Inequality and elections in Italian regions

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2019
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Abstract

The evolution of voting in Italy’s general elections from 1994 to 2018 is investigated in this paper at the regional level, exploring the role of inequality, changes in incomes, wealth levels, precarisation of jobs and unemployment. Using a novel regional database combining voting results, incomes of employees and household revenues and wealth, we explore the drivers of non-voting, and of the shares of votes for mainstream parties, Lega and Five Star Movement in total electors. The results of our econometric models show that inequality, lack of wealth and precarisation are closely associated to the regional patterns of Italy’s electoral change. While political, ideological and cultural variables are important factors in Italy’s political upheaval, economic conditions appear to play a key role.

1. Introduction

The evolution of voting in Italy’s general elections from 1994 to 2018 is investigated in this paper at the regional level, exploring the role of inequality, changes in incomes, wealth levels, precarisation of jobs and unemployment. Our aim is to verify the extent to which economic conditions have contributed to political change, in a period that has been marked by the economic, financial, and democratic crisis started in 2008 and followed by a decade of recession and stagnation that has not yet ended.

The period under investigation starts with the emergence of the so-called ‘second Republic’ in 1994 after the dissolution and transformation of most post-war political parties, and ends with the political upheaval of 2018 when the Five Star Movement (M5S) and the Lega became the main parties, launching a short-lived government coalition that collapsed in the summer of 2019. In these years, Italy has experienced rather unstable centre-right and centre-left government coalitions, episodes of ‘grand coalition’ and new types of alliances in 2018 (M5S-Lega) and 2019 (M5S-Democratic Party-Left groups). In 2008 the beginning of the economic crisis has had a major impact, leading to a decade of stagnation, and economic and social distress. The key political developments that have characterised this period include a major increase in non-voting; a collapse of the vote for the parties that have alternated in government for most of these years; the rise of votes for the M5S and the Lega.
In light of these developments, we consider together the parties associated to government as this allows us to contrast the evolution of ‘mainstream’ political forces with that of abstention and of the main ‘challenger’ parties. Following Hobolt and Tilly (2016, 972) these latter can be defined as those parties that are unconstrained by the responsibilities of government and seek to challenge the mainstream political consensus. Also in terms of policies, centre-right and centre-left coalitions have shown more continuity than change in most areas of government action, including the harsh austerity policies implemented after the crisis (Pianta 2012). These similarities notwithstanding, we expect that centre-right and centre-left voting have distinct dynamics, and we will devote a separate paper (Bloise et al. 2020) to compare and contrast the evolution of economic conditions and voting for centre-right and centre-left coalitions over this same 1994-2018 period.

Therefore, voting variables that are considered in this article include the share of electors that did not vote; the share of electors that voted for ‘mainstream’ parties (Forza Italia, Democratic Party and centrist parties, and their predecessors, those who have long governed the country); the share of electors that voted for the Lega and for the M5S. By using the share of electors rather than the share of voters, we take into account in all variables the rise of non-voters, allowing for a closer comparison with the economic and social conditions that affect all Italians and not just those who cast their vote.

In order to carry out this investigation, a novel database that integrates inequality and voting data in the Italian regions has been developed, combining a new SNS electoral database for regions with INPS Losai data on employee incomes and the Bank of Italy’s survey on household income and wealth (SHIW). These data provide a new, detailed picture of the patterns of inequality and voting, highlighting strong and persisting differences across regions.

The econometric analysis is carried out with models that highlight different aspects of the relationships under study. Our results show that voting trends in Italian elections, and notably the upheaval occurred in 2018, are closely associated to the rise in inequality, the levels and changes in incomes and wealth, precarisation and joblessness. However, specific factors appear to be at work for each political variable we consider.

The rise in non-voting moves along with overall inequality, income polarisation, part-time jobs and unemployment. Consensus for mainstream parties is driven by high household wealth alone, and is negatively affected by all the above factors. Voting for the Lega and for the M5S are driven by very different factors, putting in question the notion of a ‘populist wave’ that unifies under a common category all ‘challenger’ parties. The Lega has greater consensus where the incomes of the middle classes are pushed down and there is lower average wealth. The M5S is clearly favoured by income poverty and precarisation.

Political, ideological and cultural factors are key drivers of Italy’s electoral upheaval and are not investigated in this paper. From the analysis of economic and social variables, inequality, lack of wealth and precarisation appear to be closely associated to Italy’s electoral change.

The article is organized as follows. In the next section, we review the existing literature on the connection between inequality and changes in voting trends in Western democracies. A particular attention is given to works dealing with regional patterns in electoral behaviour and inequality in Italy. In section 3 we present our electoral and economic data in detail and provide a set of figures that describe key regional patterns in electoral outcomes and inequality in Italy. In section 4 we build a model to test the association between inequality and electoral behaviour in Italian regions; we

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1 The Lega has been part of centre-right coalitions, although with an often unpredictable role; in 1995, for instance, the withdrawal of support of the Lega caused the end of the centre-right coalition supporting the first Berlusconi government. Overall, the Lega has had government responsibility for a total of nine years over the 1994-2018 period: 1994-1995; 2001-2005; 2008-2011, all with Silvio Berlusconi as prime minister.
discuss results in section 5. In the concluding section we summarise our findings and propose avenues for further inquiry.

2. The state of the art

This article contributes to the literature on the relationship between economic dynamics and political developments in Western democracies. Specifically, it focuses on the consequences of inequality on voting trends through a territorial analysis of the Italian case. In this section we first address recent works in the economic and political literature that have investigated political change, the crisis of mainstream parties and the rise of challengers, which are often defined as ‘populist’ parties. Second, we focus on studies that have examined voting dynamics in Italy, and particularly in Italian regions, which have been marked by strong and persisting differences in their political structures.

2.1 Inequality and Voting

Studies on the connection between inequality and voting trends have been on the rise in recent years, complementing the classic ‘class voting’ approach. This is a well-established tradition in political science that has investigated the influence of social class, understood in terms of occupational categories, on citizens’ electoral behaviour. Since the 1980s, empirical analyses in the field have documented a progressive decline of voting along class lines, though with considerable variation in time and space (Jansen et al. 2013). Scholars associated this decline to a series of social transformations — such as increased levels of education, more social mobility, diffusion of new ‘identity’ cleavages and values, homogenisation of life experiences — all leading to the blurring of class divisions (Dalton 2008).

While class identities have weakened, partially losing their role in shaping political behaviour, economic divides linked to income and wealth have increased in most advanced countries with wide-ranging social and political consequences. A growing stream of literature has emerged to explore these processes by adopting an interdisciplinary perspective that bridges economics and political science concepts and methods.

Piketty (2018, 2019) has studied the effects of long-run inequality dynamics on the structure of political cleavages in France, Great Britain, and the US over the 1948-2017 period. Based on post-electoral individual surveys conducted after nearly every national election, the connections between multidimensional inequality — measured by income, wealth, and education — and voting trends in the three countries are investigated. He finds that in the 1950s-1960s, a ‘class-based’ party system was in place: lower education and lower income voters tended to vote for left-wing parties, while upper and middle classes’ voters tended to vote for centrist or right-wing parties. Since the 1970s-1980s, left-wing vote has gradually become associated with higher education voters, giving rise to a ‘multiple-élite’ party system in the 2000s-2010s: high-education élites now vote for the left, while high-income/high-wealth élites still vote for the right. As for abstention, the massive increase in non-voting is related to the behaviour of lower education and lower income groups who do not feel represented in the ‘multiple-élite’ party system. The analysis of Piketty identifies educational level as the most important factor in the evolution of centre-left voting, but does not provide a

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2 Among a very large literature see Atkinson and Bourguignon 2014; Piketty 2013; Milanovic 2016; Franzini and Pianta 2016.

3 Data sources are the following institutes: CDSP/ADISP (French data archives for the social sciences) in France; BES (British Election Study) in Britain; ANES (American National Election Studies), and NEP (the National Exit Polls) in the US.
A comprehensive explanation of the overall changes in voting behaviour in the countries’ he investigates.

A set of interdisciplinary studies has addressed the rise of novel parties, looking for the structural reasons for what is problematically described as a ‘populist challenge’ (Kriesi 2014). Interest in populism has grown in recent years and, while a shared definition is still missing, scholars have often come to include in this category all parties whose success has altered the traditional competitive dynamic of two-party (or two-poles) systems (Hobolt and Tilley 2016). Though considerable for their effort to bring back economic factors into political analysis, the interdisciplinary works reviewed in this Section are all examples of this tendency to overstretch the concept.

Acemoglu et al. (2013) understand populism as a political strategy for redistributive policies that used to be typical of left-wing politics, and can be adopted also by conservative politicians. Similarly, Guiso et al. (2017) define as populist those parties – both left and right – that champion short-term protection policies, and identify them by applying the broad classification of van Kessel (2015) that includes radical right parties, anti-establishment parties, and radical left parties. Algan et al. (2017) build a broad ‘anti-establishment’ category, which includes all parties that are critical of the elite: extreme right, nationalist parties; radical left parties; populist parties; Eurosceptic and separatist parties.

As summarised by Caiani (2019), the literature on the reasons for ‘populism’ has developed along three analytical perspectives, all linked to the notion of crisis. The first approach focuses on a political crisis: the inability of mainstream parties to represent citizens’ interest and the lack of responsiveness on the side of political institutions have opened up spaces for new parties to emerge (Rovira Kaltwasser and Taggart 2016). For the second approach populism is a reaction to a cultural crisis: while post-industrial developments went along with more progressive politics, once-predominant sectors of the population have been losing status and have provided a pool of supporters for a populist backlash (Inglehart and Norris 2016). The third approach emphasises the consequences of economic crises, arguing that rising economic insecurity and social deprivation among the left-behind have fuelled popular resentment towards the political establishment, favouring populist challengers (Kriesi 2014).

The volume edited by Kriesi and Pappas (2015) stands as the first large-scale comparative work on the impact of the Great Recession on European populism, examining how the interplay between the economic and the political crises has influenced the patterns of populist development across 17 countries over the 2001-2013 period. Indicators for the economic crisis are unemployment rates, growth rates and public debt; the political crisis is signalled by electoral volatility, trust in parliament and satisfaction with democracy. The analysis documents overall pre-crisis and post-crisis trends and compares them with the electoral fortunes of 25 populist parties, finding that while both economic and political crises had a positive effect on populism, this was most intense when the two types of crisis occurred together. While providing an important overview on European populism in times of crisis, their analysis lacks a detailed account of the role of economic factors on electoral outcomes.

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4 The most widely accepted is that of Mudde (2004): ‘a thin-centered ideology that considers society to be ultimately separated into two homogeneous and antagonistic groups, “the pure people” versus “the corrupt elite,”’ and which argues that politics should be an expression of the volonté générale (general will) of the people.’

5 This includes 57 populist parties distributed in 26 European countries (out of the 33 he considers) active at different points in time in the 2000-2013 period. Of these, only 25 are defined as populist in the more stringent classification of Inglehart and Norris (2016).

6 Data sources are Eurostat for economic data and Eurobarometer surveys for political data.
A few studies have investigated inequality as a determining factor for populism. Acemoglu et al. (2013) have approached this issue providing formal models. They define populism ‘as the implementation of policies receiving support from a significant fraction of the population, but ultimately hurting the economic interests of this majority’ (p. 1). Populism here applies mostly to pro-redistribution positions, when leaders use populist language in order to signal to ordinary voters that they are not beholden to big economic interests. This largely corresponds to the recent Latin American experience with populism, which in the authors’ view is linked with the weaknesses of democratic institutions.

Using a political economics approach, Guiso et al. (2017) analyse the drivers of the populist vote – defined as the demand for short-term protection policies - in 24 European countries covered by the European Social Survey (2002-2017). Specifically, they test whether economic insecurity and low levels of trust in traditional parties can induce people not to turnout, and if they vote, to vote for a populist party. They find that lower income, financial distress and higher economic insecurity from exposure to globalization and competition of immigrants are drivers of the populist vote. Economic insecurity shocks also have an indirect effect inducing lower trust in incumbents. All these variables push voters simultaneously in two directions: to abstain from voting and, if they participate, to vote more for the more populist. Negative economic shocks (like the 2008 crisis and its aftermath) and the collapse of trust in traditional politics they induce, drive the demand for populist policies.

An interesting work taking into account the subnational level is that of Algan at al. (2017) in which voting for ‘anti-establishment’ parties and the fall in trust in political institutions are related with the post-2008 increase in unemployment. They first offer a descriptive analysis of the evolution of unemployment, voting and trust-beliefs across 26 European countries before (2000-2008) and after (2009-2017) the Great Recession, showing that the economic crisis has moved in tandem with a political trust crisis and the rise of anti-establishment vote. They then study the relationship between unemployment and anti-establishment voting through regional comparisons, and analyse the impact of the recession on political trust using individual-level survey data. Results show that rising voting shares for anti-establishment parties follow increases in unemployment. It is the change in unemployment, rather than its level, that correlates with voting for non-mainstream parties, suggesting that individuals are mostly sensitive to economic losses. A relationship is found also between the change in regional unemployment and a decline in trust towards the European and national parliaments and political parties.

Other studies have investigated the relationship between inequality and the rise of radical right parties. Focusing on 16 European countries, Han (2016) tests whether income inequality has dissimilar effects on different social groups’ voting for radical right parties, understood as those that support a hierarchic social order, authoritarianism and nationalism. The Gini coefficient for income inequality and an index for individual income are related to voting behaviour. Using a multilevel analysis, he finds support for his ‘social identity’ argument, showing that income inequality encourages poor people to vote for radical right parties, while it concurrently discourages rich people from doing so.

Burgoon et al. (2018) define radical right populist parties as those embracing autarchic nationalism and anti-élite populism, and verify whether their electoral rise in Europe is shaped by new measures

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7 The dataset includes 134,834 observations (with data for all variables) combining all countries, parties and periods.
8 Eurostat is used for information on regional unemployment, covering 215 regions in 26 countries. Data for national elections come from country-specific electoral archives and information about political parties’ orientation from the Chapel Hill Expert Survey and other online resource. Data on trust come from the European Social Survey (ESS), considering seven rounds from 2000 until 2014; the final ESS sample covers 183 NUTS-2 regions in 24 countries.
9 Data sources are six round of the European Social Survey (2002-2012; 96,572 observations) and five rounds of the European Value Survey and the World Value Survey (1990-2008; 50,249 observations).
of deprivation and inequality based on growth-incidence-curves. First, they expect radical right populism to be more likely among individuals facing greater ‘positional deprivation’ — that is belonging to an income decile that experienced lower income gains other deciles. Second, they expect that greater support for radical right parties is associated to higher ‘positional inequality’, that is the situation where the gap between the income growth of richer deciles and that of poorer deciles is larger. The paper tests these expectations using individual level survey data from 16 European countries between the 1980s and the 2000s. The results yield support for both arguments, particularly for ‘positional deprivation’ that correlates with a higher propensity to vote for radical right and for parties that incorporate nationalist claims in their party manifestos.

Finally, it is worth noting that inequality was also proved to have affected citizens’ trust on political institutions. A negative relationship has been found between worsening economic conditions and support for democracy at the national level (Armingeon and Guthmann 2014). Citizens with lower economic conditions appear to have lost trust in the European Parliament more than citizens with higher incomes (Dotti Sani and Magistro 2016).

2.2 Voting in Italy and regional patterns

Studies of electoral politics in Italy have rarely investigated in detail the role of economic factors, social class and inequality. The relationship between class and electoral behaviour was proved to be weak already in the ‘first Republic’ (1946-1992). This was due to the presence of two large mass parties, the Christian Democrats and the Italian Communist Party, able to integrate different social groups on the basis of strong political and cultural identities. A decline in the relevance of class voting emerged with the transformations of Italian society, and the weakening of the post-war ideological cleavages (Corbetta and Segatti 2003).

Class voting found a new relevance when the rise of Silvio Berlusconi’s Forza Italia reshaped Italian politics at the start of the ‘second Republic’. Its consensus was shown to come largely from the self-employed (Caciagli and Corbetta 2002; Pisati 2010, Maraffi 2008; Heath and Bellucci 2013; Barisone and De Luca 2018), while middle class employees tended to vote for the parties of the centre-left and the working class split in half between centre-left and centre-right (Maraffi et al. 2011).

Explanations of these patterns relied on the redefinition of the ‘supply’ of political representation (Bellucci 2001; Bellucci and Heath 2012) rather than considering the structural transformations of the country.

A decade later, in 2013, Italy’s party system experienced a new radical change, with the sudden rise of the Five Star Movement. The self-employed mainly voted for the M5S, with the centre-right coalition as a second choice. The working class moved further away from the Democratic Party (Maraffi et al. 2013).

These trends accelerated in the 2018 elections, when the Five Star Movement obtained a large consensus from a range of social groups. Post-election polls showed that low skilled white collars and highly skilled blue collars overwhelmingly voted for the M5S, with a similar support also from

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10 Data sources are the Luxemburg Income Study (LIS) and five waves of European Social Survey (ESS) data (2002-2010). LIS and ESS data are also matched with data on the contents of party platforms coming from the Manifesto Project Database (MPD). This allows to judge respondents’ party preferences in terms of systematic coding of the anti-globalization, nationalist and authoritarian content of a given party’s platform —including over-time variation and the positioning of all parties, radical right and mainstream. The final sample includes 86,627 observations; data on voting choices are available for 66,852 respondents.

11 Studies on the M5S include Ceccarini and Bordignon (2016); Biorcio and Natale (2018); Mosca and Tronconi (2019). For a mapping of Italy’s political behaviour see Ilvo Diamanti, Mappe dell’italia politica, http://www.demos.it/mappe2018.php. The rise of ‘movement parties’ in Europe as a result of the crisis is investigated in della Porta et al. (2017).
‘housewives’ and the unemployed. The Democratic party maintained an above-average consensus from pensioners, managers, employees with higher skills, teachers and university students. Conversely, Lega has been able to attract at the same time highly skilled and unskilled white collars, as well as unskilled manual workers; the self-employed have confirmed their preference for centre-right parties, Lega first and Forza Italia second, bringing about a radical shift in the balance of power within the centre-right coalition (Maraffi 2018).

While ‘class’ has been a disputed explanatory variable for Italian political developments, and ‘inequality’ has been overlooked, the role of ‘territory’ has been widely investigated. Scholars have identified four main geopolitical areas (the North-West, the North-East, the Centre, and the South) characterized by strong voting stability (Capecchi et al. 1968). In spite of the move from the ‘first’ to the ‘second Republic’, Italian electoral dynamics at the regional level appears to have maintained some continuity with the past (Shin and Agnew 2008; Diamanti 2009). Two ‘territorial political subcultures’ have been identified, with a strong prevalence of particular political affiliations. The socialist-communist subculture prevailed in Central Italian regions (Emilia-Romagna, Toscana, Umbria and Marche); the Catholic subculture prevailed in North-Eastern regions (Veneto, Friuli-Venezia Giulia, Trentino Alto Adige) (Baccetti and Messina 2009). During the ‘second Republic’, variability in voting within the geopolitical areas increased, with Lega – for instance - making inroads in several areas of Central Italy (Diamanti 2009), but at least until the 2008 elections the geographical dimension appeared to remain the key variable for understanding electoral outcomes (Vezzoni 2008). With the votes of 2013 and 2018 a new political geography has emerged, with the Lega dominating Northern Italy and the M5S dominating the South. In 2018 the M5S had 32.7% of the votes and became the largest national party. The Lega (17.4% of national votes) became the main right-wing party, overtaking a declining Forza Italia (14%). The Democratic Party (18.8%) remained a dominant party in selected areas of its older regional strongholds, and in the centre of the largest metropolitan areas – Turin, Milan and Rome in particular (Vassallo and Shin 2018). According to some interpretations, this outcome can be explained by the relevance that voters assigned to the issues emphasised by the two winners. Based on individual-level post-electoral data, Vassallo and Shin (2018) show that for Lega voters the priorities were immigration, anti-Europe attitudes, and the need for a strong leader. For M5S voters, instead, the priority was redistribution. The two parties’ constituencies converged on a similar anti-élitist attitude and on the mistrust for the political establishment.

So far, more structural explanations are missing. Ardeni (2019) explores the relationship between income distribution and the surge of the M5S and the Lega in 2018. He analyses data on Tax Statements at the municipal level which provide information on the relative concentration of the population by income classes, that is then linked to electoral districts. Simple correlations between income distribution and the percentages of votes show that in areas with a concentration of lower and middle-income groups a greater vote for Lega and M5S is found. Vote for the Democratic Party and its allies is instead associated with areas where high-income groups are found.

Little research has also investigated the territorial patterns of income inequality in Italy. Acciari and Mocetti (2013) investigated differences in income inequality among Italian provinces using tax records, showing that regional disparities have increased, especially after the Great Recession. Income inequality is higher in the South because of the very low income held by those in the bottom-tail of the distribution. Ciani and Torrini (2019) have used the Bank of Italy SHIW database showing that most of the upward trend in income inequality comes from greater ‘within area’ inequality starting with the 2008 crisis; conversely, between-area inequality has remained basically stable since

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12 The Tax Statements Database comes from the Ministry of Finance and covers some 7,970 municipalities over 20 Italian regions.
the early 2000s. The links between inequality and mobility have been investigated by Acciari et al. (2019) using tax records and by Barbieri et al. (2019) using administrative data; they find that the South of Italy is the area with the highest levels of current inequality, has the highest levels of intergenerational inequality and the lowest levels of mobility from one generation to the next.

Building on this state of the art, our investigation provides novel evidence on the structural economic factors — including inequality, income and wealth – that contribute to explain the evolution of voting patterns in the 1994-2018 period. As we carry out our analysis at the regional level, we relate to an important stream of Italian political studies that has however largely disregarded the role of economic and social conditions.

3. Data and descriptive evidence

For this article we have integrated different databases on election outcomes, employee incomes, household incomes and wealth, and other socio-economic characteristics. In order to maintain a high number of cases for the construction of the economic variables obtained from micro-data, we have combined together Valle d’Aosta and Piedmont, Abruzzo and Molise, Basilicata and Calabria, obtaining a panel of 17 regions. A detailed description of each database used for our analysis is presented below.

Data on electoral trends in Italian regions come from a new SNS database that provides an original systematization of the official data recorded by the Italian Ministry of Interior for seven rounds of national parliamentary elections (1994, 1996, 2001, 2006, 2008, 2013, 2018). The database considers only the political formations (be they political parties or electoral lists) that have obtained seats in the national parliament. The votes of the lists that did not succeed in entering parliament were not considered; this choice is due to the need to focus on major political forces and to ensure comparability over time and regions.

The SNS electoral database includes data for twelve variables, including all main political parties and coalitions. In this article we consider four variables: the share of electors who decided not to exercise their right to vote; the share of electors who voted for mainstream parties; the share of electors who voted for Lega; the share of electors who voted for the M5S.

The share of non-voters is particularly important to identify dissatisfaction with the political system, as argued by other studies (Guiso et al., 2017; Piketty, 2018). The variable ‘mainstream parties’ is meant to register satisfaction with the political system; it considers total voting of the parties that have had a major government role during most of the period under consideration, which was characterized by the succession in power of ‘centre-left’ and ‘centre-right’ coalitions. We include within the ‘mainstream parties’: Berlusconi’s Forza Italia (running as Popolo delle Libertà in 2008 and 2013); the Democratic Party (in 2008, 2013, and 2018) and its predecessors (the Democratic Party of the Left in 1994 and 1996, and Democrats of the Left in 2001 and 2006); and the galaxy of centrist parties. The voting trends of the Lega and the M5S are analysed separately as they emerged as the two parties able to challenge the political system of the ‘Second Republic’; investigating the economic and social base of their rise is a key goal of this analysis. While the Lega contested these elections considered in most regions, electoral data for the (young) M5S regard the two rounds in 2013 and 2018 only (see details in the Appendix).

Voting behaviour is related to a set of socio-economic characteristics of the Italian regions, drawing from two main data sources that are representative of the Italian population at the regional level. The first group of variables regards employees’ wages and is used to calculate various measures of labour

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13 Data on electoral outcomes refer to all Italian regions with the exception of Valle d’Aosta, that is excluded from the analysis due to the lack of information on electoral data.
income, inequality and type of job contract. They are drawn from a rich administrative panel from INPS Social Security archives, containing about 1/15 of the Italian population working in the salaried private sector (Longitudinal Sample INPS – LoSai). Within the dataset, we find information on the individual yearly employment history in the private sector from 1993 to 2016.

Table 1. List of variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electoral outcomes:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-voters</td>
<td>Share of electors</td>
<td>SNS voting database</td>
</tr>
<tr>
<td>Vote for mainstream parties</td>
<td>Share of electors</td>
<td>SNS voting database</td>
</tr>
<tr>
<td>Vote for Lega</td>
<td>Share of electors</td>
<td>SNS voting database</td>
</tr>
<tr>
<td>Vote for the M5S</td>
<td>Share of electors</td>
<td>SNS voting database</td>
</tr>
<tr>
<td><strong>Economic variables:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median gross income of employees</td>
<td>Euros at 2012 prices</td>
<td>INPS LoSai database</td>
</tr>
<tr>
<td>Share of rich employees</td>
<td>Share of regional employees in the top decile of the national distribution of gross employee income</td>
<td>INPS LoSai database</td>
</tr>
<tr>
<td>Shares of employees in relative poverty</td>
<td>Share of regional employees below 60% of the median national gross employee income</td>
<td>INPS LoSai database</td>
</tr>
<tr>
<td>P90/P50 ratio for employee income</td>
<td>90th over 50th of the regional gross employee income distribution</td>
<td>INPS LoSai database</td>
</tr>
<tr>
<td>P50/P10 ratio for employee income</td>
<td>50th over 10th percentile of the regional gross employee income distribution</td>
<td>INPS LoSai database</td>
</tr>
<tr>
<td>Mean of net wealth</td>
<td>Euros at 2012 prices</td>
<td>SHIW</td>
</tr>
<tr>
<td>Share of partime employees</td>
<td>Share of employees with a partime contract</td>
<td>INPS LoSai database</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>Share of regional labor force</td>
<td>SHIW</td>
</tr>
<tr>
<td><strong>Other variables:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate share</td>
<td>Share of regional population</td>
<td>SHIW</td>
</tr>
<tr>
<td>Mean age</td>
<td>Years</td>
<td>SHIW</td>
</tr>
</tbody>
</table>

The second group of variables is obtained from the Bank of Italy’s Survey on Household Income and Wealth (SHIW), using the waves from 1993 to 2016; this survey is the best source of information in Italy on incomes, wealth and other socio-economic characteristics of a representative sample of Italian households and individuals interviewed every two years. We use SHIW data to compute information regarding equivalised household disposable income, which includes annual labour and capital revenue flows, net of taxes, and all public transfers. Inequality indexes within regions are calculated on this variable taking into account all types of household incomes. SHIW also provides data on net household wealth, that is the sum of financial and real assets, minus liabilities; we calculate here the mean value of household wealth within regions. Moreover, all SHIW waves provide detailed socio-economic information on the Italian population useful to compute the share of regional workers with a tertiary degree and unemployment rates. Given that the SHIW is conducted every two
years only, we obtain an imputed value for each year in which the Bank of Italy’s survey is not conducted, by performing a cubic spline interpolation. Accordingly, all yearly values between 1993 and 2016 are available in our dataset.

The full list of variables we consider in this analysis and their definition are presented in Table 1.

In order to simplify the description of regional patterns, we consider three groups of Italian regions that are characterised by commonalities in economic structures and inequality patterns.

a. **Metropolitan regions** (Piedmont, Lombardy, Liguria, Latium) are characterised by the presence of large metropolitan areas (Turin, Milan, Genoa, Rome); here we find the country’s highest income levels, and high inequality, with a large distance between the richest decile and median incomes. A large literature has pointed out that in post-industrial economies major metropolitan areas play a dominant role as the location of high-level, globally-connected economic activities (see Crouch, in this volume); these areas tend to concentrate the country’s economic gains and experience the largest increases in incomes and wealth, with widening economic and social disparities.

b. **‘Third Italy’ regions** (Trentino Alto Adige, Veneto, Friuli-Venezia Giulia, Emilia Romagna, Tuscany, Umbria, Marche) are characterised by intermediate income levels and lower inequality than in other areas. This definition goes back to Bagnasco (1976) and is based on commonalities in economic structures – a dominant role of small and medium sized firms, a lack of advanced service activities, a less polarised class composition. In political terms, however, these regions are divided between the Catholic orientation in the North-East and the traditional Left dominance in Central Italian regions, discussed in section 2 above.

c. **Southern regions** (Abruzzo-Molise, Campania, Puglia, Basilicata-Calabria, Sardinia, Sicily) are characterised by the lowest incomes and the highest inequality. The structural backwardness of the economy of the South is documented by Svimez (2019) and Asso (in this volume); geographical patterns of inequality are reported by Acciari and Mocetti (2013).

The territorial diversity of Italian regions has long been investigated, as discussed in section 2 above. The aggregation we use here for descriptive purposes is based on economic characteristics and trends in inequality, but can shed new light on electoral behaviour too, as we focus on the contrast between mainstream and challenger parties. A more detailed investigation of traditional left-right voting in Italian regions is carried out in a separate study (Bloise et al. 2020).

The set of Figures we provide summarises the key patterns in electoral outcomes and inequality in Italian regions. Figure 1 maps for the latest national elections held in 2018 the share of electors that did not vote, that voted for mainstream parties, that voted for the Lega and for the Five Star Movement. The regional structure of political affiliations in Italy is crucial in shaping the country’s patterns: non-voting appears strong in Metropolitan and Southern regions; mainstream parties are strong in Third Italy and Metropolitan regions; Lega is strong across the North with inroads in the Centre; and the Five Star Movement is strong in the South.

Figure 2 shows the evolution over time of voting patterns in these three areas. Abstention in Metropolitan and Third Italy regions has started from a 10% level in 1994 and has constantly increased in parallel, with the only exception of 2006, at a faster pace in Metropolitan regions, where it reached 25% in 2018. In 1994, abstention in the South amounted to a share of electors close to the one that the above regions have today, with a growth trend that has reached 32% in 2018, and reductions in 2002 and 2006.

The combined voting for mainstream parties has a remarkable trajectory. In Metropolitan and Third Italy regions it has been above 50% of the electorate until 2008 (with the exception of 2006), with an
increasingly steep collapse to 25-30% in 2018. In the South, mainstream vote has never surpassed the 50% mark, with the same collapse after 2008 to less than 25% in 2018.

Conversely, the Lega has oscillated between 5 and 15% in Metropolitan regions and between 5 and 10% in Third Italy regions, while in the South has reached 5% in 2018 only. The Five Star Movement has been stable at 20% of electors in Metropolitan and Third Italy regions in 2014 and 2018, jumping in South alone to close to 30% in 2018. What we need to explain is therefore a complex pattern over time and space, that is the result of multiple dynamics —political, cultural, social, regional and economic ones— among which we focus on the role played by economic and inequality factors.

**Insert Figure 1 and 2 here**

Figure 3 summarises the structural differences among Italian regions in terms of income levels. We consider here gross incomes of employees, that is a more reliable indicator as it is not affected by under-reporting of the self-employed (see above for a discussion of this indicator). We consider the income level above which we find the richer 10% of employees (P90), median income (dividing in half the distribution of employees), and the income below which we find the poorer 25% of employees. These are gross incomes of individuals, before taxes and redistribution.

In Metropolitan regions the 10% of richest employees remains for the whole period above a stable line at 43,000 euros (at constant 2012 prices), a much higher level than top earners in other regions. Median incomes are far below the richest group, receiving less than half in terms of employee income, with a 10% fall in real terms over the period. The level of income of poor employees is much lower and has fallen by 30%, reaching now 10,000 euros only. Income gaps are huge and have widened.

Third Italy regions experienced similar trends but with much smaller divides. Richer employees show stable income levels above 37,000 euros, with a modest upward trend. Median incomes are stable at a level slightly above half the richest group. Poor employees have similar levels of income as in Metropolitan regions, with a lower reduction trend. Income gaps here are much lower, and less decline for the middle and bottom of the income distribution is found.

Southern regions experienced a serious decline of all income data. In 1993 the level above which we find the richest employees was the same as in the Third Italy; by 2017 it has lost 12%. Median income has also collapsed; in real terms it is now at 15,000 euro, the level the poorest employees had in Metropolitan regions 25 years ago. Poor employees in the South are at the bottom of the distribution; 25% of employees earns less than 7,000 euros per year. Part-time work and discontinuous employment, as well as low wages, are a clear problem in this area.

Figure 4 provides an overall picture of inequality in the three areas, showing the Gini index of inequality in disposable household incomes (after tax and public transfers, combining all incomes of the individuals living in a household, see above for the definition of this measure). This measure reflects the patterns presented in Figure 3, showing modest oscillations over time (a fall after 1999, a rise after 2008) and significant differences across areas; Third Italy regions have the lowest inequality (below a Gini index of 0.28), while Metropolitan regions have in 2017 an index of 0.30 and Southern regions an index of 0.32.

Summing up the regional structure of inequality in Italian regions, we can argue that Metropolitan regions have higher income levels and high inequality; the Third Italy has medium-high incomes and a more compressed income distribution; the South has low and seriously falling incomes, with the highest inequality. How do these inequality patterns relate to voting outcomes?

**Insert Figures 3 and 4 here**

Figure 5 show a clear association between abstention and the share of employees in relative poverty (that is, those earning less than the national poverty level, at 60% of median national income), with Southern regions concentrated in the top right of the distribution. Figure 6 combines abstention and
the Gini index on disposable income, showing a broad positive association, with Southern regions clustered at the top right end of the distribution.

**Insert Figures 5 and 6 here**

Figure 7 shows that mainstream parties obtain a share of electors that is positively associated to the mean net wealth of households, with Third Italy regions at the top right end of the distribution and Southern regions clustered at the bottom left corner. Figure 8 shows a general negative link between vote for mainstream parties and inequality in household incomes, with Southern regions at the bottom right end of the distribution.

Finally, for Lega and the Five Star Movement, the number of observations available is much lower, as Lega has not run in national elections in many regions of Central and Southern Italy, and the Five Star Movement has participated in two elections only (2013 and 2018). Figure 9 shows a close association between vote for the Lega and the compression of median incomes relatively to the poorest employees – measured by the P50/P25 ratio. In the regions and years when the relative impoverishment of the middle income earners is higher, the vote for Lega moves up. Conversely, figure 10 shows that vote for the Five Star Movement has a broad positive association with the shares of employees below the national poverty level; a concentration of poverty — mainly in regions of the South — appears to be associated to higher vote for the Five Star Movement.

**Insert figures 7,8,9,10 here**

Building on this preliminary descriptive evidence, we can now move to present a model for explaining the impact of inequality and economic conditions on electoral behaviour in Italian regions.

### 4. Models and econometric strategy

We analyse the association between the four variables on electoral outcomes and the economic ones presented in Section 3 by estimating different alternatives of the following regression model:

\[
Electoral share_{it} = \alpha_i + \beta Economic_{it-1} + \theta X_{it-1} + \gamma Period + \epsilon_{it}
\]  

(1)

where for each region \(i\) and year of election \(t\), our dependent variables are either the share of electors who do not voted (Model 1); the share of electors who voted for mainstream parties (Model 2); the share of electors who voted for Lega (Model 3); the share of electors who voted for the Five Star Movement (Model 4).

On the right-hand side of equation (1), \(Economic_{it-1}\) is the row vector of economic variables or our interest which includes the Gini index of disposable income as a measure of overall inequality, the share of rich employees, the share of employees relatively poor, the log mean net wealth used as a proxy of permanent economic status of households, the share of employees with a parttime contract, used as a proxy of precarisation of jobs, and the unemployment rate. Then, \(X_{it-1}\) is a row vector of control variables which includes the share of the population with a university degree and mean age.

Moreover, we control for all time-invariant regional characteristics by including regional fixed effects \(\alpha_i\) and a dummy that assumes the value of 1 starting from 2008 and 0 otherwise. This \(Period\) dummy is necessary to take into account the effect of the financial crisis started in that year on electoral preferences. Given that all elections occurred between 1994 and 2018 have taken place in the first five months of the year, we observe all variables on the right-hand side of Equation (1) one year before the election year in order to better capture the association between economic conditions and electoral decisions.
Additionally, we estimate an alternative model in which we include in the vector $Economic_{it-1}$ the two interquantile ratios P90/P50 and P50/P25 as proxies of inequality in different part of the employee income distribution, in place of the shares of rich and poor employees.

Even though our specification prevents our estimated coefficients to be biased by regional structural heterogeneity and by the likely discontinuity in electoral preferences deriving from the 2008 crisis, we do not claim that the estimated coefficient could be interpreted as the causal impact of a specific measure of inequality, poverty and other socio-economic variable on electoral outcomes. More specifically, the error term $\epsilon_{it}$ may include a set of time-varying political, institutional, social and cultural factors that may affect voting alongside our economic variables. The main goal of our empirical approach is to interpret all estimated coefficients as associations between electoral and economic outcomes within each region, while we control for the structural diversity of regions.

5. Results

Tables 2 and 3 present the main results of the models. A further robustness check in provided in Table A in the Appendix. The results obtained from estimating the four models based on equation (1) can be summarised as follows.

First, overall income inequality measured by the Gini index has a significant negative association with vote for mainstream parties: an increase of 10 percentage points in inequality is associated to a 6 percentage points fall in their votes as a share of the electorate (Table 2). A weaker relationship emerges with the share of non-voters (significant in the models of Table 3 and the Appendix), with non-voters increasing alongside higher inequality.

Second, an increase in the share of rich employees (those in the richest 10% in terms of labour income at the national level who happen to live in the region) is closely associated to higher shares of non-voters. Conversely, the share of votes for the Lega increases as the presence of richest Italians becomes lower (Table 2). In general, larger variations of the share of rich employees are mainly found in the regions with large metropolitan areas, where the vote for the Lega is lagging behind.

Third, at the opposite end of income distribution, an increase in the share of poorest Italians (the share of employees in the region with a gross labour income below 60% of median employee income) is associated to greater abstention in elections, falling vote for mainstream parties and greater votes for the Five Star Movement (Table 2). Greater poverty leads to disenchantment with electoral politics and to more votes for the challenger party that has campaigned on the need to provide a minimum income, obtaining a large support in the poorer regions of the South.

Fourth, in Table 3 the evolution of employee incomes can be documented using the P90/50 and P50/25 ratios, that is the distance between the rich and the median, and between the median and the poor, instead of the shares of rich and poor employees. The share of votes for the Lega increases as the distance between the rich and the middle classes becomes lower. At the same time, Lega votes increase where the middle classes are impoverished and their distance from those in poverty falls. The downward compression of the middle of the income distribution also leads to greater abstension.

Fifth, the average net wealth of households in regions is a further indicator that is required to integrate income data. In fact, net wealth is the only positive driver of vote for mainstream parties in all our results. The reduction of taxation on wealth (liberalisation of financial investment, separate non-progressive taxation of incomes from finance and real estate; elimination of tax on homeownership; large cuts in estate taxes, etc.) and the refusals to levy taxes on wealth have been cornerstones of policies by either government coalitions in the 1994-2018 period. The protection of wealth appears to have played a greater role than the goals of increasing incomes in shaping the political behaviour of mainstream voters. Regions with lower variations in average wealth (again, far from metropolitan areas) are those where the Lega obtains higher votes (Tables 2 and 3).
Sixth, precarious employment emerges as a very strong factor in shaping voting behaviour in all directions. The share of part-time employees (that is highly correlated with the share of fixed-term employees for which we do not have data for the full period) has increased rapidly in the period we investigate with a strong positive association with abstension and vote for both Lega and the Five Star Movement, and, on the opposite, a negative association with the share of votes for mainstream parties. These results capture also the vote of young workers that are overwhelming in precarious jobs.

Seventh, unemployment matters in increasing the distance from the political system, being associated to greater abstention and lower votes for mainstream parties (Table 2). In our models we also include an education variable (share of residents with a university degree) and an age variable (average age of residents in regions) as further controls, that have never resulted significant.

**Insert Tables 2 and 3 here**

The robustness check in Table A in the Appendix considers as key variables the change in the income levels of rich, median and poor employees over the previous two years before the election. The strongest results are that in the regions and periods when the incomes of the middle classes have fallen most, an increase of votes for the Lega and a reduction of those of the Five Star Movement can be found. Conversely, when the incomes of poorest employees have fallen most, an increase of votes for the Five Star Movement and a reduction of votes for the Lega can be found.

Results do not change significantly when the share of voters is used instead of the share of electors for mainstream parties, Lega and Five Star Movement.14

Inequality, the levels and changes in incomes and wealth, precarisation and joblessness all appear to be important factors associated with the evolution of voting in Italy’s political system. Disillusionment with electoral politics as documented by the share of non-voters is mainly associated to overall inequality, the polarisation of incomes with more rich and more poor employees compared to the national average, the high presence of part-time jobs and high unemployment.

An opposite picture emerges for the vote for mainstream parties, those who have governed over the period 1994-2018; higher votes are found only where average net wealth increases, while a negative effect is found for the concentration of poor employees, lower median incomes, higher part-time jobs and higher unemployment.

Voting for the Lega and for the Five Star Movement are related to very different factors, putting in question the studies that have lumped them together under to notion of ‘populism’ (Guiso et al, 2017). The Lega has greater consensus where the incomes of the middle classes are pushed down and get closer to the poor, and where the distance between middle classes and the richest employees is lower. Lega votes are higher where there is a lower presence of the richest employees, lower average wealth, and a larger share of precarious jobs. Support for the Five Star Movement is clearly characterised by income poverty and precarisation. However, our findings for the Lega, and for the Five Star Movement in particular, are subject to a lower number of observations and the econometric results are therefore weaker.

**6.Conclusions**

In this paper we have provided evidence on four variables summarising the evolution of Italy’s electoral behaviour – the share of electors that did not vote; the share of electors that voted for ‘mainstream’ parties (Forza Italia, Democratic Party and Centrist parties, and their predecessors, those who have long governed the country); the shares of electors that voted for the Lega and for the

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14 Results of these additional robustness checks are available upon request.
Five Star Movement, focusing on the regional level. A more systematic investigation of the political processes under way is provided in another paper (Bloise et al. 2020) where, in particular, we compare the evolution of centre-right and centre-left voting and expand more on the regional structure of Italian political behaviour.

Our findings confirm the importance of the diversity across Italy’s regions of economic and political dynamics, with the emergence of greater polarisation in recent years. We have shown that the upheaval in Italy’s election is closely associated to the rise in inequality, the levels and changes in incomes and wealth, precarisation and joblessness. Disillusionment with electoral politics has taken various forms in the last 25 years in Italy. Larger non-voting in elections, falling support for mainstream parties and greater vote for Lega and Five Star Movement as ‘challenger’ parties have common roots in a more polarised, impoverished and unequal society. There are specific economic and social factors behind each of these dynamics, and they cannot be reduced to a generalised ‘populist wave’. We have shown that higher abstention is associated to greater overall income inequality, a more polarised income structure, a high presence of part-time jobs and high unemployment. The rise of consensus for the Lega has roots in the ‘squeezing’ and downward pressure on the income of the middle classes, in lower levels of average household wealth and, partly in precarisation of work. The rise of consensus for the Five Star Movement has clear roots in conditions of poverty, in the impoverishment of lower income groups and, very clearly, in the rise of precarious employment for the youth. All these factors appear to contribute to a lower consensus for mainstream parties, that remain strong only where average household wealth is higher.

As argued elsewhere (Pianta, 2012) the ‘economics of privilege’ has been the hallmark of policies by both centre-right and centre-left coalition governments in the last 25 years. The protection of financial and real estate wealth – which is much more concentrated than incomes are – and the interests of a small wealthy elite have dominated Italian political economy both in the expansion up to 2008 and in the long recession and stagnation that followed the crisis, at the price of lower growth – or, more often, real decline - in incomes and wages.

The political upheaval in Italy’s recent elections reflects the discontent of the ‘unwealthy’ majority, with different trajectories for the vote to the Lega (rooted in the middle classes in Northern and Central regions) and to the Five Star Movement (rooted in poorer social groups and in the regions of the South).

While political, ideological and cultural factors are key explanatory factors for Italy’s electoral behaviour, the economic and social conditions we investigated in this article show how important inequality, lack of wealth and precarisation have been in shaping Italy’s political change.

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Figure 1. Electoral outcomes in 2018 by region, share of electors
Figure 2. Non-voting, voting for mainstream parties, for the Lega and Five Star Movement, 1994-2018, by area, share of electors.

Graphs by area.
Figure 3. Employee income trends, 1993-2016, High (P90), Median (P50), Low (P25) incomes, by area

Figure 4. Gini index of inequality in household incomes, 1993-2016, by area
Figure 5. Shares of non-voters and employees in relative poverty in regions, 1993-2018

Figure 6. Shares of non-voters and Gini index of inequality in household incomes in regions, 1993-2018
Figure 7. Shares of voters for mainstream parties and mean of household net wealth in regions, 1993-2018

Figure 8. Shares of voters for mainstream parties and Gini index of inequality in household incomes in regions, 1993-2018
Figure 9. Shares of voters for Lega and ratio of median employee incomes to incomes of poor employees in regions, 1993-2018

Figure 10. Shares of voters for the Five Star Movement and shares of part-time employees in regions, 1993-2018
Table 2. Inequality and voting in Italy’ regions, 1994-2018. Shares of rich and poor employees

Regression of electoral outcomes (shares of electors) on regional economic variables:
inequality, regional share of employees in the richest national 10th decile, regional share of employees under the national poverty level, median labour income, mean household wealth, share of part time employees, unemployment rate

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<th>M5S</th>
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Regional fixed effects | YES | YES | YES | YES |
Period dummy          | YES | YES | YES | YES |
Obs.                  | 119 | 119 | 88  | 34  |
R-squared             | 0.907 | 0.761 | 0.786 | 0.920 |

Data sources: Losai data on employee income (INPS), Bank of Italy’s SHIW data, SNS electoral database for regions

Notes: Robust standard errors in parentheses. Additional regional controls included in all specifications but not showed: mean age (t-1) and graduate share (t-1)
Table 3. Inequality and voting in Italy' regions, 1994-2018. Distance from rich, median and poor employees

Regression of electoral outcomes (shares of electors) on regional economic variables:
inequality, P90/P50 ratio (distance between the richest employees and the median), P50/P25 ratio (distance between the median and poorest employees), mean household wealth, share of part time employees, unemployment rate.

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Data sources: Losai data on employee income (INPS), Bank of Italy's SHIW data, SNS electoral database for regions

Notes: Robust standard errors in parentheses. Additional regional controls included in all specifications but not showed: mean age (t-1) and graduate share (t-1)
Appendix

The SNS voting database

In order to identify in a systematic way the voting trends in Italian regions, we have built the SNS voting database already described in section 3 above. Here we provide the full details on the definition of the key variables we considered for each general election in the period under investigation.

Non-voters are the share of electors that did not vote. Votes that were cast but left blank or were invalid have not been considered.

Votes for mainstream parties are the share of electors that cast their vote for the following parties:
Forza Italia (in 1994, 1996, 2001, 2006, 2018) and Popolo della Libertà (in 2008 and 2013). Popolo della Libertà was a centre-right party born out of the merger between Forza Italia and Alleanza Nazionale. It changed name again after 2013 returning to Forza Italia. In 1994, Forza Italia was not admitted to compete in the Puglia region. We calculated its electoral outcome by summing all votes received by right-wing and centre-right parties (Alleanza Nazionale, Patto Segni, and Partito Popolare) and then redistributing this total among FI, AN, Patto Segni, and PP on the basis of the percentages obtained by each of these parties in the European elections of the same year.
Centrist parties include: in 1994 Partito Popolare, Patto Segni, Partito Socialista Italiano, and Südtiroler Volkspartei; in 1996 Centro Cristiano Democratico-Cristiano Democratici Uniti, Rinnovamento Italiano; in 2001 Centro Cristiano Democratico-Cristiano Democratici Uniti, Nuovo PSI, Il Girasole, and Südtiroler Volkspartei; in 2006 Unione dei Democratici Cristiani e di Centro, Nuovo PSI-Democrazia Cristiana per le Autonomie, Popolari UDEUR, and Südtiroler Volkspartei; in 2008 Unione di Centro, and Südtiroler Volkspartei; in 2013 Unione di Centro, Scelta Civica, Futuro e Libertà, Centro Democratico, and Südtiroler Volkspartei; in 2018 Unione di Centro, Più Europa, Civica Popolare, Italia Europa Insieme, and Südtiroler Volkspartei. Note that in 1996 the Südtiroler Volkspartei is not included among the centrist parties as it run within the centre-left formation Popolari per Prodi.

Votes for the Lega are characterised by great variation at the subnational level as for several elections the party presented its lists only in some regions in Northern and Central Italy, notably: 8 regions in 1994 (Emilia Romagna, Friuli-Venezia Giulia, Liguria, Lombardy, Piedmont, Toscana, Trentino, and Veneto); 10 regions in 1996 (Emilia Romagna, Friuli-Venezia Giulia, Liguria, Lombardy, Marche, Piedmont, Toscana, Trentino, Umbria, and Veneto); 9 regions in 2001 (Emilia Romagna, Friuli-Venezia Giulia, Lazio, Liguria, Lombardy, Piedmont, Toscana, Trentino, and Veneto); all regions in 2006 (in alliance with the Movimento per le Autonomie, based in the South); 10 regions in 2008 (Emilia Romagna, Friuli-Venezia Giulia, Liguria, Lombardy, Marche, Piedmont, Toscana, Trentino, Umbria, and Veneto); all regions in both 2013 and 2018. In some elections the Lega run within a Centre-right coalition; here we consider the votes obtained by the Lega party list only.

Votes for the M5S include the results obtained by the party in the two national elections it contested, in 2013 and 2018.
Table A. Inequality and voting in Italy’ regions, 1994-2018. Changes in employee income

Regression of electoral outcomes (shares of electors) on regional economic variables: inequality, rates of change of the income of the richest employees, of the poorest employees, of the median, mean household wealth, share of part time employees, unemployment rate.

<table>
<thead>
<tr>
<th></th>
<th>Non-Voters</th>
<th>Mainstream</th>
<th>Lega</th>
<th>M5S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gini index on disposable income (t-1)</td>
<td>0.247**</td>
<td>-0.629**</td>
<td>-0.053</td>
<td>-0.59</td>
</tr>
<tr>
<td></td>
<td>[0.115]</td>
<td>[0.278]</td>
<td>[0.225]</td>
<td>[0.382]</td>
</tr>
<tr>
<td>Change in P90 employee income, log(t)-log(t-2)</td>
<td>-0.472***</td>
<td>0.224</td>
<td>0.585</td>
<td>1.024</td>
</tr>
<tr>
<td></td>
<td>[0.162]</td>
<td>[0.391]</td>
<td>[0.504]</td>
<td>[1.841]</td>
</tr>
<tr>
<td>Change in P25 employee income, log(t)-log(t-2)</td>
<td>0.008</td>
<td>-0.447*</td>
<td>0.698***</td>
<td>-0.688*</td>
</tr>
<tr>
<td></td>
<td>[0.093]</td>
<td>[0.226]</td>
<td>[0.254]</td>
<td>[0.365]</td>
</tr>
<tr>
<td>Change in median employee income, log(t)-log(t-2)</td>
<td>0.015</td>
<td>0.368</td>
<td>-0.938**</td>
<td>1.872***</td>
</tr>
<tr>
<td></td>
<td>[0.180]</td>
<td>[0.434]</td>
<td>[0.362]</td>
<td>[0.386]</td>
</tr>
<tr>
<td>Mean of net wealth log(t-1)</td>
<td>-0.022</td>
<td>0.152***</td>
<td>-0.096***</td>
<td>0.041</td>
</tr>
<tr>
<td></td>
<td>[0.015]</td>
<td>[0.037]</td>
<td>[0.030]</td>
<td>[0.027]</td>
</tr>
<tr>
<td>Share of partime employees (t-1)</td>
<td>0.275***</td>
<td>-0.472**</td>
<td>-0.305</td>
<td>-0.357</td>
</tr>
<tr>
<td></td>
<td>[0.078]</td>
<td>[0.189]</td>
<td>[0.200]</td>
<td>[0.904]</td>
</tr>
<tr>
<td>Unemployment rate (t-1)</td>
<td>0.162</td>
<td>-0.405*</td>
<td>0.346</td>
<td>-0.126</td>
</tr>
<tr>
<td></td>
<td>[0.098]</td>
<td>[0.235]</td>
<td>[0.214]</td>
<td>[0.185]</td>
</tr>
<tr>
<td>Regional fixed effects</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Period dummy</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Obs.</td>
<td>119</td>
<td>119</td>
<td>88</td>
<td>34</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.906</td>
<td>0.736</td>
<td>0.771</td>
<td>0.976</td>
</tr>
</tbody>
</table>

Data sources: Losai data on employee income (INPS), Bank of Italy’s SHIW data, SNS electoral database for regions

Notes: Robust standard errors in parentheses. Additional regional controls included in all specifications but not showed: mean age (t-1) and graduate share (t-1)