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Is Populism reversible? Evidence from Italian local elections during the pandemic☆

Massimo Bordignon [a], Federico Franzoni [a], Matteo Gamalerio [b,*]

[a] Università Cattolica del Sacro Cuore, Italy
[b] Institut d'Economia de Barcelona, University of Barcelona, Spain

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ABSTRACT

We study the effect of economic insecurity on electoral outcomes using data on municipal elections in Italy. We implement a difference-in-differences approach that exploits exogenous variation across municipalities in the share of inactive workers due to the economic lockdown introduced by the central government to deal with the Covid-19 pandemic. We show that lockdown-induced economic insecurity positively affected the electoral performance of progressive and left-wing parties, while it negatively affected conservative and far-right parties. Conversely, we find no effect for the populist Five Star Movement, local independent parties (i.e., Civic Lists), and electoral turnout. We provide evidence that extraordinary economic measures introduced by the central government to compensate workers for the economic insecurity can explain this shift in partisanship toward the left and the increasing support for pro-EU parties, away from euro-skeptic and populist forces.

1. Introduction

In recent years, various democratic countries have experienced a rise in the electoral success of anti-establishment and populist parties at the expense of mainstream and traditional parties (Guriev and Papaioannou, 2022). We can find clear examples of this success in Donald Trump's victory, the Brexit vote in 2016, and the rising support for far-right and populist parties in European countries like France, Italy, and Spain. Recent literature in economics and political science has highlighted the role of economic insecurity as one of the main factors explaining this electoral success (Algan et al., 2017). Specifically, the literature has shown how populist and anti-establishment parties are more likely to gain votes when mainstream parties fail to deal with the economic insecurity felt by voters during a period of crisis, as happened for example in Europe during the 2008–2011 financial and sovereign debt crisis (Guiso et al., 2019). In light of this evidence, one interesting question is whether voters would react similarly to increases in economic insecurity during crises in which governments did manage to respond appropriately.

This paper analyzes the effect of the Covid-19 economic lockdown on voting behavior to study whether voters reacted differently to an increase in economic distress during a crisis in which governments worldwide responded to compensate for this increased level of insecurity. Specifically, we study the case of the economic lockdown imposed by the Italian government in the period March–May of 2020 to deal with the Covid-19 pandemic, which mandated the closing of non-essential economic activities and thus led to severe

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* Corresponding author.
E-mail addresses: massimo.bordignon@unicatt.it (M. Bordignon), federico.franzoni@unicatt.it (F. Franzoni), m.gamalerio@ub.edu (M. Gamalerio).

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economic losses for part of the population and to a general increase in economic insecurity. There are several reasons to exploiting the Italian case to study this topic. First, many Italian municipalities held elections for the renewal of the municipal councils and the election of mayors in September–October of 2020, just a few months after the economic lockdown introduced by the Italian central government. This feature, combined with the availability of electoral data at the municipal level for the 2020 elections and the previous electoral years, enables us to build a panel dataset that we use to study the effect of economic insecurity on electoral outcomes.

Second, in September–October 2020, the national government led by Prime Minister Giuseppe Conte received the support of both center-left parties (e.g., the Democratic Party) and populist forces (i.e., the Five Star Movement). Conversely, right-wing parties were forming the opposition, composed of both moderate (e.g., center-right Forward Italy) and more extreme-right parties like the League and Brothers of Italy. This political scenario characterized by peculiar alliances enables us to study the effect of the lockdown-induced economic insecurity from different points of view, distinguishing between different mechanisms. Specifically, it allows us to look at the impact of the lockdown-induced economic insecurity on shifts in partisanship and electoral orientation by part of voters, distinguishing between center-left and center-right political parties and between mainstream and pro-European Union parties and populist forces (see Figure A1).[1] In addition, the alliance between forces with different political stances, such as the mainstream Democratic Party and the populist Five Star Movement, allows us to separate the eventual shifts in partisanship from a rally "round the flag" effect (Mueller, 1970), with increasing support for parties that support the central government.

Third, for the identification strategy, we exploit exogenous variation across municipalities in the intensity of the economic insecurity due to the imposition of the economic lockdown. Specifically, we use variation across municipalities in the share of inactive workers generated by the restrictions introduced by the central government as a measure of the local intensity of the economic insecurity due to the lockdown (Borri et al., 2020). As explained in Section 3, in response to the Covid-19 pandemic, in March 2020, the Italian national government imposed the closing of non-essential economic activities and severely constrained the movement of people. Given the heterogeneous pre-Covid distribution of non-essential economic activities across different areas of Italy, the economic restrictions affected different municipalities with a different intensity. We exploit this lockdown-induced variation in the share of inactive workers to run a difference-in-differences model. We use this model to compare the evolution of electoral outcomes before and after the Covid-19 crisis across municipalities affected differently by the economic lockdown.

Predicting the political consequences of lockdown-induced economic insecurity is inherently challenging from the outset. On the one hand, the increase in economic insecurity due to the pandemic and the associated restrictions combined with the closing of non-essential economic activities may have increased the support for the opposition and populist political parties. On the other hand, as described in Section 3, the Italian government accompanied the economic lockdown with special economic measures introduced to support the firms, the workers, and in general, the people more affected by the pandemic and the economic restrictions. Therefore, the pandemic might have convinced even traditionally skeptical voters of the usefulness of government protection and intervention in the economy in the presence of large shocks to provide support to the center-left parties more associated with these risk reduction and redistribution policies. In addition, these measures may have convinced voters to reward the protection provided by the national government and increase their support for political parties aligned with the central government, leading to a rally "round the flag" effect.

The results of the difference-in-differences analysis provide evidence of a shift in partisanship, with increasing support for center-left forces by part of voters. Specifically, we find a positive effect of the lockdown-induced economic insecurity on the electoral performance of center-left parties (i.e., the Democratic Party and other center-left political forces in the same coalition) and a negative effect on the vote shares of center-right and extreme-right parties. More in detail, we find that an increase in the share of inactive workers by one standard deviation (i.e., 14.7 percentage points) led to an increase in the vote shares of center-left parties by around 1 percentage points. At the same time, we find that a rise in the share of inactive workers by one standard deviation decreased the vote shares of center-right and extreme-right political parties by 1.2 percentage points. Conversely, the lockdown-induced economic insecurity did not affect the electoral performance of the Five Star Movement, the main populist party supporting the central government, the vote shares of independent municipal parties (i.e., Civic Lists), and electoral turnout.

We also verify the same results in public opinion survey data collected in 2020. Specifically, we use detailed survey individual data provided by IPSOS[2] to confirm further this shift in partisanship in the opinions of Italian citizens interviewed. We provide this evidence through survey data in two ways. First, we produce descriptive evidence about how survey participants' opinions changed between March and September 2020. We distinguish between individuals who had to stop working because of the economic lockdown and those who did not. The evidence shows that inactive individuals, while on average supported more center-right parties than center-left ones, over time during 2020, became more supportive of center-left parties and less of center-right forces, eventually converging toward the opinions of those who remained active. This evidence suggests that supporters of center-right parties affected by the economic lockdown changed their preference toward center-left parties in 2020. In addition, the descriptive evidence shows that inactive individuals in 2020 were more concerned about their economic situation than their health situation, confirming that the share of inactive individuals represents a good measure of the level of lockdown-induced economic insecurity.

[1] The definition of populist parties used in this paper is grounded in a well-established literature (Norris and Inglehart, 2016; Inglehart and Norris, 2019; Bellodi et al., 2023), drawing from resources such as the 2014 Chapel Hill Expert Survey data and the PopuList Database (Rooduijn et al., 2019). According to these sources, among the Italian national parties, three are distinctly identified as populist: the League, Brothers of Italy, and the Five Star Movement. At certain points in time, Forward Italy, the party founded and led by Silvio Berlusconi, was also classified as populist, though it has not been since 2018.

[2] Ipsos is a multinational market research and consulting firm with headquarters in Paris, France. We provide more details on the survey data in Section 5.2.

Second, by combining the voting intentions of respondents in September 2020 with their self-reported past voting behavior (i.e., in elections held in 2018 and 2019), we build a time-variant proxy for the individual probability of voting for political parties with different political orientations. This information, combined with the variable capturing the probability of being inactive due to the lockdown, enables us to apply the same difference-in-differences strategy to these individual data. This exercise confirms the increasing support for center-left parties, and the drop in the support for center-right parties, while there is no effect for the Five Star Movement.

How can we interpret these results? First, the rising support for progressive left-wing parties and the negative effect for conservative right-wing forces signals an increasing demand for government protection and intervention in the economy, and a connected reward for those forces more in favor and responsible for this protection during the lockdown period. To provide further evidence on this increasing demand, we repeat the difference-in-differences analysis distinguishing between the share of inactive workers in the services sector and the share of inactive workers in the industry sector. We find that the share of inactive workers in the services sector drives our results. In contrast, the share of inactive workers in the industry sector did not affect electoral outcomes.

The fact that the share of inactive workers in the service sector drives the results is evidence that the economic measures introduced by the central government to reduce workers' economic insecurity represents the more likely explanation for the increased support for progressive and left-wing parties and the negative effect for conservative and right-wing forces. As described in Section 3, these economic measures represented an important innovation for the services sector, given that workers in these occupations did not benefit from any particular protection in the pre-Covid era. Conversely, the insignificant impact of the share of inactive workers in the industry sector is consistent with the fact that workers in these occupations already benefited from extensive unemployment protections even before the Covid-19 crisis. Hence, for workers in these occupations, the economic measures introduced to deal with economic security did not represent an innovation.

To further reinforce the evidence supporting this mechanism, we repeat the diff-in-diff analysis using the per capita benefits received by self-employed workers during the lockdown as the treatment variable. While this variable has the limit to be just one of the several compensatory measures introduced by the Italian government (see Section 3.1), it represents a good proxy for the intervention of government in the economy during the lockdown. This analysis confirms that the support for center-left parties grew more in areas that received more benefits. At the same time, these areas experienced a greater decline in electoral support for center-right parties. This evidence confirms that the economic measures introduced by the central government to reduce economic insecurity represents the more likely explanation for the increased support for center-left parties and the negative effect on right-wing forces. Besides, as explained in Section 2, this increased support for the political parties that supported the introduction of these economic measures is in line with the "pocketbook voting" literature (Levitt and Snyder, 1997; Manacorda et al., 2011; Baez et al., 2012; Pop-Eleches and Pop-Eleches, 2012; De La O, 2013; Zucco, 2013; Elinder et al., 2015), which finds that beneficiaries of public spending programs tend to increase their support for the political parties in favor of these programs.

Second, the positive effect for pro-EU parties like the Democratic party and the null effect for the populist and euro-skeptic Five Star Movement is further evidence that the economic measures introduced to compensate for economic insecurity represent the more likely explanation for the main results. Specifically, as described in more detail in Section 3.1, the direct support of the European Union to countries during the pandemic made possible the funding of the economic measures introduced by the Italian government. Hence, these contrasting effects for mainstream pro-EU and populist euro-skeptic parties represent further evidence of the role of the protective and recovery measures introduced to compensate for economic insecurity. These EU-supported measures enabled the EU to regain credibility in the eyes of voters, subsequently boosting their support for pro-EU parties. In addition, we find similar results in the descriptive analysis produced with the IPSOS survey data, which shows how inactive individuals became more supportive of the EU during 2020.

Third, the fact that the economic lockdown did not benefit the populist Five Star Movement allows us to rule out the existence of a rally "round the flag" effect. In September–October 2020, the Five Star Movement was the biggest party supporting Conte's government. In addition, Giuseppe Conte was an independent politician with close links with the Five Star Movement until he became president of the Movement in August of 2021. Hence, in the presence of a rally "round the flag" effect, we should have observed increasing support for the Five Star Movement. Besides, we confirm further the absence of a rally "round the flag" effect by showing that the level of lockdown-induced economic insecurity did not affect the re-election probability of incumbent mayors.

Finally, using data from the 2022 national elections at the municipal level, we demonstrate that, consistent with the "pocketbook voting" literature (Section 2), the observed effects were short-lived. Two years later, in a landscape dominated more by the Ukraine conflict and price surges than by the Covid-19 pandemic, these effects did not persist. As explained in Section 6.5, this lack of persistence suggests that once the pandemic's economic repercussions and the government's extraordinary measures ceased, their effects on electoral outcomes disappeared. Essentially, after the differential effects of the government's extraordinary measures on various social groups had concluded, beneficiaries and non-beneficiaries of these measures returned to similar levels of support for the political parties that had introduced them.

2. Related literature

This paper contributes to several streams of literature. First, it contributes to the literature analyzing the effect of economic insecurity on electoral outcomes, and specifically the electoral support for populist and anti-establishment forces (Algan et al., 2017) and radical-right parties (Dehdari, 2022). This literature shows how economic insecurity due to economic crises can increase both the demand and the supply of populist policies and political forces. This effect is strong in countries with low fiscal space (Guiso

et al., 2021) and in which governments fail to compensate for the economic insecurity felt by voters, as happened during the 2008–2011 financial and sovereign debt crisis (Guiso et al., 2019), which worsened citizens' perceptions of quality of governance and the level of social trust (Bordignon et al., 2022). This paper contributes to this literature by showing that when governments introduce measures that compensate for the increase in economic distress, the effect of economic insecurity can go in the opposite direction, with increasing support for left-wing and mainstream parties and with a null or negative effect for populist and anti-establishment parties. In addition, our results, combined with the role played by the European Union in funding the measures introduced to deal with the Covid-19 pandemic, suggest that voters can reward mainstream and pro-EU parties when governments and EU institutions manage to meet their demand for protection against economic insecurity.

Second, the paper also connects to the "pocketbook voting" literature, which examines the electoral impact of targeted government transfers on incumbent government support. This body of work generally finds that beneficiaries of public spending programs tend to increase their support for the governing party (Levitt and Snyder, 1997; Manacorda et al., 2011; Baez et al., 2012; Pop-Eleches and Pop-Eleches, 2012; De La O, 2013; Zucco, 2013; Elinder et al., 2015). Our study adds to this discourse by exploring "retrospective pocketbook voting" behavior. We investigate how voters, affected by economic insecurity during the Covid-19 pandemic and who received governmental aid, retrospectively rewarded the political parties behind these interventions. Notably, our context differs from much of the existing literature, which often focuses on specific anti-poverty programs in developing countries during regular periods. Instead, our analysis encompasses a wide array of emergency economic measures introduced in response to the economic challenges posed by the Covid-19 crisis and its associated health restrictions. These measures were essential in addressing the limitations of the Italian welfare state, which was not originally structured or funded to protect a significant portion of the workforce, especially the self-employed and the dependent workers employed in the service sector.

Finally, this paper contributes to the literature that studies the political impact of the Covid-19 crisis (Amat et al., 2020; Daniele et al., 2020; Giommoni and Loumeau, 2020; Noury et al., 2021; Picchio and Santolini, 2021; Fernandez-Navia et al., 2021). This literature analyzes the political consequences of the health shock and the restrictions in terms of electoral turnout (Picchio and Santolini, 2021), support for nationalist parties (Fernandez-Navia et al., 2021), and support for incumbent politicians (Giommoni and Loumeau, 2020). The literature has also studied the impact of elections on the pandemic diffusion (Cipullo and Le Moglie, 2022) and electoral incentives on the restrictions adopted by governments around the world (Pulejo and Querubín, 2021). Our paper contributes to this literature by focusing on a novel margin, i.e., the political consequences of the economic insecurity introduced by the Covid-19 crisis. Specifically, the richness of our data allows us to distinguish between the economic aspects of the Covid-19 crisis, which combine an increase in economic insecurity with measures introduced by governments to deal with that, from the health consequences of the Covid-19 pandemic captured by the excess mortality. Our analysis below shows how the economic aspects of the Covid-19 crisis generated effects that go in the opposite direction compared to the electoral impact of the health shock.[3]

3. Institutional background

3.1. The Covid-19 in Italy

The central government's initial significant response to the Coronavirus pandemic came on January 31st, 2020, when a six-month state of emergency was declared to provide the necessary tools to combat the pandemic.[4] As the infection spread rapidly, more stringent measures, including prohibitions on gatherings and movement restrictions, were swiftly implemented. Starting by isolating selected municipalities in Lombardy and Veneto on February 23rd,[5] the restrictions expanded territorially, peaking on March 9th with a nationwide maximum alert.[6]

Within days, the government intensified restrictions, halting many businesses. By March 11th, retail shops and restaurants were closed, and by March 22nd, all non-essential activities ceased.[7] This strict period lasted until May 3rd, transitioning into the "phase two" of the pandemic, which marked a gradual easing of restrictions.[8] From May 4th, industries and wholesalers resumed operations, with cultural, artistic, and sports activities, along with retail and dining, reopening by the end of the month. June marked the start of the pandemic's third phase, a cautious coexistence with the virus, which persisted until October when a second wave prompted renewed restrictions.

In response to the economic challenges posed by the prolonged suspension of activities due to Covid-19, the Italian government allocated over €100 billion to support the economy during the first pandemic wave (March–September). This support included guarantees on loans for small businesses. The financial aid was distributed through three key decrees: The "Care Italy" decree,

[3] A recent strand of literature has examined the Italian government's handling of the pandemic, concluding that the government did not perform well. This literature highlights the unpreparedness of the Italian National Health Services (Servizio Sanitario Nazionale) during the Covid-19 pandemic. This lack of preparedness, coupled with Italy being the first European country affected by the pandemic without the benefit of learning from other countries' experiences, contributed to Italy having one of the highest mortality rates in the world. The government's response, often driven by emotion and displays of force rather than a scientific approach, exacerbated the situation (Bosa et al., 2022). Moreover, some scholars argue that the government's introduction of restrictions and lockdown measures followed a populist approach (Scalia, 2021). Unlike this literature, our paper does not analyze the health or security aspects of the pandemic and the lockdown. We focus instead on the socio-economic consequences of the lockdown in terms of economic insecurity and their effects on political outcomes.

[4] Resolution of the Council of Ministers (31.01.2020).

[5] Decree of the President of the Council (23.02.2020).

[6] Decree of the President of the Council (09.03.2020).

[7] Decrees of the President of the Council (11.03.2020) and (22.03.2020).

[8] Decree of the President of the Council (26.04.2020)

approved on March 17th, allocated €25 billion.[9]; the "Recovery" decree, approved on May 19th, provided €55 billion[10]; and the "August" decree, approved on August 14th, contributed an additional €25 billion[11]

The Italian government allocated approximately €35 billion to safeguard workers, primarily focusing on job retention and ensuring stable incomes. A special "Covid-19" redundancy pay was introduced, covering all employees across sectors for 36 weeks. Self-employed, freelance, and seasonal workers received benefits ranging from €600 to €1000 in March, April, and May, based on their job category (detailed further in Sections 4 and 5.1). The government also introduced the Emergency Income (REM), a temporary support for low-income families, offering between €400 and €800. This aid was granted twice, with an optional third €400 payment. Regular unemployment benefits were extended by two months for those not covered by new measures. Additionally, to curb unemployment, dismissal procedures were suspended from February 23rd, 2020, and this suspension was extended multiple times into the subsequent year.

The measures mentioned predominantly benefited those in the services sector, which, for our purposes, encompasses a broad definition including dependent workers employed in the service sector, small firms, self-employed individuals, and retail shops (details in Section 5.1 and Tables A3, A4, and A5). Historically, these workers have always enjoyed a lower level of social protection compared to those in the industrial sector. The "Covid-19" redundancy pay, for instance, was designed to offer benefits to these traditionally underserved workers. Beyond direct financial assistance, the government also provided tax and tariff payment deferrals and loan guarantees. Monteduro et al. (2023) highlights the significance of these interventions, noting their role in maintaining income equality during the pandemic. Without such measures, self-employed individuals would have faced a much steeper income loss compared to regular employees.

The government also supported Italian businesses through grants and tax incentives to ensure their resilience during the emergency and to aid their recovery thereafter. Specifically, companies with revenues up to €5 million that experienced at least a 33% decline in April's revenue compared to the previous year were granted non-repayable contributions. This amount was determined as a percentage (ranging from 10% to 20%, and decreasing as revenues rose) of the difference between the sales volumes of April 2019 and April 2020. Additionally, a 60% tax credit, capped at €80.000, was provided for 2020 expenses associated with health protocols and measures to contain the virus, including costs for sanitation and the acquisition of personal protective equipment.

In addition, firms and self-employed individuals with revenues under €250 million (excluding banks, insurance companies, and public administrations) were exempted from the June's Regional Business Tax (IRAP) payment, a relief backed by nearly €4 billion. Additionally, the government introduced other tax reliefs: The Wealth Municipal Tax (IMU) for 2020 was waived for beach resorts, hotels, and theaters (with theaters' suspension extended to 2022). Retail businesses with public land use concessions also saw a suspension of fees for occupying public spaces throughout the year.

At the peak of the first pandemic wave, legislative actions were taken to safeguard the credit market, anticipating the economic downturn's dual impact. Reduced earnings risked compromising firms' and families' ability to meet financial obligations and secure new financing. The "Liquidity" decree,[12] approved on April 8th and backed by €30 billion, ensured liquidity for all economic entities. Key measures included an extended moratorium on short-term loans for self-employed workers and small and medium-sized enterprises (SMEs), initially until September 30th and later extended to January 2021. Additionally, the treasury provided guarantees, ranging from 70% to 90%, for new loans offered by banks and financial institutions to all business types. These loans could be up to 25% of the 2019 revenue with a maximum term of six years.

From the aforementioned overview, it is evident that Italy, like many other countries, saw significant public sector intervention to address the pandemic's widespread effects. To quantify the scale of this effort, the 2020 Italian government deficit exceeded €156 billion, amounting to 9.5% of the GDP—the highest since 1995. It is also worth mentioning that the European Union financially supported part of such an extraordinary economic intervention. At the beginning of April 2020, the European Commission proposed the institution of a temporary "Support to mitigate Unemployment Risks in an Emergency" (SURE) dedicated to safeguarding jobs and workers from the consequences of the Covid-19 pandemic crisis.[13] The support to the EU Member States was provided via financial assistance, up to €100 billion in total, and in the form of loans granted on favorable terms, to (partially) cover the costs devoted to social safety nets. The Italian government formally required the activation of the SURE program on the 8th of August for an amount close to €28 billion, based on the measures adopted in the "Care Italy" and "Recovery" decrees. The European Commission approved the request on the 24th of August,[14] and the first tranche was distributed the 27th of October. Hence, the EU strongly contributed to bearing the financial exposure implemented by the Italian government, providing close to one-quarter of the total additional resources expended.

A further significant contribution for the Italian government derived from the European Central Bank through the launch in March 2020 of the Pandemic Emergency Purchase Programme (PEPP), an additional non-standard monetary policy measure aimed at safeguarding the monetary policy transmission mechanism against the COVID-19 outbreak.[15] The program consists of a temporary asset purchase program of private and public sector securities, initially amounting to €750 billion and then increased up to €1850

[9] Decree Law 17 March 2020, n. 18 converted with amendments into Law 24 April 2020, n. 27.
[10] Decree Law 19 May 2020, n. 34 converted with amendments into Law 17 Law 2020, n. 77.
[11] Decree Law 14 August 2020, n. 104 converted with amendments into Law 13 October 2020, n. 126.
[12] Decree Law 8 April 2020, n. 23 converted with amendments into Law 5 June 2020, n. 40.
[13] Approved by the Council of the European Union with the Council Regulation (EU) 2020/672 of 19 May 2020.
[14] Approved by the Council of the European Union with the Council Implementing Decision (EU) 2020/1349 of 25 September 2020.
[15] Decision (EU) 2020/440 of the European Central Bank of 24 March 2020 on a temporary pandemic emergency purchase program (ECB/2020/17).

billion. Finally, the most significant intervention of the European institutions in 2020 was the Next Generation EU, a more than €800 billion temporary recovery instrument – proposed by the European Commission in May and approved in general political terms by the European Council in July – finalized to repair the economic and social damages caused by the Covid-19 pandemic.

3.2. The Italian political scenario during the pandemic

During the Covid-19 pandemic, Italy was governed by the second Conte administration from September 2019 to February 2021. This cabinet was backed by a parliamentary coalition including the Five Star Movement, a catch-all populist party founded by comedian Beppe Grillo in 2009[16]; the Democratic Party, the main center-left party founded in 2007; and Free and Equals, an alliance of smaller left-wing parties.

The opposition consisted of center-right parties: Forward Italy, established by Silvio Berlusconi with moderate liberal principles; the League, initially the Northern League with federalist leanings under Umberto Bossi, but later transformed into a far-right party by Matteo Salvini; and Brothers of Italy, a far-right party co-founded by Giorgia Meloni, which followed the National Alliance, the successor to the post-fascist Italian Social Movement.

To illustrate the stances of Italian parties on the Covid-19 pandemic crisis, Figure A2 presents the results from the 2020 Covid-19 Special Edition of the Chapel Hill Expert Surveys.[17] From the figure, a distinct difference in the approaches of the two coalitions regarding the Covid-19 consequences is evident. The governing parties were more inclined to rely on scientific expertise for public policymaking and favored shutting down economic activities to halt the virus's spread, even through government-enforced measures. In contrast, the opposition parties were less inclined to follow scientific advice for public policymaking and were less supportive of closing economic activities, instead preferring self-enforced public health measures.

We also observe contrasts between the majority and the opposition regarding the introduction of measures to financially support workers, families, and firms in addressing the economic consequences of the Covid-19 pandemic emergency. Specifically, although the opposition parties either voted in favor of or abstained from resolutions aimed at increasing the public deficit,[18] necessary to allocate funds for the extraordinary compensatory measures, contrasts emerged during the parliamentary debates and decisive votes in Parliament when converting the government's decrees into laws.[19]

3.3. 2020 Municipal elections in Italy

Initially scheduled in the Spring and then postponed to the Autumn of 2020, Italian local elections took place on the 20th and 21st of September. The elections involved 1178 municipalities, 608 belonging to ordinary statute regions and 570 to special statute regions. In concomitance with these elections, there were two other electoral appointments: a constitutional referendum regarding reducing the number of parliamentarians and regional elections in six ordinary statute regions (Veneto, Liguria, Campania, Marche, Puglia, and Toscana) and the special region Valle d'Aosta.

As amended in 1993 by Law 81/1993, the Italian legislation mandates the direct election of the mayor using a majoritarian rule, with variations based on the municipal population (Bordignon et al., 2016; Gamalerio et al., 2021; Bordignon and Colussi, 2020). Specifically, municipalities with less than 15,000 inhabitants use a first-past-the-post mechanism to elect the mayor. With this system, the mayoral candidate who wins the most votes is directly elected mayor. The electoral rule also assigns a majority of 2/3 of the council seats to the list connected to the newly elected mayor. Municipalities with more than 15.000 inhabitants use a runoff or dual ballot electoral system, in which the candidate who wins more than 50 percent of the votes is elected mayor. If no candidate gets more than 50 percent of the votes, the first two candidates go to a second round. The winner of the second round is elected mayor. The lists connected to the elected mayor get 60 percent of the municipal council seats.

4. Empirical strategy

To study the effect of lockdown-induced economic insecurity on electoral outcomes, we perform multiple difference-in-differences analyses based either on municipal or survey data. With the Italian municipal data, we run the following model:

$$Y_{i,t} = \gamma_0 + \gamma_1 \cdot \%\ inactive_i + \gamma_2 \cdot post_t + \gamma_3 \cdot \%\ inactive_i \cdot post_t + \gamma_k \cdot X_{k,i} + \xi_{i,t} \quad (1)$$

where the dependent variable $Y_{i,t}$ captures electoral outcomes measured in municipality i and during the electoral year t, with $t \in [2008, 2020]$. As described in Section 5.1, we have information for three electoral years for all municipalities in our sample. The continuous variable $\%\ inactive_i$ is the share of inactive workers during the first lockdown in municipality i, calculated as described

[16] A fitting definition is given by Pirro (2018) in terms of "polyvalent populism": variant of populism that rests on concomitant ideological discordance, newness and radicalness.

[17] Conducted in June 2020 with 257 political scientists specializing in party politics and European integration, the 2020 Chapel Hill Expert Surveys details the positions of 251 parties on four Covid-19 policies. It encompasses parties from 32 countries, covering all EU members except Luxembourg, and includes Norway, Switzerland, Turkey, and the UK (Rovny et al., 2022).

[18] See Camera (2020a).

[19] For an example related to the "Care Italy" decree see the article by Sky-TG24 (2020). Also, see the results of the decisive vote to convert the "Care Italy" decree into Law published by Openpolis (2020) and Camera (2020d). As for the "Recovery" decree see the article by Formiche (2020) and the decisive vote published by Camera (2020c). Finally, for the "August" decree see the article by AGI (2020) and the decisive vote published by Camera (2020b).

in Section 5.1. This variable represents our main measure that captures the level of economic insecurity suffered by workers at the municipal level. The dummy variable $post_t$ is equal to 1 for the 2020 municipal elections. The vector $X_{k,i}$ contains k covariates capturing socio-economic municipal characteristics for municipality i and electoral year t, described in Section 5.1. We cluster the standard errors at the municipality level. The coefficient of interest is γ_3, which captures the effect of an increase in the share of inactive workers due to the Covid-19 restrictions on electoral outcomes.

Then, we run the following modified version of Eq. (1) with municipal and year of election fixed effects:

$$Y_{i,t} = \beta_0 + \beta_1 \cdot \%\ inactive_i \cdot post_t + \delta_i + \lambda_t + \xi_{i,t} \tag{2}$$

where the year of election FE λ_t control for temporal shocks that affect all the municipalities at the same time and the municipal FE δ_i captures all the time-invariant municipal characteristics. In Eq. (2), λ_t absorbs the variable $post_t$, while the municipal FE δ_i absorbs the variable $\%\ inactive_i$ and the vector $X_{k,i}$. The coefficient of interest in model (2) is β_1, which estimates whether an increase in the share of inactive workers during the first lockdown leads to a differential change in electoral outcomes across municipalities hit differently by the Covid-19 restrictions introduced by the central government during the first lockdown.

The central assumption of the difference-in-differences approach is that municipalities with different shares of inactive workers during the lockdown should have been following common electoral trends in the electoral years before 2020. We test this assumption by interacting the variable $\%\ inactive_i$ with a dummy variable pre_t equal to 1 for the first (out of three) electoral years observed in the data for all municipalities in our sample. We add this interaction term to Eq. (2) to empirically check for the absence of differential pre-treatment trends in electoral outcomes across municipalities affected differently by the restrictions introduced during the lockdown.

We also adapt the difference-in-differences model by modifying the treatment variable. Specifically, we employ an alternative metric for economic insecurity at the municipal level: the per capita amount of various monetary compensations awarded to self-employed workers, calculated as the total amount divided by the resident population (refer to Section 5.1).

We then adopt the same empirical strategy also to study the consequences of the pandemic emergency on voting intention collected in the survey data described in Section 5.2. The necessary variations to perform this second specification are the following. First, the dependent variable $Y_{i,t}$ is the probability of voting a specific party or coalition, for individual i in year t with $t \in [2018, 2020]$. As illustrated in Section 5.2, we know the voting preferences for both the current year (2020) and the two preceding elections (2019 and 2018), then the dummy variable $post_t$ is equal to 1 for the year 2020. Second, the treatment variable – described in Section 5.2 – is a dummy variable, then more simply indicated as $inactive_i$. It represents the employment status of the interviewee and is 1 when inactive. Third, the vector $X_{k,i}$ contains k covariates capturing characteristics of individual i in year t. The coefficient of interest γ_3 indicates the effect of being an inactive worker due to the restrictions introduced by the Italian government on the declared voting intention. Finally, to test the common trend assumption, we interact the treatment variable $inactive_i$ with a dummy variable pre_t equal to 1 if the year is 2018.

5. Data

5.1. Data on Italian municipalities

We sourced data on Italian municipalities from various institutions: the Italian National Institute of Statistics (ISTAT), the Ministry of Interior, and the National Institute for Social Security (INPS). Our sample comprises 575 out of the 1178 municipalities that held elections in 2020. The discrepancy between the total potential municipalities and those actually included in our study arises because electoral data for special statute regions are unavailable. Thus, our primary reference comprises 608 municipalities from ordinary statute regions. Any further discrepancies are due to missing data in the variables relevant to our empirical analysis. Fig. 1 illustrates the distribution across the Italian territory of municipalities from both ordinary (left graph) and special (right graph) statute regions that voted in 2020. We also incorporated data from the two preceding local elections for each municipality, resulting in a total of 1725 observations. As depicted in Fig. 2, the majority of these prior elections took place in 2010 and 2015, aligning with the five-year election cycle stipulated by legislation.

The dependent variable of the analysis is the vote shares of different political parties. In municipalities above the 15.000 inhabitants, we use votes expressed to the lists (not the candidates) in the first round. The variable *Center-Right Votes* gathers the preferences conferred to center-right parties, namely: the League, Brothers of Italy, Forward Italy, and other past or present smaller parties belonging to that faction. *Center-Left Votes* collects the votes in favor of the Democratic Party plus other (smaller) leftist movements or parties. Both groups are also integrated with those civic lists – participating especially in small cities – which refer (for the name and/or the logo) clearly to one of the two coalitions. To correctly identify those lists, we exploit both the Registry of local administrators (arranged by the Ministry of Interior) and local newspapers' information. The variable *Five Star Votes* refers to the votes for the Five Star Movement, a party that – at the time – always run alone, allowing for a neat identification. All the civic lists without an evident political affiliation are assembled in the variable *Civic Lists Votes*. Table A2 in the appendix provides a complete list of each party forming the center-right and the center-left blocks. Finally, the variable *Turnout* indicates the effective popular participation in the electoral competitions with respect to the eligible voters. All this information is derived from the historical archive of the elections of the Ministry of Interior.

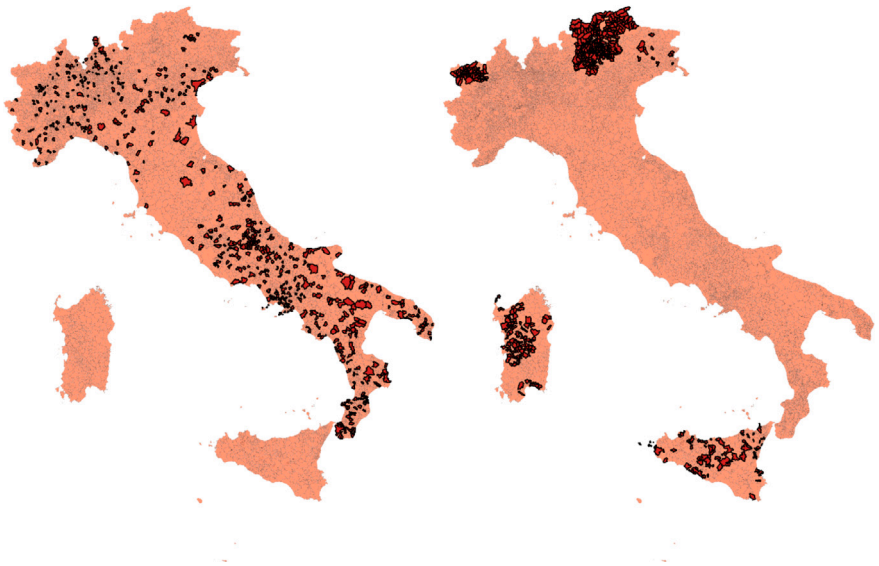

Fig. 1. Municipalities from ordinary and special statute regions that voted in 2020.
Notes. The figures highlight all municipalities which held local elections in 2020: on the left side those belonging to ordinary statute regions and on the right side those belonging to special statute regions.

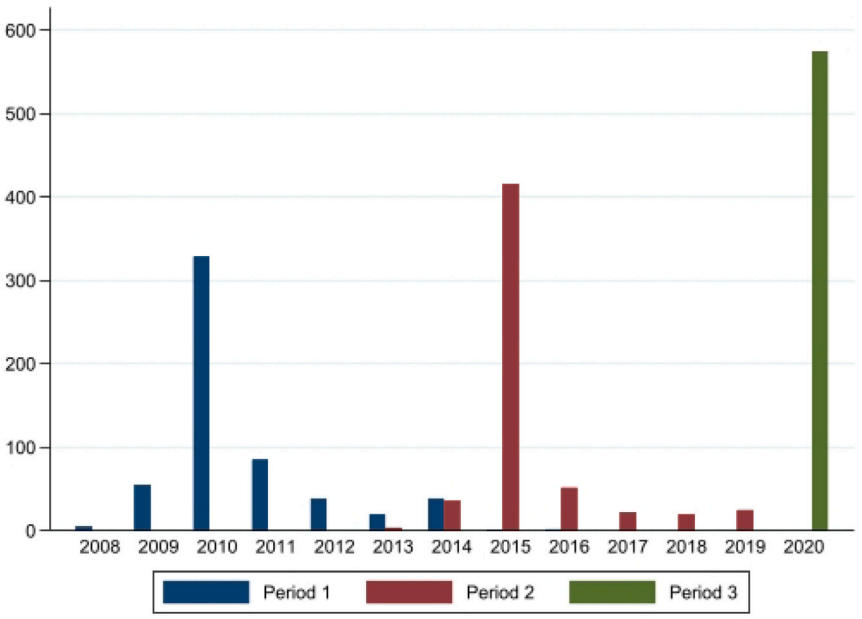

Fig. 2. Observations by period for each electoral year.
Notes. The figure shows the number of observations for each electoral year: in blue the first period, in red the second period and finally in green the third period, namely the 2020.

To provide a consistent evidence of the programmatic platforms of these parties, Figure A1 reports a summary of their political positions, as elaborated by the Manifesto Project.[20] First, it confirms that the parties forming both the Center-Left and the Center-Right coalition are actually leaning to their respective political side; then, it shows the prevalence of pro-EU stances for the Center-Left while the prevalence of against-EU stances for the Center-Right and – even more moderately – for the Five Star Movement as well.

[20] The Manifesto Project analyses parties' election manifestos in order to study parties' policy preferences: https://manifesto-project.wzb.eu/.

The treatment variable – elaborated and made available by the Italian National Institute of Statistics – captures the effect of the economic lockdown in terms of economic insecurity. Specifically, we use three indicators of the share of inactive workers, which estimate how many people had to stop their working activity due to the restrictive measures.[21] The main treatment variable is the *Share Inactive Workers*, which captures the ratio between the number of people not allowed to work – in the period from the 22nd of March to the 3rd of May – and the total number of workers. More in detail, this distinction follows the ATECO 2007[22] classification of economic activities: the DPCM of the 22nd of March clearly list those with the permission to regularly carry on the business and – by subtraction – those who had to suffer the suspension. The adoption of this treatment variable is not new in the literature since it is the same employed by Borri et al. (2020). However, differently from them, in addition to such a general subdivision, we also provide a more detailed partitioning, using two other indicators. The first indicator measures the share of inactive workers in the industry sector, while the second captures the share of inactive workers in the services sector.

For an appropriate comprehension of the treatment variable, it is important to understand which economic activities remained open. In broad terms, in the industry sector, this is the case for food and beverage, chemical and pharmaceutical products, construction of roads, railways, and other public utility operas; on the other hand, in the services sector, the wholesale commerce for raw materials, food and beverage, the logistics sector, the information and communication sector, education and health and social assistance. A broad classification of the suspended activities is reported in Table A3 in the appendix, while the full list of all open and close activities for both sectors is reproduced in two distinguished tables (Table A4 and Table A5), in the appendix as well.[23]

We also collected data on tourism activity and excess mortality due to the Covid-19 pandemic for robustness checks. The variables *Tourism Relevance Index* and *Elderly Excess Mortality* are drawn as follows. According to a governmental decision of July 2020, the ISTAT designed a series of novel indicators to capture the role of tourism – in terms of attractiveness (demand side) and proposal (supply side) – for each Italian municipality. We make use of the measure which embraces all the relevant aspects, the "synthetic index of tourist density", computed on a scale from 1 (lowest) to 5 (highest). We re-scale this variable to take values between 0 and 1. The mortality impact of the epidemic disease is evaluated in terms of excess mortality – with respect to the moving average of the previous 5 years (2015–2019) – in the period ranging from March to August 2020 and for the population with more than 65 years old.

Finally, we also included data – retrieved from INPS – containing information on one of the various compensatory measures introduced by the Italian government in 2020. Specifically, we collected data on the different forms of monetary compensation (€600 or €1.000) that were attributed (from the 10th of April to the 28th of July 2020) to a broad audience of self-employed, freelance or seasonal workers. More in detail, the variable *Share Bonus Self-Employed* represents the per capita amount of all these benefits, i.e., the total amount in each municipality over the resident population. As anticipated in Section 4, we use this variable as a further treatment variable to reinforce our analysis with an alternative measure of the economic insecurity level in each municipality. It is important to stress how this variable captures only one of the economic interventions produced by the Italian government in 2020. We focus on this measure because of data availability.

The dataset is then completed by a series of control variables that provide full information on each municipality's geographical, economic, and social characteristics. The summary and descriptive statistics of all independent and dependent variables are represented in Table 1 while Table A1 in the appendix reports each corresponding source.

5.2. Survey data

The second dataset is built around survey data elaborated by IPSOS SA in Italy from March to September 2020 using the CAWI methodology. It consists of 27 sessions of surveys with about 800 interviews for each session and provides information regarding the interviewees' personal, professional, political, and geographical characteristics.

Of primary interest for our research are the data regarding the current national voting intention, the vote expressed at the 2019 European election and the vote expressed at the 2018 parliamentary election. With this information, it is possible to build an individual-based panel data-set, knowing the individual political party preferences over the years 2018, 2019, and 2020. Hence, the voting intentions represent the dependent variables, grouped as follows. The first is the probability of voting for center-left parties (Democratic Party, Free and Equals, The Left, Italian Left, Article One). The second is the probability of voting for center-right parties (League, Brothers of Italy, Forward Italy, Us with Italy, Cambiamo!). Finally, the probability of voting for the Five Star Movement. For coherence and homogeneity, in gathering together parties to form the center-left and the center-right coalitions, we included the same political forces both with electoral and survey data.

[21] The starting point to build these variables is the 2017 "*Frame SBS Territoriale*" which contains an extensive municipality-based report about the typology of all active firms and businesses, including the respective number of their workers (both employers and employees). For completeness, this survey does not include some economic categories: agriculture, credit and insurance, public administration, and part of the sector regarding personal services. The following step incorporates the aforementioned restrictive measures adopted the 22nd of March and contained in the Decree of the President of the Council of Ministers (DPCM) of the same day. Based on that disposals, each economic organization is assigned either to the group allowed to continue the working activity or to the group forced to stop; simultaneously, we also obtain a subdivision between active and inactive workers.

[22] The ATECO code is an alpha-numeric combination that identifies an economic activity. Letters and numbers have different meanings: letters identify the macro-sector, while numbers represent the sectors' categories and sub-categories. The numbers range from a minimum of two digits up to a maximum of six digits: the various articulations describe a different degree of detail.

[23] The subdivision between active and inactive sectors is ruled by Annex 1 of the DPCM approved the 22nd of March 2020 and based on the 2007 ATECO classification. Each macro-sector, category, or sub-category is correspondingly labeled with 1 if active and with 0 if inactive.

Table 1
Summary and descriptive statistics of the variables.

Variable	Obs	Mean	Std. Dev.	Min	Max
Center-right Votes	1725	0.077	0.164	0	1
Center-left Votes	1725	0.060	0.140	0	1
Five Stars Movement Votes	1725	0.011	0.037	0	0.574
Civic Lists Votes	1725	0.771	0.331	0	1
Turnout	1725	0.674	0.109	0.209	0.950
Share Inactive Workers	1725	0.488	0.147	0	0.958
Share Inactive Workers (Services)	1725	0.413	0.137	0	1
Share Inactive Workers (Industry)	1725	0.613	0.213	0	1
Tourism Relevance Index	1725	0.456	0.351	0	1
Elderly Excess Mortality	1725	0.118	0.574	−1	4
Share Bonus Self-Employed	1722	102.618	47.843	3.152	410.345
Population	1725	9112	18,782	48	261,362
Share Population 0–14	1725	0.129	0.030	0.021	0.225
Share Population 15–64	1725	0.643	0.042	0.354	0.743
Share Population 64-	1725	0.227	0.065	0.094	0.614
Provincial Capital	1725	0.021	0.143	0	1
Area (km2)	1725	40.233	51.473	1.527	415.899
Density (Population/km2)	1725	452.568	1091.378	0.920	12,224.405
Elevation (m)	1725	366	310	0	2035
Share Primary Educated	1725	0.217	0.050	0.125	0.554
Share Secondary Educated	1725	0.290	0.038	0.113	0.463
Share Upper Secondary Educated	1725	0.270	0.042	0.117	0.412
Share Graduated	1725	0.076	0.028	0.014	0.189
Active Enterprises	1725	668	1578	1	25,243
Occupation Rate	1725	0.422	0.076	0.188	0.596
Activity Rate	1725	0.480	0.062	0.203	0.633
Total Income	1725	108,600,000	268,100,000	673,748	4,482,000,000

Notes. The tables summaries all dependent and independent variables and provides the main descriptive statistics: the number of observations, the mean, the standard deviation and the minimum and maximum values. The variable Share Bonus Self-Employed presents only 1722 observations because data for one municipality are missing.

A second relevant question, posed only in the surveys conducted during the first lockdown (late March, April, and early May 2020), regards a possible swing in the employment status. Interviewees were asked whether they regularly continued to work (i.e., active worker) or they were forced to interrupt the working activity due to the restrictive measures adopted to contain the spread of the virus (i.e., inactive worker). Students, pensioners, homeworkers, and unemployed people were excluded from this question since they could not be affected.

In order to cover the remaining period (from late May to September) with this type of information, we first estimate with a logit regression the probability of being an inactive worker, using surveys conducted between the 22nd of March and the 3rd of May, that is in the period when strongest and territorially homogeneous limitations were in place. The estimation is performed including a series of explanatory variables regarding both individual characteristics – age, years of education, gender, profession, sector of employment (private or public), type of employment contract (permanent or fixed-term) – and features related to the municipality in which the interviewee is living—population, area, elevation, the provincial capital, per capita total income, coastal area, share of workers in different professional sectors.

Once obtained these estimates, we then predicted the employment status of the individuals interviewed in the subsequent months, attributing the status of inactive worker to those with a predicted probability equal to or higher than 0.50; symmetrically, those with a predicted probability lower than 0.50 are considered as not affected by the restrictive measure when they were in force (active workers). In this exercise – apart from excluding the above-mentioned categories which are not involved in any working activity – we performed some adjustments to refine the prediction: public sector employees with a permanent contract, farmers, and teachers were assumed to be active workers, independently from the result of the prediction. The reason behind this choice is to exclude from the category of the inactive workers people whose job was very unlikely affected by the restrictive measures since they were allowed to carry on the profession.[24]

Hence, through these steps, we are able to define a dummy treatment variable that covers the whole temporal interval: equal to one for people who stop their working activity in compliance with the governmental decisions. Finally, the dataset contains an individual weighing variable in order to make the interviewees of each session representative of the whole Italian population.

[24] To evaluate the accuracy of the prediction, we can compare the predicted results with the actual attributes for the period when employment status information is available. Out of 2426 individuals analyzed, 1317 were correctly predicted as active workers and 444 as inactive workers. Therefore, the correct assignment rate is 73%.

Table 2
The effect on center-left vote shares.

Dependent variable	(1)	(2)	(3)	(4)
	Vote shares of center-left parties			
Covariates	No	Yes	No	No
Municipal FE	No	No	Yes	Yes
Election Year FE	No	No	Yes	Yes
post · % inactive	0.076***	0.076***	0.071**	0.062*
	(0.027)	(0.027)	(0.033)	(0.035)
post	−0.063***	−0.063***		
	(0.015)	(0.015)		
% *inactive*	−0.106**	−0.060		
	(0.045)	(0.041)		
pre· % inactive				−0.018
				(0.025)
Observations	1725	1725	1725	1725
R-squared	0.016	0.215	0.788	0.789

Notes. Difference-in-differences estimates. The treatment variable is the overall share of inactive workers. The estimated coefficients indicate the effect of the share of inactive workers, during the greatest lockdown period due to the restrictive measures, on the share of vote to center-left parties. The sample is composed by 3 observation for each of the 575 municipalities (belonging to ordinary stature regions) which voted for local elections in 2020: one referring to the last electoral competition plus the two precedent ones. The outcome variable is the variation in the share of votes in favor of center-left parties. Covariates in column (2) are the following: Population, Share Population 0-14, Share Population 15-64, Share Population 64-, Provincial Capital, Area (km2), Density (Population/km2), Elevation (m), Share Primary Educated, Share Secondary Educated, Share Upper Secondary Educated, Share Graduated, Tourism Relevance Index, Active Enterprises, Occupation Rate, Activity Rate, Total Income. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

6. Results from municipal data

6.1. Main results—The effect of lockdown-induced economic insecurity on electoral outcomes

This section describes the main results of the effect of the economic lockdown on electoral outcomes. We investigate the impact on the vote shares of center-left parties, center-right parties, the Five Star Movement, local independent parties (i.e., Civic Lists), and the electoral turnout. Center-right political forces did not align with the central government during the municipal elections in September and October of 2020. Civic Lists are, by default, independent from levels of government above the municipal one (Gamalerio, 2020). Conversely, at the time of the municipal elections studied, center-left political parties and the Five Star Movement supported the central government led by Giuseppe Conte.

We start by investigating the effect on the vote shares of center-left parties. We report in Table 2 the results estimated running models (1) and (2) presented in Section 4. In column 1, we report the coefficients estimated running model (1) without additional municipal covariates, while in column 2, we add the covariates. In column 3, we report the results obtained running model (2). In column 4, we test for potentially differential pre-treatment electoral trends by adding the interaction between $\%\ inactive_i$ and pre_t to model (2). The results in Table 2 indicate that the lockdown-induced economic insecurity positively affected the electoral performance of center-left parties. The estimated coefficients of the interaction term between $\%\ inactive_i$ and $post_t$ are all different from zero and stable across different specifications. More in detail, the coefficients indicate that an increase in the share of inactive workers by one standard deviation (i.e., 14.7 percentage points) led to an increase in the vote shares of center-left political parties by approximately 1 percentage point. In addition, the coefficient in column 4 of the interaction between $\%\ inactive_i$ and pre_t is not statistically different from zero. This last result confirms that the common trends assumption in electoral outcomes before 2020 holds.

Table 3 reports the results obtained using the vote shares of center-right political parties as the dependent variable. The structure of Table 3 is the same as that of Table 2. The results in Table 3 indicate that economic insecurity negatively affected the electoral performance of center-right parties. The estimated coefficients of the interaction term between $\%\ inactive_i$ and $post_t$ are all negative, statistically different from zero, and stable across different specifications. The results indicate that an increase in the share of inactive workers by one standard deviation (i.e., 14.7 percentage points) led to a decrease in the vote shares of center-right political parties by 1.2 percentage points. Besides, the coefficient in column 4 of the interaction between $\%\ inactive_i$ and pre_t is small and not statistically different from zero. This last result supports the common trends assumption in electoral outcomes before 2020.[25]

[25] To further validate the absence of differential pre-treatment trends in electoral outcomes across municipalities affected differently by the restrictions introduced during the lockdown, we performed the same empirical experiment using the electoral results of the 2018 General Elections and the 2019 European Elections. Even this additional test, reported in Figure A5, indicates the validity of the common trends assumption in electoral outcomes before 2020.

Table 3
The effect on center-right vote shares.

Dependent variable	(1)	(2)	(3)	(4)
	Vote shares of center-right parties			
Covariates	No	Yes	No	No
Municipal FE	No	No	Yes	Yes
Election Year FE	No	No	Yes	Yes
post · % inactive	−0.077***	−0.077***	−0.082***	−0.068***
	(0.025)	(0.025)	(0.031)	(0.025)
post	0.028**	0.028**		
	(0.012)	(0.012)		
% *inactive*	0.100**	0.041		
	(0.043)	(0.038)		
pre· % inactive				0.030
				(0.036)
Observations	1725	1725	1725	1725
R-squared	0.006	0.262	0.795	0.795

Notes. Difference-in-differences estimates. The treatment variable is the overall share of inactive workers. The estimated coefficients indicate the effect of the share of inactive workers, during the greatest lockdown period due to the restrictive measures, on the share of vote to center-right parties. The sample is composed by 3 observation for each of the 575 municipalities (belonging to ordinary stature regions) which voted for local elections in 2020: one referring to the last electoral competition plus the two precedent ones. The outcome variable is the variation in the share of votes in favor of center-right parties. Covariates in column (2) are the following: Population, Share Population 0-14, Share Population 15-64, Share Population 64-, Provincial Capital, Area (km2), Density (Population/km2), Elevation (m), Share Primary Educated, Share Secondary Educated, Share Upper Secondary Educated, Share Graduated, Tourism Relevance Index, Active Enterprises, Occupation Rate, Activity Rate, Total Income. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

In Table 4, we examine the impact of economic insecurity on the electoral performance of the Five Star Movement. The Five Star Movement is a populist political force (Bordignon and Colussi, 2020; Boffa et al., 2023) that, in 2020, supported the national government led by Prime Minister Giuseppe Conte. Columns 1–4 of Table 4 follow the same structure as Tables 2–3. As observed, all the coefficients are small and statistically insignificant. These results suggest that lockdown-induced economic insecurity did not influence the electoral performance of the Five Star Movement, negating the possibility of a "rally around the flag" effect.[26]

Finally, in columns 1–4 of Table 5, we study the impact of economic distress on the electoral performance of the Civic Lists, which are municipal political organizations independent from national political parties (Gamalerio, 2020). Finally, in columns 5–8 of Table 5, we analyze the impact on electoral turnout. Columns 1–4 and columns 5–8 of Table 5 use the same structure as Tables 2–3. As we can see, all the coefficients estimated in Tables 5 are small and statistically insignificant. Thus, the results in Tables 5 suggest that economic distress did not affect Civic Lists. Also, in contrast with existing evidence in the literature (Giommoni and Loumeau, 2020; Noury et al., 2021; Picchio and Santolini, 2021), we do not find any effect on electoral participation.

6.2. Main mechanism

This section provides evidence on the main mechanism that can explain the core results in Section 6.1. In Table 6, we split our treatment (i.e., the interaction term between the variables $\%\ inactive_i$ and $post_t$) into two separate treatment variables. The first is the interaction between $post_t$ and the variable $\%\ inactive\ services_i$, which is equal to the share of workers in the service sectors that remained inactive during the first lockdown due to the economic restrictions introduced by the central government. The second is the interaction term between $post_t$ and the variable $\%\ inactive\ industry_i$, which is the share of inactive workers in the industry sector during the first economic lockdown mandated by the central government. As explained in Section 3.1, the Italian central government intervened in the economy to support and compensate workers in occupations affected by the economic lockdown. However, while the tools used to compensate workers in industry sectors were pre-existing to the Covid-19 crisis, the central government introduced new special economic measures to protect workers in the services sector. The reason for introducing these new special measures is that occupations in the services sector did not benefit from the same protection as the industry sector before 2020.

We provide evidence on center-left parties in columns 1–4 and center-right parties in columns 5–8. The coefficients in Table 6 indicate that the share of inactive workers in the service sector drives our main results. We find a positive effect of the share of

[26] The Five Star Movement, in comparison to other parties, tends to participate less frequently in local elections due to its limited territorial roots (Diamanti, 2014). For instance, in our sample, Five Star Movement candidates ran for mayor in approximately 13% of the cases, achieving an average result of 8%, conditional on running. This observation aligns with the findings reported by Bordignon and Colussi (2020). This infrequent participation at the municipal level might account for the absence of statistically significant results in Table 4, and it constrains the validity of the evidence presented here in negating the "rally around the flag" effect. However, as detailed in Section 6.5, when examining results from national elections, we do not identify a positive impact of economic insecurity on the vote shares of the Five Star Movement.

Table 4
The effect on Five Star Movement vote shares.

Dependent variable	(1)	(2)	(3)	(4)
	Vote shares of Five Star Movement			
Covariates	No	Yes	No	No
Municipal FE	No	No	Yes	Yes
Election Year FE	No	No	Yes	Yes
post · % inactive	−0.011	−0.011	−0.009	−0.010
	(0.009)	(0.009)	(0.010)	(0.016)
post	−0.001	−0.001		
	(0.004)	(0.004)		
% *inactive*	0.001	0.012		
	(0.009)	(0.008)		
pre· % inactive				−0.002
				(0.014)
Observations	1725	1725	1725	1725
R-squared	0.006	0.166	0.550	0.550

Notes. Difference-in-differences estimates. The treatment variable is the overall share of inactive workers. The estimated coefficients indicate the effect of the share of inactive workers, during the greatest lockdown period due to the restrictive measures, on the share of vote to the Five Star Movement. The sample is composed by 3 observation for each of the 575 municipalities (belonging to ordinary stature regions) which voted for local elections in 2020: one referring to the last electoral competition plus the two precedent ones. The outcome variable is the variation in the share of votes in favor of the Five Stars Movement . Covariates in column (2) are the following: Population, Share Population 0-14, Share Population 15-64, Share Population 64-, Provincial Capital, Area (km2), Density (Population/km2), Elevation (m), Share Primary Educated, Share Secondary Educated, Share Upper Secondary Educated, Share Graduated, Tourism Relevance Index, Active Enterprises, Occupation Rate, Activity Rate, Total Income. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 5
The effect on Civic Lists and Electoral Turnout.

Dependent var.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Civic Lists vote shares				Electoral turnout			
Covariates	No	Yes	No	No	No	Yes	No	No
Municipal FE	No	No	Yes	Yes	No	No	Yes	Yes
Election Year FE	No	No	Yes	Yes	No	No	Yes	Yes
post · % inactive	0.010	0.010	0.018	0.013	0.011	0.011	0.009	0.005
	(0.039)	(0.039)	(0.048)	(0.046)	(0.018)	(0.018)	(0.021)	(0.022)
post	0.042**	0.042**			−0.042***	−0.042***		
	(0.020)	(0.020)			(0.008)	(0.008)		
% *inactive*	0.016	−0.001			0.008	−0.018		
	(0.072)	(0.060)			(0.034)	(0.031)		
pre· % inactive				−0.011				−0.009
				(0.043)				(0.018)
Observations	1725	1725	1725	1725	1725	1725	1725	1725
R-squared	0.007	0.375	0.859	0.859	0.025	0.194	0.906	0.906

Notes. Difference-in-differences estimates. The treatment variable is the overall share of inactive workers. The estimated coefficients indicate the effect of the share of inactive workers, during the greatest lockdown period due to the restrictive measures, on the share of vote to the Civic Lists and the Turnout. The sample is composed by 3 observation for each of the 575 municipalities (belonging to ordinary stature regions) which voted for local elections in 2020: one referring to the last electoral competition plus the two precedent ones. The outcome variable is the variation in the share of votes in favor of the Civic Lists, from column (1) to (4), and in the Turnout, from column (5) to (8). Covariates in column (2) and (6) are the following: Population, Share Population 0-14, Share Population 15-64, Share Population 64-, Provincial Capital, Area (km2), Density (Population/km2), Elevation (m), Share Primary Educated, Share Secondary Educated, Share Upper Secondary Educated, Share Graduated, Tourism Relevance Index, Active Enterprises, Occupation Rate, Activity Rate, Total Income. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

inactive workers in the services sector on the vote shares of center-left parties and a negative effect on the vote shares of center-right parties. Conversely, we do not find any effect of the share of inactive workers in the industry sector on electoral outcomes. The results remain the same if we control for both treatments, as in columns 4 and 8. This evidence suggests that the new special economic measures introduced by the central government to protect workers in the services sector may have induced those who benefited from these measures to vote for center-left parties. This increased support for center-left parties came at an electoral cost for center-right political parties, which in September 2020 did not align with the central government. Hence, these results suggest

Table 6
Main mechanism: Services vs. industry.

Dependent var.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Center-left vote shares				Center-right vote shares			
Covariates	No	No	No	No	No	No	No	No
Municipal FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Elect. Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
post · % inactive	0.071**				−0.082***			
	(0.033)				(0.031)			
post · % inactive *services*		0.085**		0.083**		−0.070**		−0.065*
		(0.037)		(0.039)		(0.033)		(0.033)
post · % inactive *industry*			0.014	0.005			−0.026	−0.019
			(0.024)	(0.026)			(0.018)	(0.019)
Observations	1725	1725	1725	1725	1725	1725	1725	1725
R-squared	0.788	0.789	0.787	0.789	0.795	0.795	0.794	0.795

Notes. Difference-in-differences estimates. The treatments variables are: the overall share of inactive workers, the share of inactive workers in the industry and services sectors. The estimated coefficients indicate the effect of the share of inactive workers (in overall terms and then separately for either the services or the industry sector), during the greatest lockdown period due to the restrictive measures, on the share of vote to the center-right and center-left parties. The sample is composed by 3 observation for each of the 575 municipalities (belonging to ordinary stature regions) which voted for local elections in 2020: one referring to the last electoral competition plus the two precedent ones. The outcome variable is the variation in the share of votes in favor of the center-left parties, from column (1) to (4), and of the center-right parties, from column (5) to (8). Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

that the combination of economic insecurity with new protective measures generated a partisanship shift toward the left of the political spectrum.[27]

To provide additional evidence on the main mechanism that explains our results, we compute another empirical analysis using an alternative measure of economic insecurity. We perform the same difference-in-differences experiment with the alternative treatment variable *Share Bonus Self-Employed*. This variable represents the per capita amount (in each municipality) of all benefits in favor of self-employed workers (see Section 3.1 for a description). In other words, we measure economic insecurity through the per capita municipal incidence of one important compensatory measure introduced by the central government. Even though this measure has the limit to be only one of the various compensatory measures introduced by the Italian government in 2020 (see Section 3.1), Table A6 shows its pertinence as an alternative treatment variable. Specifically, Table A6 shows how this variable positively correlates with the share of inactive workers in the services sector, which is indeed the variable that drives our main results.

We report the results in Table 7, where the dependent variables are the vote shares for the center-left in columns 1 and 2, and the vote shares for the center-right in columns 3 and 4. Columns 1 and 3 report the results obtained running model (2). In columns 2 and 4, we test for potentially differential pre-treatment electoral trends, including the interaction between $\%\ bonus_i$ and pre_t to model (2). Once more, Table 7 confirms the same tendency: a positive effect on the vote shares for the center-left parties and a negative effect on the vote shares for the center-right parties. Given that we measure *Share Bonus Self-Employed* by €100, we should interpret the estimated coefficients as the effect of a variation of €100 in the per capita amount. For example, an increase of €100 per capita leads to an increase of 1.3 percentage points in the vote shares for the center-left parties.[28]

6.3. Alternative stories

In this section, we control for two alternative stories that could explain our results. First, we control for a proxy of the economic recovery that many parts of Italy experienced during the summer of 2020. As shown in Fig. 3, Italy experienced an important economic recovery during the third quarter of 2020. The tourism sector was the main sector to drive this recovery. Hence, in columns 2 and 6 of Table 8, we add as an additional control variable the interaction term between the dummy variable $post_t$ and the dummy variable $tourism$ which, as described in Section 5, captures the relevance of tourism at the municipal level. The results in columns 2 and 6 show that our main coefficients of interest capturing the effect of lockdown-induced economic insecurity on

[27] Figure A4 illustrates the territorial distribution of the share of inactive workers in the services sector, which, as demonstrated in Table 6, is the key variable driving our results. While there is not a distinct geographical pattern, we can observe a lower share in the central-southern Apennine area and a higher concentration of municipalities with a more intense color in the northern part of the country. Therefore, as a robustness check in Section 6.4, we introduce to our model an interaction term between the share of inactive workers in the service sector and a dummy variable set to 1 for municipalities in the north of the country. Incorporating this interaction term ensures that our results are not solely influenced by the territorial distribution of the share of inactive workers in the services sector.

[28] Following Elinder et al. (2015), we compute the cost per vote resulting from this policy. Given that the total cost of the bonus for self-employed workers in the sample municipalities amounts to approximately €444 million, and the increase in votes for the Center-Left is 36.256, the crude estimate yields a cost per vote of €12.255. However, it is crucial to underscore the distinction, as previously detailed in Section 2, between the type of economic program examined in Elinder et al. (2015) and those explored in this paper. Since our focus is not on a singular, targeted policy but rather a myriad of interventions, we recognize the inherent limitations of the calculation just presented.

Table 7
Main mechanism: Share bonus.

Dependent var.	(1)	(2)	(3)	(4)
	Center-left vote shares		Center-right vote shares	
Covariates	No	No	No	No
Municipal FE	Yes	Yes	Yes	Yes
Election Year FE	Yes	Yes	Yes	Yes
post · % bonus	0.013**	0.012*	−0.008	−0.016*
	(0.006)	(0.007)	(0.010)	(0.009)
pre · % bonus		−0.001		−0.015
		(0.008)		(0.011)
Observations	1722	1722	1722	1722
R-squared	0.788	0.788	0.794	0.794

Notes. Difference-in-differences estimates. The treatment variable is the overall monetary amount of the bonus in favor of self-employed workers over the resident population, divided by 100 (this means that the estimated coefficients should be interpreted as a variation of €100 in the per capita amount). The estimated coefficients indicate the effect of the per capita share of the overall monetary amount of the compensations devoted to self-employed workers, introduced during the greatest lockdown period to compensate for the restrictive measures, on different electoral outcomes: the vote shares for the Center-Left in columns (1) and (2), and the vote shares for the Center-Right in columns (3) and (4). The sample is composed by 3 observation for each of the 574 municipalities (belonging to ordinary stature regions) which voted for local elections in 2020: one referring to the last electoral competition plus the two precedent ones. Municipalities are 574 and not 575 because for one municipality of the canonical sample data are not available. The outcome variable are the variations of different electoral outcomes: the vote shares for the Center-Left in columns (1) and (2), and the vote shares for the Center-Right in columns (3) and (4). Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

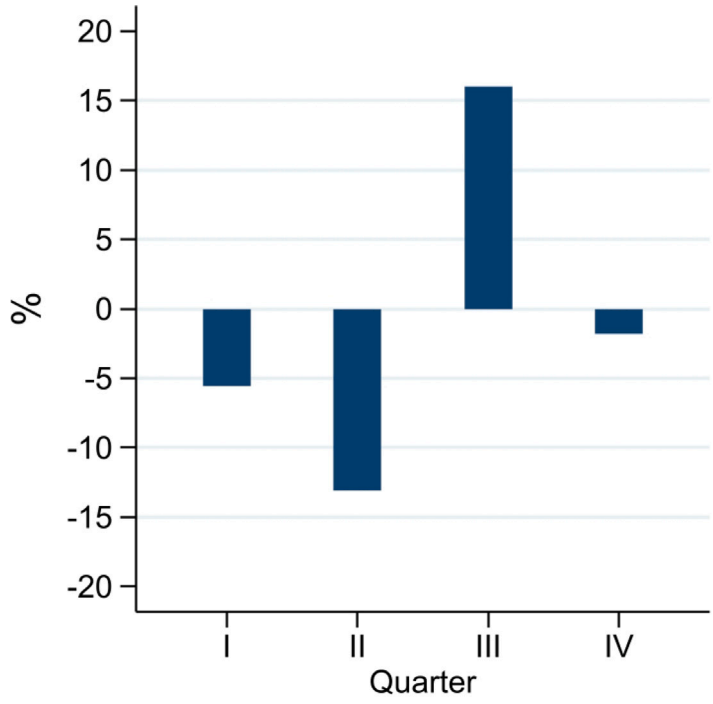

Fig. 3. 2020 Quarterly GDP Growth.
Notes. The figure shows the 2020 quarterly GDP growth in Italy, which respectively was: −5.7%, −13.1%, +15.9% and 1.7%.

center-left and center-right vote shares do not change once we include this proxy for the economic recovery during the summer of 2020.

Second, we show that a measure of the health consequences of Covid-19 does not explain our results. Specifically, we add as a control variable the interaction term between the dummy variable $post_t$ and a measure for elderly excess mortality at the municipal

Table 8
Alternatives stories: Tourism and excess mortality.

Dependent var.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Center-left vote shares				Center-right vote shares			
Covariates	No	No	No	No	No	No	No	No
Municipal FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Elect. Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
post · % inact.	0.071**	0.077**	0.068**	0.075**	−0.082***	−0.082***	−0.093***	−0.093***
	(0.033)	(0.033)	(0.034)	(0.033)	(0.031)	(0.031)	(0.032)	(0.032)
post· tourism		−0.021*		−0.020*		−0.001		−0.000
		(0.012)		(0.012)		(0.014)		(0.014)
post· EM			0.005	0.005			0.022*	0.022*
			(0.008)	(0.008)			(0.011)	(0.011)
Observations	1725	1725	1725	1725	1725	1725	1725	1725
R-squared	0.788	0.789	0.789	0.789	0.795	0.795	0.796	0.796

Notes. Difference-in-differences estimates. The treatments variables are: the overall share of inactive workers, the tourism relevance index and the over 65 excess mortality in the period March–June 2020 (with respect to the M.A. 2015–2019 of the same period). The estimated coefficients indicate the effect of the share of inactive workers (in overall terms and then separately for either the services or the industry sector), during the greatest lockdown period due to the restrictive measures, on the share of vote to the center-right and center-left parties. The sample is composed by 3 observation for each of the 575 municipalities (belonging to ordinary stature regions) which voted for local elections in 2020: one referring to the last electoral competition plus the two precedent ones. The outcome variable in the variation in the share of votes in favor of the center-left parties, from column (1) to (4), and of the center-right parties, from column (5) to (8). Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

level, described in Section 5. The reason to control for this interaction term is that recent literature (Picchio and Santolini, 2021) has shown how the excess mortality generated by Covid-19 affected political outcomes. The results in columns 3 and 7 of Table 8 show that our main coefficients do not change once we include this measure capturing the health consequences of Covid-19. Besides, as shown in columns 4 and 8 of Table 8, the main coefficients do not change if we include both proxies for economic recovery and health consequences. In conclusion, these two alternative stories cannot explain our findings.

6.4. Additional robustness checks

This section presents a sequence of robustness checks that reinforce the results presented in Sections 6.1 and 6.2. First, we examine the potential influence of municipalities holding municipal elections concurrently with regional elections. This is pertinent because the Italian constitutional framework delegates health policies to regions, which could impact municipal election outcomes, especially in 2020. We incorporate a dummy variable in the model (Eq. (2)) that is set to 1 when a municipality's local election coincides with a regional election. The results, presented in Table A7, indicate that our findings remain consistent, unaffected by the overlap of the two elections.

Second, we address instances where certain political parties either did not field candidates in specific municipalities and electoral years or were unidentifiable as per the procedure in Section 5.1. In such cases, we recorded the vote share for the absent party/coalition as zero. To verify if these instances influence our results, we adjust the model from Eq. (2), introducing dummy variables for each party, set to one if the party/coalition did not participate in a particular municipal election. The findings, presented in Table A8, largely confirm our initial results. However, the coefficient for the center-right becomes statistically insignificant. Further analysis in Table A9 reveals that economic insecurity reduced the likelihood of the center-right coalition participating in municipal elections. This suggests that the negative effect on the center-right's vote shares, as seen in Table 3, is due to a decreased likelihood of contesting municipal elections amid lockdown-induced economic insecurity. This pattern is not observed for the center-left or other political entities.

Third, we adjust the regressions from Section 6.1 by clustering standard errors at the labor district level instead of the municipality level.[29] This tests if electoral outcomes are independently distributed within each labor district due to significant inter-municipality worker mobility. Results in Table A10 confirm our initial findings, showing no correlation within labor districts.

Fourth, we examine whether lockdown-induced economic insecurity affected the re-election chances of the incumbent mayor, testing for a local "rally round the flag" effect. Table A11 shows no evidence of this effect, indicating that neither incumbent mayors nor municipal government members had a higher likelihood of re-election. Finally, in Table A12, we conduct a balance test on municipal characteristics, distinguishing between municipalities with a share of inactive workers in the service sector below vs. above the median. This balance test enables us to identify the dimensions on which treated and control units differ. As illustrated in Table A12, some characteristics exhibit statistically significant differences. To ensure that these differences do not influence our findings, in Tables A13 and A14, we replicate the analysis, adding as controls the interaction terms between the dummy variable

[29] Labor districts are territorial areas, computed by Istat (Italian National Institute of Statistic), where the majority of the workforce resides and works, and they share similar economic and social traits. They do not correspond to any level of government (Gamalerio and Negri, 2022).

$post_t$ and each variable that shows a statistically significant difference. Encouragingly, the outcomes in Tables A13 and A14 confirm that our results remain consistent even after incorporating these additional interaction terms.[30]

6.5. Persistence over time

In this section, we examine if the previously discussed evidence endures over time. We replicate the analysis from Section 6.1, incorporating the 2022 Italian general election results for the municipalities in our sample.[31] In essence, we add the vote shares from the recent legislative elections to those of the three local elections used in our primary analysis.

Before delving into the results, it is important to stress the distinct political and socioeconomic contexts between the 2022 general elections and the local elections of September 2020. Notably, by 2022, a national unity government led by Mario Draghi, backed by nearly all parliamentary groups, was in place.[32] Another crucial point is the diminished focus on the Covid-19 pandemic and its economic and health implications by 2022. Instead, the Ukraine conflict and its repercussions, beginning in February 2022, dominated public discourse. This unexpected event reshaped the political landscape, significantly impacting the 2022 general elections, primarily due to surging electricity and gas prices and debates over military support to Ukrainian forces.

Table 9 presents the results of our extended analysis. We use the share of inactive service sector workers as our primary treatment, interacting it with dummy variables for the 2020 municipal and 2022 national elections. To account for potential institutional differences between the elections, we include interaction terms between the two election dummies and pre-determined municipal characteristics, as in Tables A13–A14. The significant results from the 2020 municipal elections vanish when examining the impact of inactive service sector workers on the 2022 national election vote shares at the municipal level. The coefficients for the 2022 general elections are smaller and not statistically significant compared to the 2020 municipal elections.[33]

Therefore, we do not find signs of persistence over time in the effects of the lockdown-driven economic insecurity on electoral outcomes. This evidence is consistent with results provided by the "pocketbook voting" literature, which shows that cash transfers tend to have stronger electoral effects in the short-run and smaller or no effects in the medium-long run (Zucco, 2013). This lack of persistence suggests that, with the end of the Covid-19 pandemic, its economic effects, and the extraordinary support measures by the government, the effect on electoral outcomes disappeared. In other words, after the distinct effects of the government's pandemic-related economic interventions on different social groups had concluded, both beneficiaries and non-beneficiaries of these interventions returned to similar levels of support for the political parties that implemented these measures. However, given the different social and political contexts between the 2020 and 2022 elections, we should treat this evidence and the conclusions drawn from it with caution.

7. Results from survey data

As Section 6 reported results emerging from the analysis of municipal data, this section presents a set of additional results obtained using the survey data described in Section 5.1 in order to provide corroborative evidence in support to the previous findings.

7.1. Descriptive evidence from survey data

Let us begin with some descriptive evidence presented through different graphs. First, we confirm that the restrictive measures adopted to stop the spread of Covid-19 gave rise to economic insecurity. For this purpose, Fig. 4 shows the answers for active and inactive workers to the following question: "What are your actual greater concerns? Health concerns or income concerns?". As it is evident – and also expected – those who suffered the break off of their working activities exhibit lower concerns toward health problems and more concerns toward income problems. As expected, the peak of this divergence is reached at the end of the greater lockdown but remains consistent even later.

The second piece of descriptive evidence in Fig. 5 shows how the support for the different political forces and the European Union changed over time. The graphs indicate the following trends as election day approaches: an increase in the voting intention for the center-left and the approval rate for the European Union; vice versa, a decrease in the voting intention for the center-right; finally, no relevant deviations for the Five Star Movement. The same tendencies are described in Figure A6 in the appendix, where it is instead shown the average consensus – that is, the average opinion on a scale from 1 to 10 – for the same variables.

The third contribution consists of evaluating the approval rates of different institutions: the government, the prime minister, the interest in politics, and the trust in the institutions. Fig. 6 shows a common tendency for all of them: an increase in the approval rates

[30] In addition to these variables, the exercise also incorporates the interaction with the dummy variable $North$, which is set to 1 for municipalities located in the following regions: Emilia-Romagna, Liguria, Lombardia, Marche, Piemonte, Toscana, Umbria, and Veneto. The objective is to account for the geographical distribution of the share of inactive workers, which is somewhat more concentrated in the northern part of the country, as depicted in Figure A4. We thank an anonymous referee for suggesting these robustness checks, which have undoubtedly strengthened the robustness of our empirical analysis.

[31] The 2022 Italian general elections took place on 25 September 2022. These were snap elections, prompted by the fall of the Draghi government. The ensuing parliamentary deadlock led the President of the Republic, Sergio Mattarella, to opt for an early dissolution of the parliament and call for fresh elections.

[32] The Draghi government, inaugurated on 13 February 2021, secured confidence votes from a larger coalition including the Five Star Movement, the Democratic Party, the League, Forward Italy, and other minor parties. Brothers of Italy remained at the opposition.

[33] For the 2022 Italian general elections, *Center-Left Votes* comprises votes for the coalition of the Democratic Party, Civic Commitment, Green and Left Alliance, and More Europe. Similarly, *Center-Right Votes* encompasses votes for the coalition of Forward Italy, Brothers of Italy, the League, and Us Moderates.

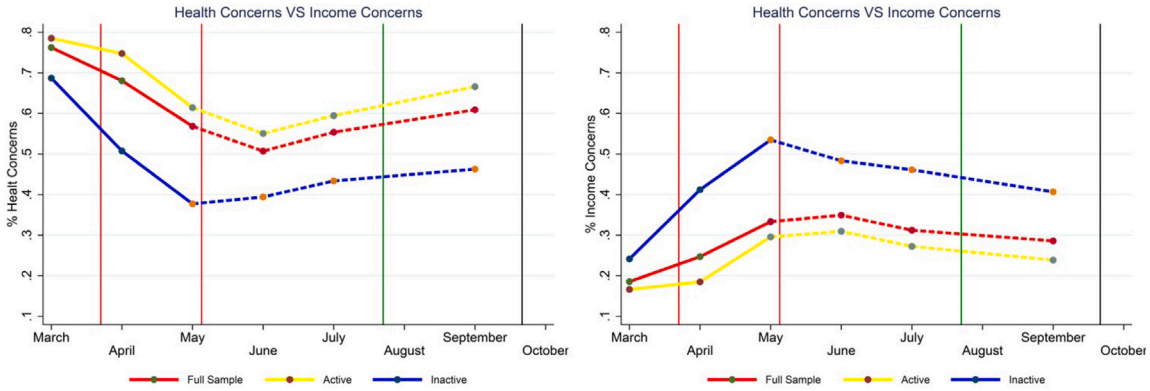

Fig. 4. Health concerns vs income concerns.
Notes. The Figure shows the probability of answering "health concerns" on the left and "income concerns" on the right to the following question: "What are your actual greater concerns? Health concerns or income concerns?". Results – monthly grouped – are collapsed over different subcategories: (i) the full sample; (ii) the active workers; (iii) the inactive workers. The dotted line indicates that such subdivision is made through our predictions while the full line indicates that the information derives from the survey. The results are obtained weighting each observation with the correspondent socio-demographic coefficient in order to make the survey sample representative of the whole population. The vertical lines represents the following events: start of the greater lockdown, 22nd of March; end of the greater lockdown, 3rd of May; announcement of the launch of the Next Generation EU, 21st of July; election day, 20th of September.

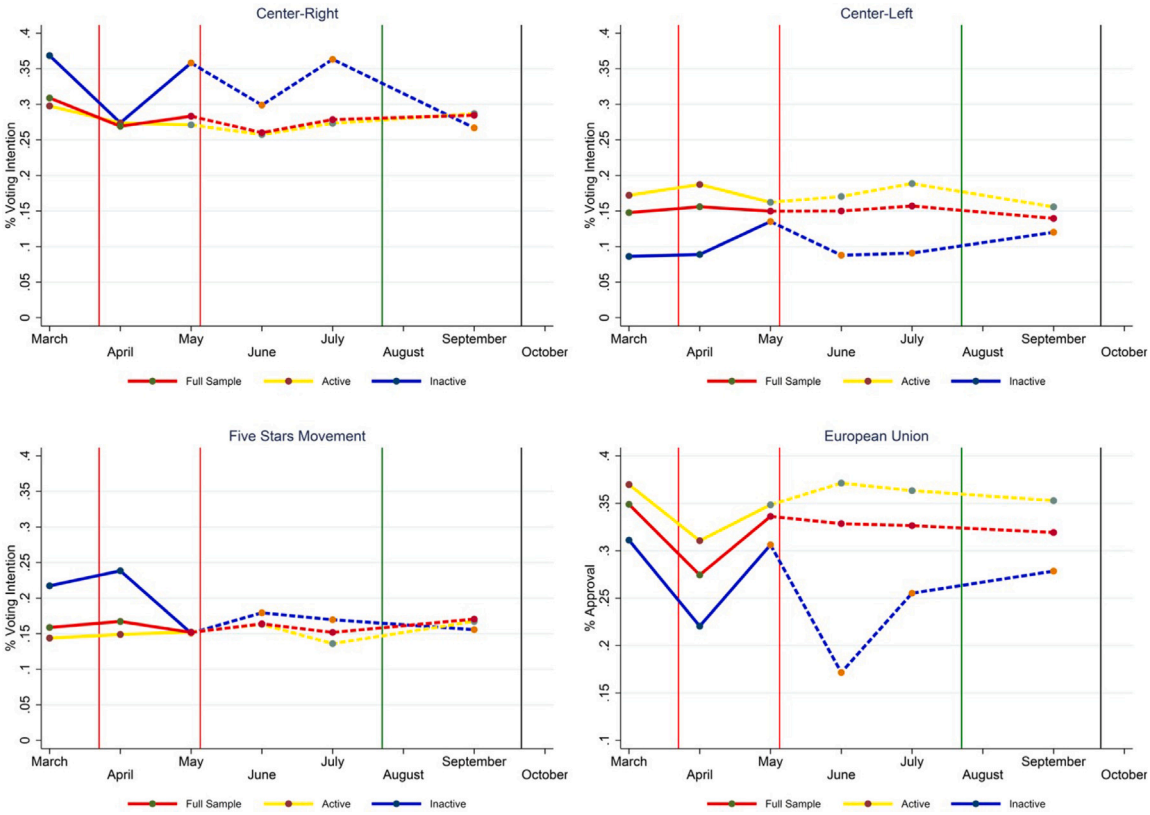

Fig. 5. Parties' voting intention & EU approval rate.
Notes. The Figure shows the voting intention – that is the exclusive probability of voting – in favor of different political forces: for center-left parties (Democratic Party and The Left), for center-right parties (League, Brothers of Italy and Forward Italy) and for the Five Star Movement. It shows also the approval rate – that is the probability of expressing a sufficient or a more than sufficient opinion – for the European Union. Results – monthly grouped – are collapsed over different subcategories: (i) the full sample; (ii) the active workers; (iii) the inactive workers. The dotted line indicates that such subdivision is made through our predictions while the full line indicates that the information derives from the survey. The results are obtained weighting each observation with the correspondent socio-demographic coefficient in order to make the survey sample representative of the whole population. The vertical lines represents the following events: start of the greater lockdown, 22nd of March; end of the greater lockdown, 3rd of May; announcement of the launch of the Next Generation EU, 21st of July; election day, 20th of September.

Table 9
Persistence over time.

Dependent variable	(1) Center-Left	(2) Center-Right	(3) Five Star M.	(4) Turnout
Covariates	No	No	No	No
Municipal FE	Yes	Yes	Yes	Yes
Election Year FE	Yes	Yes	Yes	Yes
post · % inactive serv. (2020)	0.063**	−0.071**	−0.001	0.004
	(0.029)	(0.028)	(0.006)	(0.016)
post · % inactive serv. (2022)	0.013	0.025	−0.023	−0.027
	(0.043)	(0.050)	(0.029)	(0.039)
Observations	2300	2300	2300	2300
R-squared	0.736	0.859	0.863	0.783

Notes. Difference-in-differences estimates. The treatment variables are share of inactive workers in the services sector: one refers to the 2020 local elections and the other to the 2022 general elections. In addition, although not reported in the Table, the estimation includes also all the variables included in Table A13 and A14 (the north, the population, the provincial capital, the area, the share of primary educated, the share of secondary educated, the share of graduated, the active enterprises, the occupation rate, the activity rate and the total income), even in this case with a double time interaction, one referring to the 2020 local elections and the other to the 2022 general elections. The estimated coefficients indicate the effect of the share of inactive workers in the services sector, during the greatest lockdown period due to the restrictive measures, on different electoral outcomes: the share of vote to center-left parties in column (1), the share of vote to center-right parties in column (2), the share of votes to the Five Star Movement in column (3) and the turnout in column (4). The sample is composed by 4 observation for each of the 575 municipalities (belonging to ordinary stature regions) which voted for local elections in 2020. Three observations refer to local elections (the last local electoral competition plus the two precedent ones) and the fourth observations refers to the 2022 general election. The outcome variable is the variation in different electoral outcomes: the share of vote to center-left parties in column (1), the share of vote to center-right parties in column (2), the share of votes to the Five Star Movement in column (3) and the turnout in column (4). Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

at the outbreak of Covid-19, then a decline during the following months, and finally, a recovery nearing the September elections. These results are also confirmed in Figure A7 in the appendix, where we report the average consensus.

Two messages derive from this descriptive evidence. First, people who were forced to stop their working activities were initially skeptical and diffident towards political institutions and the government. Subsequently, they received the government's support, and thus their opinion improved in terms of interest in politics and trust in the institutions. The other side of the coin is that such attitude was then reflected in terms of increased political support both in favor of the parties promoters of the extraordinary measures for which they benefited (the center-left) and for the institution which played a fundamental role in their approval and realization (the government, the prime minister and the European Union).

7.2. Causal evidence from survey data

This second section provides causal evidence using the survey data. As anticipated in Section 4, we employ the same difference-in-differences empirical strategy used above. As described in more detail in Section 5.2, the treatment variable captures people who declared, or we predicted, to have suspended their professional activities due to the restrictive measures. The control group includes people who regularly continued to work, plus students, pensioners, and homeworkers. Since our interest is studying the effect of economic insecurity, we decided to include these categories in the control group, as they were not affected by the restrictions and did not benefit from the socioeconomic support programs. People unemployed for reasons different from the economic restrictions (e.g., unemployed before the introduction of the restrictions) are the sole professional category excluded from the analysis, given the difficulty of establishing whether these individuals received or not any benefit linked to the emergency measures introduced as a response to Covid-19.

Even though a broader time frame was available, we focus the empirical analysis on the period antecedent to the Italian local elections, which took place on the 20th and 21st of September, therefore employing four sessions of surveys, ranging from late August up to the middle of September, for a total number of 3198 interviews. In other words, we chose the period closest to the electoral competition, considering that people, influenced by the electoral campaign and the media coverage, usually decide how to vote just when the election date is approaching. Consequently, this strategy gives us a higher chance of dealing with more aware and precise answers from part of the respondents in the survey.

The results in Table 10 regard the center-left block in columns from 1 to 4 and the center-right block in columns from 5 to 8. In columns 1 and 5, the coefficients are estimated with the model (1) and without adding any covariate; in columns 2 and 6, we add a set of covariates; in columns 3 and 7, we estimate the coefficients with the model (2), that is with individual and year fixed effect; finally, in columns 4 and 8, to test for potentially differential pre-treatment trends, we add the interaction between $inactive_i$ and pre_t to model (2). The coefficients in Table 10 show how economic insecurity influenced the probability of voting for the center-left and the center-right block. More precisely, the results indicate that being inactive during the lockdown increased the probability of voting for center-left parties by close to 5 percentage points. At the same time, it decreases the probability of

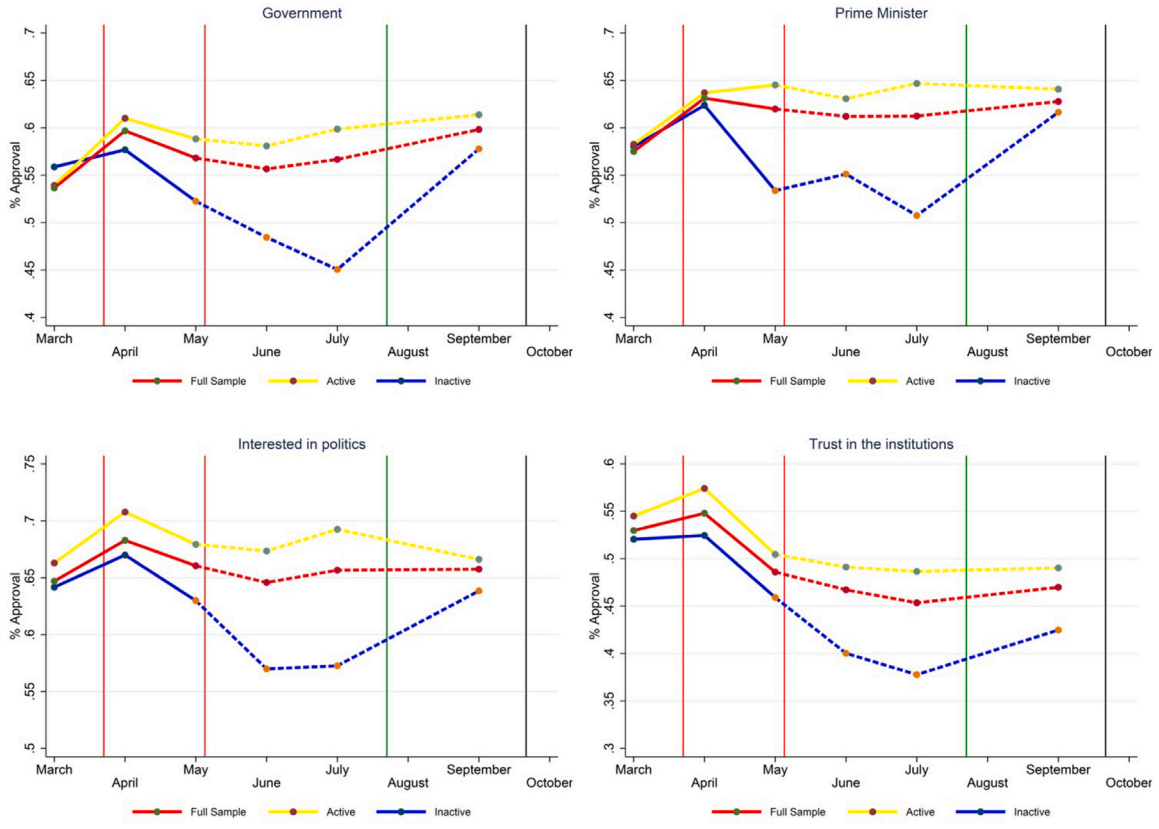

Fig. 6. Institutions' approval rates.
Notes. The Figure shows the approval rate – that is the probability of expressing a sufficient or a more than sufficient opinion – for different political variables: the government, the prime minister, the interest in politics and the trust in the institutions. Results – monthly grouped – are collapsed over different subcategories: (i) the full sample; (ii) the active workers; (iii) the inactive workers. The dotted line indicates that such subdivision is made through our predictions while the full line indicates that the information derives from the survey. The results are obtained weighting each observation with the correspondent socio-demographic coefficient in order to make the survey sample representative of the whole population. The vertical lines represents the following events: start of the greater lockdown, 22nd of March; end of the greater lockdown, 3rd of May; announcement of the launch of the Next Generation EU, 21st of July; election day, 20th of September.

voting for center-right parties by slightly less than 7 percentage points. Since the coefficients in columns 4 and 8 – representing the interaction between $inactive_i$ and pre_t – are not statistically different from zero, we have a confirmation that in both cases, the common trends assumption holds.

In Table 11 – which presents the same structure as Table 10 – we study the effects on the Five Star Movement. We see how all the coefficients are small and not statistically significant. These results prove that economic insecurity did not affect the probability of voting for the Five Star Movement. Thus, even this last exercise corroborates our main findings.

8. Conclusion

This paper studies the political impact of lockdown-induced economic insecurity imposed by the Italian government to deal with the Covid-19 pandemic. We provide evidence of a short-run partisanship effect that benefited center-left and pro-EU political parties but not populist parties supporting the central government. We also show how the lockdown-induced economic insecurity electorally damaged conservative and far-right populist parties in the opposition. We provide evidence that the extraordinary measures introduced by the central government to compensate for the increased level of economic insecurity represent the most plausible explanation for these results. This evidence suggests that the *forgotten women and men* likely felt less neglected during the pandemic than they did during previous crises. It also suggests that the social groups more heavily hit by the pandemic, traditionally more in favor of center-right parties, realized the importance of government support in dealing with large economic shocks, thus shifting their support in favor of parties more in favor of a larger role for the public sector. At the same time, voters showed more support for pro-EU parties and less for euro-skeptic and populist ones, a fact explained by the important involvement of the EU in financing the measures introduced to deal with the economic consequences of the Covid-19 pandemic.

The results of this paper show that the electoral effect of economic insecurity can go in the opposite direction compared to the evidence provided by the literature (Algan et al., 2017; Guiso et al., 2019) when government and mainstream parties manage to

Table 10
Evidence from survey data: center-left and center-right.

Dependent var.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Prob. of voting the center-left				Prob. of voting the center-right			
Covariates	No	Yes	No	No	No	Yes	No	No
Individual FE	No	No	Yes	Yes	No	No	Yes	Yes
Year FE	No	No	Yes	Yes	No	No	Yes	Yes
post· inactive	0.047**	0.047**	0.047**	0.056**	−0.069***	−0.069***	−0.069**	−0.063*
	(0.019)	(0.019)	(0.023)	(0.024)	(0.023)	(0.023)	(0.028)	(0.036)
inactive	−0.092***	−0.042			0.060*	−0.021		
	(0.026)	(0.031)			(0.033)	(0.047)		
post	−0.050***	−0.050***			0.047***	0.047***		
	(0.011)	(0.011)			(0.012)	(0.012)		
pre· inactive				0.018				0.012
				(0.021)				(0.030)
Observations	9594	9594	9594	9594	9594	9594	9594	9594
R-squared	0.015	0.072	0.810	0.810	0.004	0.080	0.840	0.840

Notes. Difference-in-differences estimates. The results are obtained weighting each observation with the correspondent socio-demographic coefficient in order to make the survey sample representative of the whole population. The treatment variable is the probability of being an inactive worker. The estimated coefficients indicate the effect of being an inactive worker, during the greatest lockdown period due to the restrictive measures, on the probability of vote to the center-right and center-left parties. The sample is composed by 3 observations for each of the 3198 individuals interviewed between August and September 2020 referring respectively: to the current voting intention, the vote expressed in 2019 European election and the vote expressed in 2018 parliamentary election. The outcome variable is the variation in the probability of vote in favor of the center-left parties, from column (1) to (4), and of the center-right parties, from column (5) to (8). Covariates in columns (2) and (6) referring to the individual are the following: age, years of education, gender, profession, sector of employment (private or public), type of employment contract (permanent or fixed-term). Covariates in columns (2) and (6) referring to the municipality in which the interviewee is living are the following: Population, Area (km2), Elevation (m), Provincial Capital, Per Capita Total Income, Coastal Area, Share of workers in the following Sectors: Accommodation and Food Service, Arts and Spots, Commercial, Construction, Education, Gas And Electricity, Health, Manufacturing Industry, Mineral Extraction, Other Services, Real Estate, Rental and Support, Scientific and Technological, Transport and Storage, Water and Waste Management. Robust standard errors clustered at the individual level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 11
Evidence from survey data: the Five Star Movement.

Dependent var.	(1)	(2)	(3)	(4)
	Prob. of voting the Five Star Movement			
Covariates	No	Yes	No	No
Individual FE	No	No	Yes	Yes
Year FE	No	No	Yes	Yes
post· inactive	0.011	0.011	0.011	0.002
	(0.023)	(0.023)	(0.028)	(0.029)
inactive	0.006	0.063*		
	(0.031)	(0.033)		
post	−0.067***	−0.067***		
	(0.012)	(0.012)		
pre· inactive				−0.019
				(0.022)
Observations	9594	9594	9594	9594
R-squared	0.012	0.090	0.802	0.803

Notes. Difference-in-differences estimates. The results are obtained weighting each observation with the correspondent socio-demographic coefficient in order to make the survey sample representative of the whole population. The treatment variable is the probability of being an inactive worker. The estimated coefficients indicate the effect of being an inactive worker, during the greatest lockdown period due to the restrictive measures, on the probability of vote to the Five Star Movement. The sample is composed by 3 observations for each of the 3198 individuals interviewed between August and September 2020 referring respectively: to the current voting intention, the vote expressed in 2019 European election and the vote expressed in 2018 parliamentary election. The outcome variable is the variation in the probability of vote in favor of the Five Stars Movement. Covariates in column (2) referring to the individual are the following: age, years of education, gender, profession, sector of employment (private or public), type of employment contract (permanent or fixed-term). Covariates in column (2) referring to the municipality in which the interviewee is living are the following: Population, Area (km2), Elevation (m), Provincial Capital, Per Capita Total Income, Coastal Area, Share of workers in the following Sectors: Accommodation and Food Service, Arts and Spots, Commercial, Construction, Education, Gas And Electricity, Health, Manufacturing Industry, Mineral Extraction, Other Services, Real Estate, Rental and Support, Scientific and Technological, Transport and Storage, Water and Waste Management. Robust standard errors clustered at the individual level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

deal with economic distress, with more support for mainstream parties and less for populist and anti-establishment ones. These results open the opportunity for future lines of research that merit being analyzed, like understanding whether the above-described findings are common in the other EU countries. It would also be intriguing to explore whether these "pocketbook voting" effects persist in the medium to long term within a more stable and less volatile context, unlike the scenario examined in this paper, which saw another crisis (i.e., the Ukrainian war and the increase in energy prices) following the previous one (i.e., the Covid-19).

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work the authors used ChatGPT 4 in order to improve language and readability. After using this tool/service, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

Appendix A. Supplementary data

Supplementary material related to this article can be found online at https://doi.org/10.1016/j.ejpoleco.2023.102480.

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