum is from Ministero dell’Interno (1977). Share of “yes” votes is total votes for repealing the divorce law divided total number of votes cast.

**Forza Italia vote share: 1994-2001.** Vote share is total Forza Italia votes divided total number of votes cast.

**log of eligible voters: 1946-92.** Between 1946 and 1972 all citizens above 21 were eligible to vote. In 1975 the age limit was reduced to 18. The variable is the natural logarithm of eligible voters.

**Voter turnout: 1946-92.** This variable is number of votes cast by number of eligible voters.

Land distribution

**Share of expropriable estates (number): 1948.** Expropriable estates data is from Medici (1948). Table 2. The table reports town-level number of estates in 1948, broken down by 11 separate categories of estate value. We use this information to construct the share of estates that the reform allowed to expropriate. We consider estates that could be expropriated as those with value in one of the top 4 categories of value. All estates in these
categories were worth at least £20’000. Share of expropriable estates (number) is the number of expropriable estates divided the total number of estates.

**Share of expropriable estates (value): 1948.** Expropriable estates data is from Medici (1948), Table 2. The table reports town-level value of estates in 1948, broken down by 11 separate categories of estate value. We use this information to construct the share of estates value that the reform allowed to expropriate. We consider estates that could be expropriated as those with value in one of the top 4 categories of value. All estates in these categories were worth at least £20000. Share of expropriable estates (value) is the total value of expropriable estates divided by the total value of estates.

**Share of owner-operated farms (number): 1961.** Data on number of farms by type of operation is from ISTAT (1962a), Table 11. Share of owner-operated farms (number) is number of owner-operated farms divided the total number of farms.

**Share owner-operated farms (land): 1961.** Data on farm size by type of operation in 1961 is from ISTAT (1962a), Table 11. Share owner-operated farms (land) is total land of owner-operated farms divided total farmland.

### Economic and demographic characteristics


**log population: 1936-2001.** Population data is from the following tables of the decadal population censuses: Table 4 (1951, 1961 and 1981); Table 3 (1971), Table 5.2 (1991), Table 2.2 (2001). The variable is the natural logarithm of total population. We made no adjustment for zeros as there were none.

**Share of active population: 1936-2001.** Active population data is from the following tables of the decadal population censuses: Table 6 (1951, 1961 and 1971), Table 7 (1981), Table 5.4 (1991), Table 2.5 (2001). The variable is active population divided total working age population. In 1936 the working age is not specified. In 1951 and 1961 working age is 10 and in 1971 14. From 1981 on we observe population by detailed age group, and use 14 as the cutoff for working age population to allow comparison with 1971.

**Share of workers in agriculture: 1936-2001.** Sector of employment of workers is from the following tables of the decadal population censuses: Table 6 (1951 and 1961), Table 7 (1971), Table 8 (1981), Table 5.5 (1991), Table 2.7 (2001). The variable is number of workers employed in agriculture divided total active population. In 1961 and 1971 forestry is included in agriculture.

**Share of workers in manufacturing: 1936-2001.** Sector of employment of workers is from the following tables of the decadal population censuses: Table 6 (1951 and 1961), Table 7 (1971), Table 8 (1981), Table 5.5 (1991), Table 2.7 (2001). The variable is number of workers employed in manufacturing divided total active population. The manufacturing sector includes extractive and manufacturing industry. In 1981 manufacturing is the sum of economic sectors 2, 3 and 4 in Table 8.

**Share of workers in public sector: 1936-2001.** Sector of employment of workers is from the following tables of the decadal population censuses: Table 6 (1951 and 1961),
Table 7 (1971), Table 8 (1981), Table 5.5 (1991), Table 2.7 (2001). The variable is number of workers employed in manufacturing divided total active population. In 1981 public sector is economic sector 9.A. In 2001 public sector combines workers in public administration and other public employees.

**Change in log population: 1936-1951.** The variable is the natural logarithm of population in 1951 minus the natural logarithm of population in 1936. We made no adjustment for zeros as there were none.

**Change in log active population: 1936-1951.** The variable is the natural logarithm of active population in 1951 minus the natural logarithm of active population in 1936. We made no adjustment for zeros as there were none.

**Change in sectoral share (agriculture, manufacturing, public sector): 1936-1951.** These variables are the difference between the share of active population in agriculture, manufacturing and public sector in 1951 and the share of the same sectors in 1936.

**Share of males: 1951-2001.** Population data is from the following tables of the decadal population censuses: Table 4 (1951, 1961 and 1981); Table 3 (1971), Table 5.2 (1991), Table 2.2 (2001). The variable is number of males divided by total population.

**Share of people in age groups (<21, 21-45; 46-65; >65): 1951-2001.** Population data is from the following tables of the decadal population censuses: Table 4 (1951, 1961 and 1981); Table 3 (1971), Table 5.2 (1991), Table 2.2 (2001). The variable is population in specific age groups divided by total population.

**Home ownership: 1951-2001.** Home ownership data is from the following tables of the decadal population censuses: Table 9 (1951), Table 10 (1961), Table 17 (1971), Table 16 (1981), Table 5.18 (1991), Table 2.12 (2001). The town-level is number of homes owned by their residents divided by total population.

**Town balance sheets**


**Geographic characteristics**

**Coordinates.** Towns’s latitude and longitude corresponds to the coordinates of their centroids in the 1951 map. They are measured in degrees in the WGS84 UTM32N coordinate system.

**Distance to coast.** We compute the distance to the coast of towns’ 1951 centroid in ArcGIS.

**Distance to Rome.** We compute the distance to Rome’s centroid and towns’ 1951 centroid in ArcGIS.

**Provinces: 1951.** Each town is assigned to its 1951 province.

**Slope.** Slope data is from the US Geological Survey database [USGS, 2005]. The data is defined on 3-arc seconds grid covering the entire planet (approximately 462.5 – 462.5 meters).
We join the raster to the map of 1951 Italian towns and assign to every town the average slope of all grid cells falling inside the town limits.

**Elevation.** Elevation data is from the US Geological Survey database (USGS 2005). The data is defined on 3-arc seconds grid covering the entire planet (approximately 462.5 meters). We join the raster to the map of 1951 Italian towns and assign to every town the average elevation of all grid cells falling inside the town limits.

**Potential yield: wheat.** Potential yield data is from FAO-GAEZ (FAO 2015). This data is defined on a 9.25 × 9.25 Km grid covering the entire planet. We join the raster to the map of 1951 Italian towns and assign to every town the average potential yield of wheat with medium-level of inputs of all grid cells falling inside the town limits.

**Endemic malaria 1934.** We select towns where malaria was endemic in 1934 using a map by Missiroli (1934). To digitize this data, we superimpose Missiroli’s map to our map and code every town in the malaria areas as having malaria in 1934.

**Potential yield: maize.** Potential yield data is from FAO-GAEZ (FAO 2015). This data is defined on a 9.25 × 9.25 Km grid covering the entire planet. We join the raster to the map of 1951 Italian towns and assign to every town the average potential yield of maize with medium-level of inputs of all grid cells falling inside the town limits.

**Share of border exposed to treatment.** The variable is the length of the town limits divided by the length of these limits that touch a treated towns.
C Robustness and Alternative Specifications

C.1 1919-1948 Pre-Trends

Figure C.1.1: Pre-Fascism Elections

A. 1919-48: pre-trends DC

B. 1919-48: pre-trends PSI

C. 1919-48: pre-trends PCI

Notes: The Panels display coefficients $\beta_t$ from the panel RDD Equation (1), which controls for year $\times$ reform area and town fixed effects. The omitted category is the $\beta$ of 1948. Panel A: dependent variable is Christian Democrat (DC) vote share. For DC we use the vote share of the Italian Popular Party (PPI) in the years 1919-24. Panel B: dependent variable is Italian Socialist Party (PSI) vote share. For PSI we use the vote share of the Official Socialist Party (PSU) in 1921, of the United Socialist Party (PSU) in 1924 and of the Popular Democratic Front (FDP) in 1948. Panel C: dependent variable is Italian Communist Party (PCI) vote share. For PCI we use the vote share of the Popular Democratic Front (FDP) in 1948. Electoral data are from Corbetta and Piretti (2009). Units of observation are town-years. The sample consists of all towns within 25 Km from the reform borders of Delta Padano and Maremma. We estimate standard errors clustered at the town level and plot 95% confidence intervals as bars around the coefficients.
C.2 Alternative Specifications

Table C.1: Robustness to alternative specifications.

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<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
</tr>
<tr>
<td></td>
<td>0.033**</td>
<td>0.041***</td>
<td>0.048**</td>
<td>0.031***</td>
<td>-0.022*</td>
<td>-0.033**</td>
</tr>
<tr>
<td></td>
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<td>[0.013]</td>
<td>[0.024]</td>
<td>[0.007]</td>
<td>[0.012]</td>
<td>[0.014]</td>
</tr>
<tr>
<td>Treatment × 1960s</td>
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<td>0.036**</td>
<td>0.061**</td>
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<td>-0.036**</td>
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<td>[0.027]</td>
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</tr>
<tr>
<td>Treatment × 1970s</td>
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<td>0.047***</td>
<td>0.064**</td>
<td>0.043***</td>
<td>-0.030*</td>
<td>-0.035**</td>
</tr>
<tr>
<td></td>
<td>[0.016]</td>
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<td>[0.025]</td>
<td>[0.009]</td>
<td>[0.016]</td>
<td>[0.016]</td>
</tr>
<tr>
<td>Treatment × 1980s</td>
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<td>0.048***</td>
<td>0.047*</td>
<td>0.053***</td>
<td>-0.019</td>
<td>-0.024</td>
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</tr>
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<td>5838</td>
<td>5838</td>
<td>5838</td>
<td>5718</td>
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</tbody>
</table>

Notes: The Table reports coefficients $\beta_t$ from alternative specifications of the panel RDD Equation (1). In these regressions, we include the 1992 election in the 1980s decade. The omitted category is the $\beta$ of the elections of 1946 and 1948. All regressions control reform area × year and town fixed effects. Columns 1 and 5: control for province × year fixed effects. Columns 2 and 6: drop 10 provincial seats (including Rome). Columns 3 and 7: control for 2nd order polynomial in distance interacted with decades on both side of the border. Columns 4 and 8: control for polynomial in latitude and longitude interacted with decades as in Dell [2010]. Columns 1-4: dependent variable is Christian Democrat (DC) vote share. Columns 5-8: dependent variable is Communist (PCI) vote share. For PCI we use the vote share of the Popular Democratic Front (FDP) in 1948 and the vote share for the Democratic Party of the Left (PDS) in 1992. Electoral data are from Corbetta and Piretti [2009]. Units of observation are town-years. The sample consists of all towns within 25 Km of the reform borders of Delta Padano and Maremma. Standard errors clustered at the town level in parentheses. *p<0.1, **p<0.05, ***p<0.01.
C.3 Robustness to Dropping Portions of the Reform Border

Figure C.3.1: Map: splitting the border in 10 segments

Notes: The Map shows how we split the borders of Delta Padano and Maremma into 10 segments of equal length. Each town within 25 km of the border of Delta Padano and Maremma is assigned to the closest segment. We report estimates of (1) in Figure C.3.2.
Figure C.3.2: Treatment coefficients when dropping portions of the sample

### Notes:
The Panels report coefficients $\beta$ from the panel RDD Equation (1), which controls for year $\times$ reform area and town fixed effects. We estimate a single coefficient for treated towns in the post-reform years (1953-92). In both Panels, the first estimate (point “None” on the x-axis) corresponds to our baseline coefficient. We obtain the other coefficients after dropping all towns close to one of the 10 segments marked on Map C.3.1. Panel A: dependent variable is Christian Democrat (DC) vote share. Panel B: dependent variable is Communist (PCI) vote share. For PCI we use the vote share of the Popular Democratic Front (FDP) in 1948 and the vote share for the Democratic Party of the Left (PDS) in 1992. Electoral data are from Corbetta and Piretti (2009). Units of observation are town-years. The sample consists of all towns within 25 km to the reform borders of Delta Padano and Maremma. We estimate standard errors clustered at the town level and plot 95% confidence intervals as bars around the coefficients.
C.4 Placebo Borders

Figure C.4.1: Placebo Borders: Christian Democrats

Notes: The Panels report results of placebo regressions. We simulate 20 fictitious reforms, by moving the reform border inside and outside the reform area in steps of 2.5 km and creating a new sample of all towns within 25 km from this new border. For each of these fictitious reforms, we estimate a single coefficient for the impact of the reform on in the post-reform years (1953-92). Panel A: estimated $\beta$. Panel B: $t$-statistics calculated from standard errors clustered at the town level. In both panels we plot in red the coefficient and $t$-statistics we obtain when we estimate the effect in the true reform area. Dependent variable is Christian Democrat (DC) vote share from Corbetta and Piretti (2009). Units of observation are town-years.
Figure C.4.2: Placebo Borders: Communist Party

Notes: The Panels report results of placebo regressions. We simulate 20 fictitious reforms, by moving the reform border inside and outside the reform area in steps of 2.5 km and creating a new sample of all towns within 25 km from this new border. For each of these fictitious reforms, we estimate a single coefficient for the impact of the reform on in the post-reform years (1953-92). Panel A: estimated $\beta$. Panel B: $t$-statistics calculated from standard errors clustered at the town level. In both panels we plot in red the coefficient and $t$-statistics we obtain when we estimate the effect in the true reform area. Dependent variable is Communist Party (PCI) vote share from Corbetta and Piretti (2009). For PCI we use the vote share of the Popular Democratic Front (FDP) in 1948 and the vote share for the Democratic Party of the Left (PDS) in 1992. Units of observation are town-years.
C.5 Continuity of the Running Variable

Figure C.5.1: McCrory Test

Notes: The Figure plots the density approximation of the number of towns within 25 Km from the border of Delta Padano and Maremma. The approximation estimates separate densities on the two sides of the border and it is the basis of the test proposed by McCrory (2008). The $t$-statistics of the test is -2.07.

Figure C.5.2: Example of discontinuity

Notes: The Map presents an extreme example of reform area in which we would expect a jump in the density. In this fictitious reform, the red town is included in the reform. All surrounding towns belong to the control group.
Figure C.5.3: Simulation Exercises

Notes: The Panels report t-statistics of McCrary tests estimated on fictitious reform areas. Panel A: 14 fictitious reform areas; y-axis: t-statistics of the McCrary tests. The first area is created by removing from Maremma all treated towns lying on the reform border (point -1 on the x-axis). The other 13 areas are created by expanding Maremma so that it includes all towns lying on each successive reform border (points 1-13 on the x-axis). The t-statistics of the McCrary test of the true Maremma area is in red (point 0 on the x-axis). Panel B: 999 randomly generated fictitious reform areas. Each of these areas consist of contiguous towns with the same area as Maremma. We calculate the t-statistics of the McCrary test for each of them on the sample of towns that lie within 25 Km from these fictitious borders. The Figure reports the distribution of these t-statistics. The black vertical line marks the t-statistics of the McCrary test of the true Maremma area. The red vertical line marks the average t-statistics of the distribution.
D Additional Results

D.1 Turnout

Figure D.1.1: Turnout: Panel RDD Coefficients

Notes: The Figure displays coefficients $\beta_t$ from the panel RDD Equation (1), which controls for year $\times$ reform area and town fixed effects. The omitted category is the $\beta$ of 1948. Dependent variable is votes cast divided by number of eligible voters. Electoral data are from [Corbetta and Piretti (2009)]. Units of observation are town-years. The sample consists of all towns within 25 Km from the reform borders of Delta Padano and Maremma. The vertical line marks the 1951 land reform. We estimate standard errors clustered at the town level and plot 95% confidence intervals as bars around the coefficients.
D.2 Changing society

Figure D.2.1: Share of Agricultural Workers and Correlation across Elections

**Notes:** Panel A: share of workers employed in agriculture between 1936 and 1991. Source: decadal population censuses (ISTAT, 1937, 1955, 1965, 1974, 1985, 1995, 2005). Panel B: pairwise correlation of Christian Democrat (DC) vote share across election years. Each point corresponds to the pairwise correlation of town-level DC vote share in two separate elections. Correlation is on the y-axis; one of the election years on the x-axis the other is marked on top of the lines. The lines connects correlations of the same election year. The sample consists of all Italian towns.
D.3 Christian Democrat Parties after 1992

Figure D.3.1: Post-1992 Elections: Panel RDD

Notes: The Panels display coefficients $\beta_t$ from the panel RDD Equation (1), which controls for year $\times$ reform area and town fixed effects. The omitted category is the $\beta$ of 1948. Panel A: dependent variable is Christian Democrat (DC) vote share. In the post-1992 elections we consider DC the following parties: Italian Popular Party and Patto Segni (1994); Italian Popular Party, Lista Dini, the Christian Democratic Center and the Christian Democratic Union (1996); Margherita, Christian Democratic Center and the Christian Democratic Union (2001). Panel B: dependent variable is Communists (PCI) vote share. For PCI we use the vote share of the Popular Democratic Front (FDP) in 1948 and the vote share for the Democratic Party of the Left (PDS) in 1992. In the post-1992 elections we consider PCI the following parties: Democratic Party of the Left (1992); Democratic Party of the Left and Communist Refoundation Party (1994-96); Democrats of the Left, Communist Refoundation Party and Communist Party (2001). Electoral data are from Corbetta and Piretti (2009). Units of observation are town-years. The sample consists of all towns within 25 Km from the reform borders of Delta Padano and Maremma. The vertical lines mark the 1951 land reform. We estimate standard errors clustered at the town level and plot 95% confidence intervals as bars around the coefficients.
## D.4 Southern Italy

### Table D.1: Balance and Pre-Trends at the Border

<table>
<thead>
<tr>
<th>Pre-Trends Variable</th>
<th>Preferred Bandwidth</th>
<th>Alternative Bandwidth</th>
<th>Alternative Bandwidth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 25km (N=1169)</td>
<td>&lt; 10km (N=561)</td>
<td>&lt; 50km (N=1788)</td>
</tr>
<tr>
<td></td>
<td>Control mean</td>
<td>β</td>
<td>[s.e.]</td>
</tr>
<tr>
<td><strong>A: Balance Land Distribution 1948</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Expropriable Estates 1948</td>
<td>0.001</td>
<td>0.004***</td>
<td>[0.001]</td>
</tr>
<tr>
<td><strong>B: Balance Vote Shares 1946 &amp; 1948</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christian Democrats (DC) 1946</td>
<td>0.350</td>
<td>-0.036*</td>
<td>[0.020]</td>
</tr>
<tr>
<td>Christian Democrats (DC) 1948</td>
<td>0.534</td>
<td>-0.061***</td>
<td>[0.018]</td>
</tr>
<tr>
<td>Communists (PC) 1946</td>
<td>0.058</td>
<td>0.039***</td>
<td>[0.017]</td>
</tr>
<tr>
<td>Communists (PC) 1948</td>
<td>0.169</td>
<td>0.073***</td>
<td>[0.020]</td>
</tr>
<tr>
<td><strong>C: Balance Geography and Census 1951</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance from the Coast</td>
<td>25.71</td>
<td>1.085</td>
<td>[2.294]</td>
</tr>
<tr>
<td>Distance from Rome</td>
<td>307.4</td>
<td>-10.49</td>
<td>[10.04]</td>
</tr>
<tr>
<td>Slope</td>
<td>3.121</td>
<td>-0.322*</td>
<td>[0.184]</td>
</tr>
<tr>
<td>Elevation</td>
<td>446.2</td>
<td>-15.95</td>
<td>[36.71]</td>
</tr>
<tr>
<td>Wheat Suitability</td>
<td>4.052</td>
<td>0.021</td>
<td>[0.045]</td>
</tr>
<tr>
<td>Maize Suitability</td>
<td>3.669</td>
<td>0.088</td>
<td>[0.099]</td>
</tr>
<tr>
<td>Malaria (1932)</td>
<td>0.546</td>
<td>-0.000</td>
<td>[0.051]</td>
</tr>
<tr>
<td>Log Population</td>
<td>8.231</td>
<td>0.386***</td>
<td>[0.109]</td>
</tr>
<tr>
<td>Share Active Population</td>
<td>0.564</td>
<td>-0.001</td>
<td>[0.013]</td>
</tr>
<tr>
<td>Share Agricultural Workers</td>
<td>0.690</td>
<td>0.016</td>
<td>[0.022]</td>
</tr>
<tr>
<td>Share Manufacturing Workers</td>
<td>0.118</td>
<td>-0.029***</td>
<td>[0.010]</td>
</tr>
<tr>
<td>Share Public Sector Workers</td>
<td>0.040</td>
<td>0.006</td>
<td>[0.004]</td>
</tr>
<tr>
<td><strong>D: Pre-Trends Vote Shares 1948-46</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christian Democrats (DC)</td>
<td>0.185</td>
<td>-0.024</td>
<td>[0.018]</td>
</tr>
<tr>
<td>Communists (PC)</td>
<td>0.111</td>
<td>0.035**</td>
<td>[0.015]</td>
</tr>
<tr>
<td><strong>E: Pre-Trends Census 1951-36</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Population</td>
<td>0.125</td>
<td>0.058***</td>
<td>[0.013]</td>
</tr>
<tr>
<td>Log Workers</td>
<td>0.171</td>
<td>0.106***</td>
<td>[0.026]</td>
</tr>
<tr>
<td>Share Active Population</td>
<td>0.138</td>
<td>0.020*</td>
<td>[0.011]</td>
</tr>
<tr>
<td>Share Agricultural Workers</td>
<td>-0.039</td>
<td>0.010</td>
<td>[0.012]</td>
</tr>
<tr>
<td>Share Manufacturing Workers</td>
<td>-0.051</td>
<td>-0.010</td>
<td>[0.008]</td>
</tr>
<tr>
<td>Share Public Sector Workers</td>
<td>0.016</td>
<td>0.000</td>
<td>[0.003]</td>
</tr>
</tbody>
</table>

**Notes:** The columns beneath β report the coefficient of separate regressions of the RDD specification in Equation (2). Dependent variables are specified on the first column, and their average in control towns is reported in the columns beneath “Control mean”. Refer to Appendix B for a detailed description of each of these variables and their sources. Units of observation are towns. The sample consists of all towns close to the reform borders of Fucino, Opera Combattenti, Puglia and Lucania and Sila. We report estimates for the preferred bandwidth (25 Km) and two alternative bandwidths (10 Km and 50 Km). In Panel A, the sample is approximately 14% smaller due to missing data in Medici (1948). The columns beneath “[s.e.]” report heteroschedastic robust standard errors. *p<0.1, **p<0.05, ***p<0.01.
## E SUTVA

Table E.1: Diff-in-Diff with heterogeneity.

<table>
<thead>
<tr>
<th></th>
<th>Christian Democrats</th>
<th></th>
<th>Communist Party</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>Treatment × Post</td>
<td>0.031***</td>
<td>-0.004</td>
<td>0.030*</td>
<td>-0.022***</td>
</tr>
<tr>
<td></td>
<td>[0.007]</td>
<td>[0.021]</td>
<td>[0.015]</td>
<td>[0.008]</td>
</tr>
<tr>
<td>Share agricultural workers × Post</td>
<td>0.021</td>
<td>0.029</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.016]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share agricultural workers × Treatment × Post</td>
<td>0.051</td>
<td>0.023</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.036]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of town limit on reform border × Post</td>
<td>0.013</td>
<td></td>
<td>-0.012</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.026]</td>
<td></td>
<td>[0.034]</td>
<td></td>
</tr>
<tr>
<td>Share of town limit on reform border × Treatment × Post</td>
<td>-0.017</td>
<td>0.026</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.050]</td>
<td></td>
<td>[0.047]</td>
<td></td>
</tr>
<tr>
<td>Mean Y Control Group</td>
<td>0.36</td>
<td>0.36</td>
<td>0.31</td>
<td>0.33</td>
</tr>
<tr>
<td>Number of Towns</td>
<td>483</td>
<td>482</td>
<td>155</td>
<td>483</td>
</tr>
<tr>
<td>Sample</td>
<td>All</td>
<td>All</td>
<td>Border</td>
<td>All</td>
</tr>
<tr>
<td>Observations</td>
<td>1929</td>
<td>1925</td>
<td>620</td>
<td>1929</td>
</tr>
</tbody>
</table>

Notes: The Table reports coefficients from Equation (3), which controls for year × reform area and town fixed effects. Post = 1 for elections after the land reform (1953-92). There are 2 elections before the reform: 1946 and 1948. Column 1 and 4: baseline (no heterogeneity). Column 2 and 5: diff-in-diff with heterogeneity in share of agricultural workers. Column 3 and 6: diff-in-diff with heterogeneity in share of town limits touching the reform border. Columns 1-3: dependent variable is Christian Democrat (DC) vote share. Columns 4-6: dependent variable is Communist (PCI) vote share. For PCI we use the vote share of the Popular Democratic Front (FDP) in 1948 and the vote share for the Democratic Party of the Left (PDS) in 1992. Electoral data are from [Corbetta and Piretti (2009)](http://www.corbetta.it/publications). Share of agricultural workers is from [ISTAT (1955a)](https://istat.it). Units of observation are town-years. Columns 1-2 and 4-5: the sample consists of all towns within 25 Km to the reform borders of Delta Padano and Maremma. Column 3 and 6: the sample consists of all towns touching the border of either Maremma or Delta Padano. Standard errors clustered at the town level in parentheses. *p<0.1, **p<0.05, ***p<0.01.
Table E.2: Donut Panel RDD.

<table>
<thead>
<tr>
<th></th>
<th>Christian Democrats</th>
<th></th>
<th>Communist Party</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) All</td>
<td>(2) Donut: 1.5 km</td>
<td>(3) Donut: 2 km</td>
<td>(4) Donut: 2.5 km</td>
</tr>
<tr>
<td>Treatment × 1950s</td>
<td>0.041***</td>
<td>0.033***</td>
<td>0.031**</td>
<td>0.038***</td>
</tr>
<tr>
<td></td>
<td>[0.013]</td>
<td>[0.012]</td>
<td>[0.012]</td>
<td>[0.013]</td>
</tr>
<tr>
<td>Treatment × 1960s</td>
<td>0.037**</td>
<td>0.032**</td>
<td>0.029**</td>
<td>0.034**</td>
</tr>
<tr>
<td></td>
<td>[0.016]</td>
<td>[0.015]</td>
<td>[0.015]</td>
<td>[0.016]</td>
</tr>
<tr>
<td>Treatment × 1970s</td>
<td>0.047***</td>
<td>0.046***</td>
<td>0.043**</td>
<td>0.042**</td>
</tr>
<tr>
<td></td>
<td>[0.016]</td>
<td>[0.017]</td>
<td>[0.017]</td>
<td>[0.018]</td>
</tr>
<tr>
<td>Treatment × 1980s</td>
<td>0.048***</td>
<td>0.052***</td>
<td>0.050***</td>
<td>0.053***</td>
</tr>
<tr>
<td></td>
<td>[0.018]</td>
<td>[0.018]</td>
<td>[0.019]</td>
<td>[0.020]</td>
</tr>
<tr>
<td>Mean Y Control Group</td>
<td>0.36</td>
<td>0.36</td>
<td>0.36</td>
<td>0.36</td>
</tr>
<tr>
<td>Number of Towns</td>
<td>490</td>
<td>471</td>
<td>461</td>
<td>444</td>
</tr>
<tr>
<td>Observations</td>
<td>5838</td>
<td>5615</td>
<td>5495</td>
<td>5291</td>
</tr>
</tbody>
</table>

Notes: The Table reports coefficients $\beta_t$ from the panel RDD Equation (1), which controls for year $\times$ reform area and town fixed effects. We include the 1992 election in the 1980s decade. The omitted category is the $\beta$ of the elections of 1946 and 1948. Columns 1-4: dependent variable is Christian Democrat (DC) vote share. Columns 5-8: dependent variable is Communist (PCI) vote share. For PCI we use the vote share of the Popular Democratic Front (FDP) in 1948 and the vote share for the Democratic Party of the Left (PDS) in 1992. Electoral data are from Corbetta and Piretti (2009). Units of observation are town-years. Column 1 and 5: baseline; the sample consists of all towns within 25 Km to the reform borders of Delta Padano and Maremma. Columns 2-4 and 6-8: “donut” RDD; the sample consists of all towns within 25 Km but farther than 1.5, 2 and 2.5 km from the reform border. Standard errors clustered at the town level in parentheses. *p<0.1, **p<0.05, ***p<0.01.
F Migration

F.1 Absolute Number of Votes

Figure F.1.1: Absolute Number of Votes: Panel RDD Coefficients

Notes: The Panels display coefficients $\beta_t$ from the panel RDD Equation (1), which controls for year $\times$ reform area and town fixed effects. The omitted category is the $\beta$ of 1948. Panel A: dependent variable is log of eligible voters. Panel B: dependent variable is log of Christian Democrat (DC) votes. Panel C: dependent variable is log of Communists (PCI) votes. For PCI we use the vote share of the Popular Democratic Front (FDP) in 1948 and the vote share for the Democratic Party of the Left (PDS) in 1992. Electoral data are from Corbetta and Piretti (2009). Units of observation are town-years. The sample consists of all towns within 25 Km from the reform borders of Delta Padano and Maremma. The vertical lines mark the 1951 land reform. We estimate standard errors clustered at the town level and plot 95% confidence intervals as bars around the coefficients.
Table F.1: Population Composition

<table>
<thead>
<tr>
<th></th>
<th>Share workers in agriculture (1)</th>
<th>Share workers in manufacturing (2)</th>
<th>Labor force participation (3)</th>
<th>Share males (4)</th>
<th>Share population aged 0-20 (5)</th>
<th>Share population aged 21-45 (6)</th>
<th>Share population aged 46-65 (7)</th>
<th>Share population aged &gt;65 (8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment × 1961</td>
<td>-0.025</td>
<td>0.006</td>
<td>-0.020</td>
<td>-0.001</td>
<td>-0.003</td>
<td>-0.003</td>
<td>0.003</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>[0.019]</td>
<td>[0.009]</td>
<td>[0.014]</td>
<td>[0.002]</td>
<td>[0.004]</td>
<td>[0.004]</td>
<td>[0.004]</td>
<td>[0.003]</td>
</tr>
<tr>
<td>Treatment × 1971</td>
<td>-0.030</td>
<td>0.005</td>
<td>-0.021</td>
<td>-0.003</td>
<td>-0.001</td>
<td>0.002</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td>[0.025]</td>
<td>[0.016]</td>
<td>[0.014]</td>
<td>[0.002]</td>
<td>[0.006]</td>
<td>[0.005]</td>
<td>[0.006]</td>
<td>[0.005]</td>
</tr>
<tr>
<td>Treatment × 1981</td>
<td>-0.011</td>
<td>-0.010</td>
<td>-0.064**</td>
<td>-0.004</td>
<td>-0.006</td>
<td>-0.005</td>
<td>0.001</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>[0.029]</td>
<td>[0.020]</td>
<td>[0.032]</td>
<td>[0.002]</td>
<td>[0.008]</td>
<td>[0.008]</td>
<td>[0.006]</td>
<td>[0.009]</td>
</tr>
<tr>
<td>Treatment × 1991</td>
<td>0.008</td>
<td>-0.027</td>
<td>-0.050</td>
<td>-0.004</td>
<td>-0.002</td>
<td>-0.009</td>
<td>0.002</td>
<td>0.012</td>
</tr>
<tr>
<td></td>
<td>[0.032]</td>
<td>[0.021]</td>
<td>[0.032]</td>
<td>[0.003]</td>
<td>[0.007]</td>
<td>[0.009]</td>
<td>[0.005]</td>
<td>[0.010]</td>
</tr>
<tr>
<td>Treatment × 2001</td>
<td>0.008</td>
<td>-0.019</td>
<td>0.001</td>
<td>-0.004</td>
<td>-0.006</td>
<td>-0.013</td>
<td>0.003</td>
<td>0.016</td>
</tr>
<tr>
<td></td>
<td>[0.033]</td>
<td>[0.021]</td>
<td>[0.015]</td>
<td>[0.003]</td>
<td>[0.007]</td>
<td>[0.009]</td>
<td>[0.006]</td>
<td>[0.011]</td>
</tr>
<tr>
<td>Mean Y Control Group</td>
<td>0.30</td>
<td>0.23</td>
<td>0.60</td>
<td>0.50</td>
<td>0.25</td>
<td>0.33</td>
<td>0.23</td>
<td>0.14</td>
</tr>
<tr>
<td>Number of Towns</td>
<td>490</td>
<td>490</td>
<td>490</td>
<td>490</td>
<td>490</td>
<td>490</td>
<td>490</td>
<td>490</td>
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<tr>
<td>Observations</td>
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<td>2939</td>
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</tbody>
</table>

Notes: The Table reports coefficients $\beta_t$ from the panel RDD Equation (1), which controls for year $\times$ reform area and town fixed effects. Column 1 and 2: dependent variable is share of workers employed in agriculture and manufacturing. Column 3: dependent variable is share of people in the labor force. Column 4: dependent variable is share of males in the population. Columns 5-8: dependent variable is share of people within specified age groups. The omitted category is the $\beta$ of 1951. Source is the decadal population censuses [ISTAT 1937, 1955a, 1965, 1974, 1985, 1995, 2005). Units of observation are town-years. The sample consists of all towns within 25 Km to the reform borders of Delta Padano and Maremma. Standard errors clustered at the town level in parentheses. *p<0.1, **p<0.05, ***p<0.01.