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Abstention and Populist Voting: Evidence from the Italian 2018 Election

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Abstention and Populist Voting: Evidence from the Italian 2018 Election

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ABSTRACT

This study aims to investigate the demographic, social, and economic drivers of rising abstention and populist electoral success in Italy in 2018. The Italian case is unique in the euro area because, in the political elections of 4 March 2018, two parties usually identified as left-wing and right-wing populists (Movimento 5 Stelle and Lega) obtained an absolute majority of valid votes. In reverse, the main established parties, the center-left Partito Democratico and the center-right Forza Italia, which have alternated in government since 1994, reached their minimum electoral consent. We study the Italian case at the level of the 110 Italian provinces (NUTS 3) by using a data set containing a wide set of demographic and socio-economic indicators, in addition to the results of the political elections in 2008, 2013, and 2018. We regress the results of the political elections of 2018, i.e., abstention and votes obtained by the main parties expressed as a share of citizens entitled to vote, on nine factors obtained by applying an exploratory factor analysis on 41 demographic and socioeconomic variables. Results suggest that abstention is associated with the State's failure in providing socioeconomic development and security and in repressing organized crime. Moreover, socio-economic well-being is the main driver of voting behavior. In particular, the left-wing populist Movimento 5 Stelle has been successful in the more backward Italian provinces and the right-wing populist Lega in the more developed ones. These results indicate that in 2018 mainstream parties have fallen out of favor with both the most backward and the most advanced provinces, suggesting that the notion of populism should be qualified for an understanding of the observed varieties of non-mainstream parties and voting or abstention behavior.

KEYWORDS

Populism, voting, abstention, electoral turnout, Italy.

JEL CLASSIFICATION D72, D78, H11, J68, P16

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INTRODUCTION

Italy is a laboratory for populism. The Italian party system has experienced crucial changes over the last few decades. Key among these changes has been the general elections held on March 4, 2018, with the electoral punishment of both the center-left and the center-right main incumbent parties, and the success of new or significantly renovated parties that have been commonly considered as left-wing and right-wing populist and opposed to European integration.

According to post-election surveys (e.g., Itanes, 2018) in the Italian political elections of 2018 a sizeable proportion of voters (26.7%) made choices different from the ones they made in 2013. On the one hand, the Partito Democratico (PD, Democratic Party), the mainstream center-left party, suffered heavy losses, getting 2.76 million fewer votes than in 2013, as well as Forza Italia (FI, Go Italy), the mainstream center-right party, that got 2.81 million fewer votes than in 2013, both confirming the declining trend in consensus compared to the previous electoral cycles (from 2008 to 2013). On the other hand, populist parties such as the Lega (League) and the Movimento 5 Stelle (M5S, Five-Star Movement) gained 4.19 million votes and 1.55 million votes, respectively (Table 1).

Thus, the 2018 Italian general elections were a crucial test to assess the resilience of mainstream parties vis-à-vis the challenge provided by populist forces and the stabilization of the tripolar party system that emerged in 2013.¹ In particular, the 2018 election results demonstrated that the previous 2013 elections had not been an anomaly, confirming the party-system transformation. Moreover, while this transformation has been quite common in many European countries, such as France, Spain, and Germany, the Italian case is unique in the Euro area because in the political elections of 4 March 2018, the two *left-wing and right-wing populist* parties - M5S and Lega - obtained an absolute majority of valid votes, and formed a coalition government that lasted from 1 June 2018 to 5 September 2019, when Lega decided to interrupt the government experience. In reverse, PD and FI, the former main parties of the center-left and center-right coalition, both reached their minimum electoral consent, being voted by only 12.6% and 9.6% of the citizens, respectively.

But Italy is a relevant setting to study populism, not only because of its electoral success but also because of the *varieties of populism*² represented in the party system. In particular, the electoral success of populist parties spread across the usual left-right dimension, a very significant case in Europe, at least at this level. The Italian case is unique in the EU also because of the economic decline experienced in the last decade, compared

¹ In 2013 the bipolar party system that in previous elections was characterized by a confrontation between Center-left and Center-right was substituted by a tripolar situation with the emergence of the M5S that claimed to be neither left nor right wing but just for the people. See Section 2 for a review of Italian political situation from 2008 to 2018.

² For a classification of European parties according to the degree of populism and the economic program see Inglehart and Norris (2016).

to other Western countries.³ Despite some improvement in several macroeconomic indicators in the years before the 2018 election, the lengthy economic crisis has left deep scars on Italian society.⁴

A final important aspect of the 2013 and 2018 Italian general elections is the high level of *electoral volatility*, which is somewhat puzzling (Bobba & McDonnell, 2015), even if it reflects the large-scale processes of partisan de-alignment and party change that occurred in many established democracies. Extensive literature has investigated the reasons for this general increase in electoral volatility in representative democracies.⁵ The Italian case clearly shows that new (or refurbished) parties can easily win support. But why is this so? The answer lies both in the strategic interaction between voters' attitudes and the nature of their reasoning, as shown in Gilli and Manzoni (2019), and in the nature of the political parties and policy platforms among which they are called upon to choose. A further crucial aspect is a strategic use of voting for the search for alternatives to parties that have adopted anti-people policies, analyzed in a general way and with a specific reference to the Italian case in Di Maio et al. (2022).

In most of the literature on populism, the success of the new populist parties is interpreted as stemming from the process of globalization, which has produced the "economic losers", those for whom the globalization process has meant economic hardship, income and occupational uncertainty, and "cultural losers", i.e., people who are disoriented by changes in values, by new waves of migration, and by the loss of national sovereignty. However, the empirical disentanglement of the relative importance of the factors behind these two hypotheses is not easy, as witnessed by the sharp confrontation between Mug and Morgan in 2018 about the possible explanation of Trump's victory (Morgan, 2018b, 2018a; Mutz, 2018a, 2018b), and more generally by the series of works by Colantone and Stanig (2018c, 2018a, 2019).

A general analysis of populist electoral success should consider both the demand side, i.e. the drivers of voting for populist parties, and the supply side, i.e. the presence or the entrance of populist parties, as in Guiso et al. (2017). Nevertheless, for the aim and scope of this paper, the study of the 2018 electoral outcome in Italy, a partial analysis of the demand side is enough, because in Italy the populist parties were established years before 2018, the Lega in 1991 and the M5S in 2009, even if M5S presented itself to the election for the first time in 2013, and Lega Nord (then evolved into Lega) presented itself throughout the national territory only in 2018.

This study aims to investigate the reasons for the rise of abstention and the success of left-wing and rightwing populist parties in Italy, relating electoral results to demographic and socio-economic factors. In particular, we focus on abstention and on the four parties that received the largest shares of the vote in the last three national elections: on one hand, the two populist outsider parties (M5S and Lega) that have progressively gained ground and, on the other hand, the two main established parties (PD and FI) that alternatively have led

³ In the years following the financial crisis that began in 2007, the Italian real GDP per capita fell below the value it had in 1998, and it was only in 2017 that it returned above this level. Appendix 8 in the Supplemental material reports a selection of the main social and economic data for Italy.

⁴ In particular, in 2018 the income of Italians was still below the pre-2008 crisis levels. For instance, the amounts declared for tax purposes in 2017 (relating to the 2016 fiscal year) were almost 2% lower, in real terms, than those declared in 2009 (Maraffi, 2018).

⁵ See Dassonneville and Hooghe (2017) for a review, and Gilli and Manzoni (2019) for a theoretical model.

the government in the last 30 years and have gradually lost votes. To this aim, after a survey of the Italian institutional situation and of the use of the concept of populism, two facets behind the rise of Italian populism starting from the first decade of the 2000s are examined using a geographic perspective. First, the geography of voting is considered using cluster analysis. Second, the role of elements that might be central to populism electoral success is studied through factor analysis and other multivariate techniques.

This paper aims to answer the following questions:

- 1. Is it possible to cluster electoral results to emphasize the nature of the connections of electoral results in Italy?
- 2. Among the multitude of correlated variables alleged to determine populist success, is it possible to group those concurring similarly to achieve a clearer understanding of the drivers of the electoral outcome of the most recent Italian elections?
- 3. Is it possible to use such factors to further understand the populist success in Italy, and possibly to extend the revealed pattern to other Western countries?

We will answer these questions by looking at several different sources. First, we review the 2008, 2013, and 2018 elections, then we concentrate on the period from 2013 to 2018⁶ at the level of the 110 Italian provinces (NUTS 3) by using a large dataset containing different types of demographic and socio-economic indicators, combining these data with the results of the Italian political election of 2013 and 2018. The provincial level of analysis is a good compromise between the regional level, on the one hand, and the municipal level, on the other hand.

Our paper takes the Italian case as a benchmark study since Italy is defined as a *laboratory* (Tarchi, 2015), an *enduring market* (Bobba & McDonnell, 2015), and a *breeding ground* for populism (Bobba & Legnante, 2017) because of the strong and recurrent success of its populist formations, as argued in Section 1. To the best of our knowledge, so far little attention has been paid to the empirical analysis of the demographic and socio-economic factors explaining voting behavior in favor of populist parties in Italy. Some interesting empirical analyses are provided by Caiani (2019), Corbetta et al. (2018), and Maraffi (2018); however, all their studies are based on ITANES 2018 post-election surveys, consisting of a sample of 2,573 observations, not on real electoral outcomes.

We make three methodological choices that differentiate our analysis of the drivers of the vote in favor of populist parties from those done by other authors, which we consider as methodological contributions to the research field. First, we investigate the drivers of both abstention and voting behavior, to highlight the potential similarities between abstention and voting for populist parties. Second, we consider the total number of electors who abstained, and the total number of votes obtained by parties as a share of the total number of citizens entitled to vote expressed in percentage points. This methodological choice differentiates our research from many others, which instead consider the total number of votes obtained by parties as a share of valid votes (e.g., Dijkstra, Poelman, & Rodríguez-Pose, 2020). Even if it is interesting because it determines the allocation

⁶ The choice of concentrating on the 2013 and 2018 elections is due to the fact that M5S was established in 2009 and thus did not concur in the 2008 elections.

of parliamentary seats, i.e., the distribution of power among parties, the share of valid votes can lead to misleading conclusions when it is regressed on demographic and socio-economic indicators since it does not take into account abstention. The variable of interest is misspecified because participation in the vote varies over time and space, between successive elections, and between different territories in the same election so that the same share of valid votes usually corresponds to different shares of citizens entitled to vote. Instead, the total number of votes obtained by a party expressed as a share of citizens entitled to vote correctly measures the consent of that party. Third, we perform an exploratory factor analysis to find the latent factors behind a wide set of demographic and socio-economic variables that could affect abstention and voting behavior, instead of pre-selecting a small number of variables, i.e., typically less than 10, as several authors do (e.g., Dijkstra et al., 2020). This approach allows us to prevent two problems. First, we avoid a subjective selection of variables, which, even if based on the literature, could reflect some kind of priors. Second, by considering a large set of variables, we minimize the possibility of problems with omitted variables. The factor analysis also allows us to highlight possible hidden relationships between the variables, which could not be identified in any other way.

The remainder of the paper is organized as follows. Section 1 briefly reviews the use of the notion of populism. Sections 2 and 3 present the institutional situation in Italy and the results in the 2008, 2013, and 2018 general elections, respectively. Section 4 illustrates the data set that we built by combining election results with a broad set of demographic and socio-economic variables. Sections 5 and 6 present the methodology applied for the analysis and the results obtained, respectively. Section 7 discusses the results obtained and concludes.

1. WHAT IS POPULISM?

The word populism is increasingly capacious, and its definitional precariousness is proverbial. At one time it referred specifically to political movements geared toward diminishing the political influence of economic elites and pushing for a redistribution of incomes to the people at large, a pure people contrasted with a corrupt elite, whose allegiance is to party and self-care rather than to the people (Canovan, 2002; Mudde, 2004). This was the meaning that populism had in U.S. politics at the turn of the twentieth century, a left-wing version that overlapped with socialism. This type of populism is still visible, for instance, in the Podemos, Syriza, La France Insoumise, and the M5S movements in Spain, Greece, France, and Italy, respectively. Increasingly, however, particularly in Europe and North America, populism has become overtly nationalist. The French National Front and La France Insoumise are both labeled populist although the former is avowedly nationalist, and the latter is radical socialist. This nationalist populism is regarded as fervently disruptive, looking for a totalistic change in the status quo by challenging the mediating role of political parties and undermining established standards of political etiquette (Norris & Inglehart, 2019). This broadening in the use of the concept leads some commentators to wonder whether the term has lost any continuing analytical meaning (e.g., Inglehart & Norris, 2016). Attacks on vaguely specified *special interests* and claims to represent the people against the politicians may seem all that most movements designated as populist have in common. The term populism now seems related to political movements, whether right or left-wing, critical of contemporary economic and social trends, particularly of economic, social, and political globalization. The fact that scholars in different regions use the same term to analyze strongly divergent political actors raises the question of whether it is merely an unfortunate coincidence that political actors from different times, from various places, and with different ideologies have all been labeled populist, or whether they have something in common.

Whatever the truth to the claim that populism is an increasingly meaningless term, two constants serve to make the term of continuing analytic use whatever other elements might be added, as argued for instance in Pappas (2019). The first constant is *taking politics to the people* by questioning and challenging the dominant political establishment of existing political parties and the experts or technocrats that are seen as unresponsive to popular demands and the public interest, captured and corrupted by private interests. The second constant frames the people in an entirely territorial sense of a founding or native group, particularly the ordinary people in it who are increasingly threatened by foreign or domestic powers. In this regard, populism defines and favors the identity of a given group against others: populism is structurally marked by a radical partiality in interpreting the people and the majority.

According to several authors (De Benoit, 2017; Mudde, 2016), these two characteristics imply that populism denies the necessity for institutional mediation provided by conventional political parties and intermediate bodies and that if a populist movement comes to power, it can have a disfiguring impact on the institutions, rule of law, and division of powers that comprise constitutional liberal democracy. However, it should be noted that in the course of history these features have characterized many political movements aimed at establishing a democratic regime and improving the living conditions of the people and that the criticisms addressed to populist parties often recall the criticisms addressed over the centuries to these democratic movements by the ruling elites of the time, e.g., the nobility and the clergy.

In general, we might say that even if populism differs in different times and places, however, it shares four characteristics (e.g., Mudde & Kaltwasser, 2017; Urbinati, 2019): 1) the central position of the people, 2) the critic of the elite, 3) the perception of the people as a homogeneous entity, and 4) the proclamation of a serious crisis.

The most accredited interpretations of the success of populist parties in Western democracies (e.g., Inglehart & Norris, 2016; Mudde & Kaltwasser, 2017) hinge on the process of modernization and globalization, and their effects on social and economic insecurity. On the one hand, this process has brought about profound changes in the dominant culture, replacing old values with new ones; on the other hand, it has altered the economic balance of the economy and society, lifting a few segments of the population upward, while leaving many others behind and with more social and economic insecurity. Social changes have been flanked by new ethical openings in the sphere of gay rights, homosexual civil unions, etc. The disorientation of the more traditionalist citizens has been further raised by non-Western immigration, causing some sectors of the population to feel like strangers in their own country. Besides this social insecurity, there is economic insecurity. The severe crisis that afflicted many economies in the last years led to radical transformations both in the structure of production and in the conditions of the working class, even if economic changes have started long before. In the last thirty years, manufacturing industries have declined, industrial production has been

transferred abroad, automation has eliminated jobs, immigration has brought in competition for labor, trade unions have been weakened, and the sustainability of the welfare state has been undermined. The 2008 financial crisis, followed by the Euro area "sudden stop" crisis (Baldwin & Giavazzi, 2015), has added further economic uncertainty. All these processes have created new conditions of economic insecurity and social deprivation: the present is uncertain and prospects non-existent. The age of the affluent society (Galbraith, 1958) has given way to the age of sad passions: a pervasive sense of helplessness and uncertainty (Benasayag & Schmit, 2003). In such a setting, widespread resentment against the dominant elites and the mainstream parties readily emerges, providing fertile ground for populist appeals. The socioeconomic decline, perceived also towards one's parents, feeds support for right- and left-wing radicalism (Bolet, 2022).

Many works have established connections between economic insecurity and populism electoral success, and more generally the significant role of the so-called 'China effect' (e.g., Colantone & Stanig, 2018a, 2018b, 2018c; Guiso et al., 2017 and references therein). Moreover, Dustmann et al. (2017) highlight how the populist vote is related to distrust in institutions, which in turn is correlated to unemployment and economic difficulties.

The explanation of these findings given by Guiso et al. (2017) is that populism is a three-part phenomenon: (1) anti-elite rhetoric; (2) immediate protection offers, and (3) hiding the future costs of the protection policies proposed. A reduction in wages and employment creates a direct effect in terms of economic insecurity. Such economic insecurity, if protracted and pervasive, reduces trust in current government policies and institutions and reduces voter turnout. Then, if government policies result ineffective to counter the crisis, populist supply arises, tempting voters with apparent protection strategies (such as trade barriers, limiting immigration from poor countries, or reintroducing a national currency in place of the euro).

The limit of this explanation is that it is strongly based on the subjective judgment of the authors and a paternalistic view of the voters. It is argued that those who vote for populist parties do not understand that there is no alternative to the policies proposed by mainstream parties, even if their effects are disastrous for most people. In practice, the preference for certain policies defines the categories of analysis: whoever disagrees is a populist.⁷ On the other hand, the vote for populist parties may be considered as a lack of confidence in the mainstream parties that dominate the institutions rather than a lack of confidence in the institutions themselves. On the contrary, it is abstention that can signal both a lack of confidence in the institutions and protest against mainstream parties.

The case of Italy illustrates several of the facets of populism that have recently become visible elsewhere in Europe and North America. The use of the term populism to describe aspects of Italian politics dates to the early 1990s, and even earlier. This followed the disintegration of the post-World War II party system that coincided with the end of the Cold War. As the Italian economy stagnated in the 1990s and early 2000s and as the global economic crisis in 2008 began to take its toll on Italian households, the trend toward populist politics intensified. The Italian case is specific, though the increasing allure of populism is reflected across several countries facing similar crises of popular economic and cultural confidence in existing political regimes and

⁷ Actually, Gilli and Manzoni (2019) propose a model where there is room for a reverse causality effect from lack of trust to ineffective economic policies and consequent high electoral volatilities.

associated political parties. It is important to note, however, that Italian populism began well before the recent economic crisis and associated austerity policies that are often invoked as its immediate causes. In the immediate aftermath of World War II, there were strong signs of popular aversion to mainstream parties and politicians.⁸ It is no surprise that when the post-World War II party system disintegrated between 1989 and 1992, the populist sentiment was not just in the air but already under mobilization. The initial beneficiary of the collapse of the two main parties that had ruled Italy since 1963, Democrazia Cristiana (Christian Democracy) and Partito Socialista Italiano (Italian Socialist Party), were Forza Italia, a personalist party, founded by the TV tycoon Silvio Berlusconi, using his media firm as the corner stone of the future party, and the Lega Nord, a party created in 1989 from several regionalist movements across Northern Italy. In almost all respects this was an incarnation of an ideal-typical populism. Lega Nord was born from local activists, its leader until 2012 was Umberto Bossi, a man of the people, who steered the party between attacks on the national government ('Roma ladrona', Rome the thief), proposals for the secession of Northern regions, and, in 1994, the joining into a governing coalition led by Silvio Berlusconi, who presented himself as a self-made man who opposed political games and tricks. The current leader of the Lega, Matteo Salvini, has turned Lega Nord into a nationalistic anti-immigrant party, flirting with neo-fascist groups. This allowed Lega support to spread beyond the North but in so doing it dropped its regionalist for a nationalist populism, while the declining leadership of Berlusconi has reduced both the electoral appeal and the populist characteristics of Forza Italia.

2. THE INSTITUTIONAL SITUATION IN ITALY

2.1 THE ITALIAN SECOND REPUBLIC

The years between 1992 and 1994 have been regarded by most observers as a turning point in Italian politics, to the extent that this period has been referred to as the passage from the so-called 'First Republic' to the 'Second Republic'. The year 1993 saw the collapse of the five governing parties under the 'Tangentopoli' ('Bribesville') scandals, the creation and regeneration of other parties, and the abandonment of the proportional electoral system, which had been a foundational and stable feature of the post-1945 party system, in favor of a mixed (mainly majoritarian) system, changing the incentive structure for electoral and political strategies. The reformed mixed system displayed a predominantly majoritarian logic as far as the mechanical effects of translating votes into seats are concerned. This majoritarian logic provided a very strong incentive for the formation of electoral-political alliances to win in first-past-the-post voting contexts, which was also facilitated by a parallel process of ideological softening across the political spectrum. As a consequence, a bipolar pattern of competition was established. The new electoral system was used in the 1994, 1996, and 2001 general elections. Between 1994 and 2013, two coalitions organized along a basic left-right continuum increasingly accounted for most votes across Italy. The polarizing capacity of the center-right leader, Silvio Berlusconi, was also important because he recruited other right-wing factions into his camp and institutionalized his alliance with the Lega Nord. Yet, there was definite geography shaping the overall national bipolarity. FI

⁸ This was manifested most clearly in the Fronte dell'Uomo Qualunque (Front of Ordinary Man) founded by Guglielmo Giannini, a satirical journalist and comedian.

indeed had to share votes and seats with the Lega Nord in the Northern regions but was faced with serious competition by the center-left in the South, and a dearth of opportunities in the Center, where the center-left parties exercised a considerable draw.

2.2 THE CHANGING ELECTORAL SYSTEMS

Italy stands out among advanced industrialized democracies because of its frequency of major electoral reforms. In the postwar period, Italy experienced four major electoral systems: the proportional representation (PR) system (1948-1992), the mixed-member majoritarian (MMM, 1993-2005), and two varieties of PR with majority bonus (2005-2015, 2015-now).

The proportional system was introduced with the electoral law of 1946, and, with minor variations, remained in force for nearly fifty years, folding under heavy criticism in the early Nineties, as it was considered the main cause of party fragmentation and government instability, and abolished by referendum in 1993, leaving the field to a new electoral law mainly based on single-candidate constituencies, the Mattarella Law. The new law replaced the previous system of proportional representation and remained in force until 2005 when it was replaced by the Calderoli Law. The Mattarella Law introduced a mixed electoral system: for the Senate, it was majoritarian with a single ballot for the allocation of 75% of parliamentary seats, the remaining 25% seats allocated to the proportional recovery of the most-voted non-elected; for the Chamber of Deputies, it was a proportional system with blocked lists and a 4% threshold. Hence, the Mattarella Law entailed three different modes of seat distribution: majority in the Senate, proportional in the Camera, and proportional recovery in the Senate. The Calderoli law of 2005 amended the Italian electoral system, introducing a radically different scheme. The main change was the elimination of single-member constituencies, along with the re-introduction of multi-member constituencies under proportional rules for both branches of Parliament. The law introduced a modified proportional representation based on coalitions, a majority premium which is managed differently in the two branches of Parliament, and blocked lists with candidates appointed by the parties with no possibility for voters to express their preferences for individual candidates, who are elected according to their position in the list. At the Senate, the majority premium was assigned on a regional basis, allocating at least 55% of the seats reserved in a region to the majority coalition that won the election in that region. At the Chamber of Deputies, a majority premium of 340 seats was given to the relative majority party or coalition with no minimum threshold to obtain the premium. This law ruled the Italian general elections in 2006, 2008, and 2013.

In 2017, a new electoral law was approved, the Rosato Law. It calls for a mixed electoral system: 61% of seats (386 in the Chamber of Deputies and 193 in the Senate) are allocated on a proportional basis among parties that take more than 3% of valid votes, whereas 37% of seats (231 in the Chamber of Deputies and 115 in the Senate) is attributed following a plurality rule in single-member districts (SMDs). Before the election, politicians and analysts were particularly curious to compare proportional results with majoritarian ones: indeed, it was broadly expected that majoritarian competition - where 'winner takes all' and individual qualities of the candidates are crucial - should have favored pre-electoral coalitions at the expenses of M5S. It did not

happen. On the contrary, majoritarian results were quite similar to proportional results for M5S and the other coalitions.

3. A SURVEY OF THE 2008, 2013, AND 2018 ELECTORAL RESULTS

This section presents a survey of the results of the Italian general elections held in 2008, 2013, and 2018, which are summarized in Table 1. Figure 1-4 provide the geographical representation of these results for abstention and the three parties that will be considered in the empirical analysis, i.e., Lega, M5S, and PD.

3.1 2008 GENERAL ELECTIONS

The general election held on 13-14 April 2008 was conducted under the electoral rules introduced in December 2005 by the center-right. It marked a further milestone in the reconfiguration of the Italian polity, ongoing for over 15 years. The election took place after the collapse of the nine-party center-left coalition, elected with a narrow majority in April 2006. The center-right won the 2008 parliamentary elections with a significant majority. The electoral results caused a near shockwave in Italy: for the first time, only five parties (two parties for each coalition and the small Unione di Centro, UDC) went to Parliament, and only 80.5% of the electorate went to the ballot box, the lowest figure in a parliamentary election in the Italian history. Compared to the 2006 elections, Italy experienced a 3.1% increase in abstainers. The party getting the best result in terms of votes gained was the Lega (best result in its history till 2018).

3.2 2013 GENERAL ELECTIONS

Berlusconi returned to power in 2008, when Italy was struck by the Great Recession. In 2009, GDP fell sharply and, consequently, the debt-to-GDP ratio jumped again. In April 2011, the spread between yields on Italian and German bonds began to grow. On August 5, 2011, the European Central Bank (ECB) sent an unheard-of letter to the Italian Government, signed by the president in office and by the one appointed, i.e., Trichet and Draghi (2011), calling for severe fiscal consolidation and a wide range of radical structural reforms, starting with the pension system and the labor market.⁹ Six months later, on November 9, the spread reached a peak of 575 basis points. In a climate of national emergency, on November 12, as soon as the budget law was approved, Berlusconi resigned.¹⁰ Four days later, the technocratic government led by former EU commissioner and economist Mario Monti took office. On November 18, the Monti government won the confidence of the House of Deputies: 556 members voted in favor and only 61 against it. Lega (Lega Nord at that time) and a small party called Italia dei Valori (Italy of values) were the only parties to vote against it. In a few days, the Monti government launched a program of fiscal consolidation and structural reforms, along the lines drawn by the ECB.¹¹ Italy went into recession and the debt-to-GDP ratio increased, even if according to the Government structural reforms such as the one regarding the pension system would have guaranteed easier long-term sustainability of the debt-to-GDP ratio. However, the spread between Italian and German

⁹ The letter was strictly confidential but it was published by an Italian newspaper within a few days.

¹⁰ The Government was also in trouble because of Berlusconi's sex scandals, charges for fiscal evasion, and the weakening of its parliamentary majority.

¹¹ In an interview with the CNN reporter Fareed Zakaria (2012) in May 2012, which went viral on Italian social media, Monti declared: "We're actually destroying domestic demand through fiscal consolidation.".

government bond yields decreased only after the ECB announced a radical change in monetary policy, with the famous "whatever it takes" speech delivered by Draghi on July 26, 2012 (Draghi, 2012).

In the 2013 general elections, the M5S turned out to be the party with the highest number of votes in the Chamber of Deputies, despite being outnumbered overall by the center-left and center-right electoral alliances, however, because of the majority prize awarded by the electoral law, the PD was able to establish a center-left government. Although Berlusconi made a remarkable comeback in the 2013 election, with an electoral campaign against European Union policies, he was unable to reconstitute the coalition of regional political forces that had been the secret of his previous success, because, by early 2012, the diminished health of the Lega Nord's leader Umberto Bossi and charges of corruption against the party had taken a toll on Lega Nord, which faded across the Northern regions.

3.3 2018 GENERAL ELECTIONS

On the one hand, the rise of the M5S in the 2013 election was a significant problem for the PD, even if it was able to arrange a coalition with part of the center-right to govern till the natural end of the legislature in 2018. On the other hand, when Matteo Salvini was elected as Secretary General, in December 2013, Lega was not in good shape. It was a regional party, unable to get votes in central and southern Italy, Berlusconi's close ally since the late Nineties, and thus held co-responsible for his failure. In 2012, investigations on the illegal use of Lega funds led its charismatic leader, Umberto Bossi, to resign as secretary general. Thus, it was no surprise that in the 2013 elections, Lega got a paltry 4% of the votes.

But the political arena was ripe with opportunities. First, there was a very broad potential electoral space in the center-right because Berlusconi was politically worn out and the post-fascist party Alleanza Nazionale (National Alliance) was in disarray. Second, there was a widespread emotional condition catalyzed by a specific policy that commanded the attention of the media: immigration. In particular, in 2015 there was a huge increase of refugees and migrants in Europe, part because of the Syrian war when 1.3 million people came to the continent to request asylum, the highest number in a single year since World War II.¹² In short, Lega is one interesting example of how a political force moved from political obscurity to political significance in the wake of an economic, financial, social, and political crisis.

On March 4, 2018, a wind of change swept across Italy's political landscape, and indeed Europe's. The 2018 general election represented a turning point in Italian politics because of the huge success of two populist parties, M5S and Salvini's Lega,¹³ and the corresponding decrease in the traditional established parties, FI and PD. That national election made Italy the first country in Western Europe with a populist majority. Indeed, Italy was only the last, even if one of the most relevant manifestations of a general trend: a significant number of populist formations achieved electoral success in many countries with different economic and political characteristics.

¹² This situation is known as the "European migrant crisis".

¹³ Both M5S and Lega are by common consent classified among the so-called populist parties (e.g., Corbetta et al., 2018) and considered as opposed to European integration (e.g., Dijkstra et al., 2020).

Both main anti-establishment populist parties have achieved historical success, with a combined vote representing the absolute majority of votes cast (Table 1). As regards the M5S, never before in the history of Western Europe had a new party obtained such a high degree of support in only its second appearance at a national election. M5S obtained 10.25 million votes, improving its already historical 2013 success with an increase of 1.55 million votes, reaching a popular consensus equal to 22% of those entitled to vote and to 32.4% of the voters. On the other hand, in relative terms, the most significant change was in the support won by the Lega, which saw its votes quadruple. Lega obtained its best result in a general election, both in absolute and percentage terms, obtaining 5.59 million votes, with an increase of 4.19 million votes compared to the previous elections, and reaching a popular consensus equal to 12% of those entitled to vote and to 17.7% of the voters. For the first time, Lega overtook FI within the center-right coalition.

These historical electoral outcomes were accompanied by a paradigm shift that threw consolidated territorial alignments into disarray. Salvini's strategy of transforming the formerly Lega Nord into a national party (Lega) proved very successful, considering that Lega even achieved an average of 8% of votes in the South of Italy. The main parties of the Center-left and Center-right - respectively PD and FI - saw more than five-million voters abandon them. These parties remained significant forces, but they were defeated. However, while the electoral numbers were unequivocal, what is far less evident is why 50.1% of voters (32.4% for the M5S and 17.7% for the Lega) were prompted to cast a populist vote. Moreover, we cannot assume that the reasons that led to this and previous electoral outcomes were underpinned by the same motivations. No other Western country has an internet-driven movement such as M5S gained power, and no other Western country had a regionalist (and indeed secessionist) party such as Lega transformed itself into a champion of national sovereignty in just a couple of years. Compared to trends seen across Europe, which had witnessed the success of radical right anti-immigrant parties in some Northern European democracies, as well as the success of leftwing anti-austerity parties in Southern European democracies with weaker economies, Italy proved to be a peculiar case in which two different left-wing and right-wing 'populisms' were established in the same country. Indeed, scholars who have dealt with populism have often made distinctions between right-wing and left-wing populism (e.g., Mudde & Kaltwasser, 2017). The present work focuses exactly on the reasons behind abstention and the vote for both Lega and M5S, investigating the possible drivers of such an electoral outcome.14

¹⁴ A narrative explanation of the reasons of M5S and Lega success is Orsina (2019).

Political election			2018	018					
	Number	% of citizens	% of valid votes	Number	% of citizens	% of valid votes	Number	% of citizens	% of valid votes
Abstention and turnout									
Citizens entitled to vote	47,142,436	100%		47,005,432	100%		46,604,896	100%	
Abstention	10,617,017	22.5%		12,932,157	27.5%		14,955,989	32.1%	
Turnout	36,525,420	77.5%	100%	34,073,272	72.5%	100%	31,648,908	67.9%	100%
Parties									
Movimento 5 Stelle				8,702,987	18.5%	25.5%	10,252,280	22.0%	32.4%
Lega	3,026,844	6.4%	8.3%	1,392,537	3.0%	4.1%	5,587,146	12.0%	17.7%
Partito Democratico	12,092,998	25.7%	33.1%	8,644,542	18.4%	25.4%	5,887,357	12.6%	18.6%
Forza Italia	13,642,745	28.9%	37.4%	7,332,829	15.6%	21.5%	4,471,741	9.6%	14.1%
Fratelli d'Italia				668,886	1.4%	2.0%	1,398,109	3.0%	4.4%
Political areas and alignments									
Extreme left	378,116	0.8%	1.0%	95,150	0.2%	0.3%	480,285	1.0%	1.5%
Center-left	15,343,652	32.5%	42.0%	10,852,847	23.1%	31.9%	7,085,809	15.2%	22.4%
Center-liberals	103,760	0.2%	0.3%	3,364,715	7.2%	9.9%	971,815	2.1%	3.1%
Center-right	19,130,396	40.6%	52.4%	10,180,386	21.7%	29.9%	11,905,528	25.5%	37.6%
Extreme right	1,026,485	2.2%	2.8%	421,367	0.9%	1.2%	502,238	1.1%	1.6%
Movimento 5 Stelle				8,702,987	18.5%	25.5%	10,252,280	22.0%	32.4%

Table 1 – Political election results, Chamber of Deputies, 2008, 2013 and 2018

Notes. In 2008, Forza Italia and Alleanza Nazionale (which later became Fratelli d'Italia) stood in the elections together with a list called Il Popolo delle Libertà (The People of Freedom). The source of the data is the Italian Ministry of the Interior.



Figure 1 – Abstention in 2008, 2013, and 2018 general elections

Notes. This figure represents the abstention in each election, expressed in percentage points as a share of citizens entitled to vote, and its variations with respect to the previous election.



Figure 2 – Lega in 2008, 2013, and 2018 general elections

Notes. This figure represents the consensus for the Lega in each election, expressed in percentage points as a share of citizens entitled to vote, and its variations with respect to the previous election.



Figure 3 – Movimento 5 Stelle in 2008, 2013, and 2018 general elections

Notes. This figure represents the consensus for the Movimento 5 Stelle in each election, expressed in percentage points as a share of citizens entitled to vote, and its variations with respect to the previous election.



Figure 4 –Partito Democratico in 2008, 2013, and 2018 general elections

Notes. This figure represents the consensus for the Partito Democratico in each election, expressed in percentage points as a share of citizens entitled to vote, and its variations with respect to the previous election.



Figure 5 – Forza Italia in 2008, 2013, and 2018 general elections

Notes. This figure represents the consensus for Forza Italia in each election, expressed in percentage points as a share of citizens entitled to vote, and its variations with respect to the previous election. In 2008, Forza Italia and Alleanza Nazionale (which later became Fratelli d'Italia) stood in the elections together with a list called II Popolo delle Libertà (The People of Freedoms).

4. DATA

To analyze the drivers of abstention and voting for populist parties we have built a dataset that contains both the data of the political elections and a large set of socio-economic and demographic variables.

The observation unit is the province (NUTS 3) and we consider the 110 Italian provinces existing in the period 2012-2018.

4.1 GENERAL ELECTIONS

The data relating to the general or political elections refer to the elections of the members of the Chamber of Deputies in 2008, 2013, and 2018. For these elections, all Italian citizens who are at least 18 years old on the date of the elections have the right to vote. The electoral data provided by the Italian Ministry of Interior at the municipal level have been aggregated at the provincial level.¹⁵ It is important to note that all those entitled to vote are automatically registered in the lists of the electoral section to which they belong, which is the closest to their residential address and is usually located in a public building, e.g., schools. In practice, citizens can vote by just going to their electoral section carrying a valid identity document.

Abstention includes both the electors who did not vote and the invalid votes, i.e., the blank and null ballots.

Because we search for the drivers of abstention and voting for populist parties, we consider the total number of people who abstained and the total number of votes obtained by parties as a share of the total number of citizens entitled to vote, expressed in percentage points. This methodological choice differentiates our research from many others, which instead consider the total number of votes obtained by parties as a share of valid votes (e.g., Dijkstra et al., 2020). Even if it is interesting because it determines the allocation of parliamentary seats, i.e., the distribution of power among parties, we believe that the share of valid votes can lead to misleading conclusions, since the variable of interest might be misspecified. When participation in the vote varies over time or space, between successive elections, or between different regions in the same election, the same share of valid votes corresponds to different shares of citizens entitled to vote. Hence, consensus for a party can decrease without the share of valid votes registering this fact. Instead, the total number of votes obtained by a party expressed as a share of citizens entitled to vote correctly measures the consent of that party. This consideration is especially important when the Italian case is considered: abstention is growing nationally, and it is very different between the various provinces.

4.2 DEMOGRAPHIC AND SOCIO-ECONOMIC VARIABLES

Demographic and socio-economic variables are relative to 41 indicators in 2012 and 2017: 14 on crimes, 6 on demography, 14 on the economy, 1 on education, 1 on innovation, 3 on migration, 1 on the emergency related to uncontrolled immigration from poor countries, and 1 related to newspapers circulation (Table 2). The data source is ISTAT, i.e., the Italian national institute of statistics, for almost all indicators.

This wide set of indicators aims to include those factors that may explain abstention and voting for populist parties, based on the literature and the specific characteristics of the Italian case. In particular, voting for

¹⁵ Appendix 1 in the Supplemental material reports some descriptive statistics of the results of the general elections held in 2008, 2013, and 2018.

populist and anti-European integration parties has been explained by considering individual and territorial factors such as age, education, income, unemployment, inequality, geographic mobility, migration, population density, geographical isolation, brain drain, and industrial decline (e.g., Dijkstra et al., 2020 and the references therein).

We have added to the indicators related to these factors several indicators related to crime. The first reason for this choice is that crime occupies a central place in public discourse in Italy and the lack of security, real or alleged, is one of the most used arguments by populist parties. Secondly, we have added some indicators that can be considered as proxies of the presence and activity of organized crime, which is very relevant not only in the Southern regions of origin of the main criminal organizations but throughout the entire national territory.

Finally, we considered one indicator relating to the management of uncontrolled immigration by the government and the circulation of newspapers. From 2011 onwards, many thousands of immigrants from poorer countries arrived in Italy in an uncontrolled way, i.e., not according to the provisions of the laws in force. Similar to what happened in other countries, these people fleeing war or poverty or simply searching for a better future arrived in Italy clandestinely or aboard boats. Many of these people then applied for asylum, and many asylum applications were rejected. A peculiar choice of the Italian government was to manage this immigration by distributing people throughout the national territory, based on agreements with local authorities, in emergency residences. The whole issue was the subject of a heated political confrontation with the opposition parties accusing the PD's government of not being able to defend national borders, wasting money on welcoming migrants, and not being able to repatriate people for whom the asylum application was not accepted.

We included the number of emergency residence beds in each province as an indicator of the spillovers of the government management of this uncontrolled immigration. Beyond the controversy at the national level, this indicator can be considered as a proxy of the repercussions of this phenomenon at the provincial level and therefore a specific factor that may have been considered by voters.

Variable D		Description		Variable	Description			
	Crime			Economics				
1.	Arsons	Reported crimes per 10,000 inhabitants	21.	Isolation (highways, airports, and ports)	Travel times to urban and logistic nodes			
2.	Attempted homicides	Reported crimes per 10,000 inhabitants	22.	Participation in the labor market	Labor force aged 15-64 years out of the total population aged 15-64 (percentage)			
3.	Bag theft	Reported crimes per 10,000 inhabitants	23.	Participation in the labor market: the difference between men and women	Percentage			
4.	Home burglaries	Reported crimes per 10,000 inhabitants	24.	Exports per capita	Euro per inhabitant			
5.	Drug-related crimes	Reported crimes per 10,000 inhabitants	25.	Income inequality	Gini concentration index on equivalent net household income			
6.	Extortions	Reported crimes per 10,000 inhabitants	26.	Non-performing entry rate of loans to households	Percentage of loans to households			
7.	House robberies	Reported crimes per 10,000 inhabitants	27.	Unemployment: job seekers aged 15 and over	Percentage of the population between 15 and 64 years			
8.	Intentional homicides	Reported crimes per 10,000 inhabitants	28.	Value added: manufacturing	Percentage of the total value added			
9.	Mafia homicides	Reported crimes per 10,000 inhabitants	29.	Value added: public sector	Percentage of the total value added			
10.	Micro criminality	Reported crimes per 10,000 inhabitants	30.	Value added: per capita	Euro per inhabitant			
11.	Prostitution-related crimes	Reported crimes per 10,000 inhabitants	31.	Median gross hourly wage of employees born abroad	Euro			
12.	Sexual violence	Reported crimes per 10,000 inhabitants	32.	Median gross hourly wage of employees born in Italy	Euro			
13.	Robbery	Reported crimes per 10,000 inhabitants	33.	Mean wage of employees	Euro			
14.	Robbery homicides	Reported crimes per 10,000 inhabitants	34.	Mean wealth per capita	Euro			
	Demography			Education, innovation, migration				
15.	Fertility rate	Number of children per woman	35.	Population having at least a secondary degree	Percentage of the population between 25 and 64 years			
16.	Total growth rate of the population	Rate per thousand inhabitants	36.	Immigration of graduates between 25 and 39 years	Rate per 1,000 resident graduates			
17.	Population between 15 and 64 years	Percentage on January 1	37.	Foreign residents	Rate per 10,000 inhabitants between 15 and 64 years			
18.	Population over 64 years	Percentage on January 1	38.	Emigration to other Italian regions	Number of residents who emigrated to other Italian regions per 10,000 inhabitants			
19.	Population density	Number of inhabitants per square kilometer	39.	Emigration abroad	Number of residents who emigrated abroad per 10,000 inhabitants			
20.	Total immigration	Rate per thousand inhabitants	40.	Beds in emergency residences for migrants	Rate per 10,000 inhabitants between 15 and 64 years			
			41.	Newspaper circulation	Average number of newspapers distributed per day per 10,000 inhabitants above 14 years			

Table 2 – Demographic and socio-economic explanatory variables

Notes. The Ministry of Interior is the source for variable 40, and ADS is the source for variable 41. For all other variables, the source is Istat. All the variables are at the provincial level except variable 25, which is at the regional level.

5. METHODOLOGY

In the debate about cultural vs. economic drivers of populist voting, several studies adopt a research design that involves regressing vote choices against broad sets of explanatory variables. These variables jointly include both cultural attitudes and measures of economic distress, and the lack of significance of the economic indicators in these regressions is then interpreted as evidence that economic factors do not matter for vote choice. The article by Mutz (2018b) on the Trump election is probably the most prominent example of this approach. Many subsequent works (e.g., Colantone & Stanig, 2018b, 2019; Morgan, 2018b) challenged these results because cultural attitudes can be considered "bad controls" (Angrist & Pischke, 2009) since changes in attitudes are themselves an important channel through which economic variables might affect voting.

To overcome the problem of "bad controls", the approach we use in this paper is to start with a very large set of demographic and socio-economic variables that may affect voting through many channels, however, we perform an exploratory factor analysis to find the latent factors behind these explanatory variables. Indeed, many of the demographic and socio-economic variables that could affect the vote are highly correlated with each other, both positively and negatively.¹⁶ It should also be noted that we have only 110 observations available for each general election. Pre-selecting a small number of demographic and socio-economic variables, i.e., less than 10, as several authors do (e.g., Dijkstra et al., 2020), does not seem an appropriate solution, even if this selection is based on the literature. On the one hand, this approach would introduce an element of discretion in the analysis, which could reflect the authors' preferences. On the other hand, it could create an omitted variable problem. The factor analysis allows us to solve these problems, and it also allows us to highlight hidden relationships between the variables, which could not be identified in another way.

We then regress the electoral results on the factor scores obtained for each province to find the demographic and socio-economic determinants of abstention and voting behavior.

In the rest of this section, we illustrate our methodological approach in more detail.

5.1 ANALYTICAL FRAMEWORK

We base our analysis on the assumption that voting decisions in a province, in particular abstention and voting for populist parties, are correlated with at least some of the demographic and socio-economic factors that characterize that province. Figure 6 represents our analytical framework. Potential voters know the socio-economic and demographic characteristics of the province they live in directly, based on their personal experience or through the social networks they belong to, or through both mass media and parties.¹⁷ Whether by personal inclination or because of the activity of mass media and parties, voters may attach more importance to one factor rather than to another. Voting decisions are based on socio-economic and demographic factors, as perceived and interpreted by voters, also depending on their socio-economic conditions, values, preferences, and beliefs, but also on the electoral law and the political offer available when the elections are held.

¹⁶ See Figure A3.1 and Table A3.2 in Appendix 3 in the Supplemental material.

¹⁷ However, we do not assume that voters have a perfect knowledge of the society in which they live.

The political offer plays a role in determining both abstentions and voting for parties. When considering the Italian case, it is important to keep in mind two facts that changed substantially the political offer. The first is that the M5S only presented itself in the two most recent political elections, in 2013 and 2018. The second is that the Lega presented itself throughout the national territory only in 2018. These two changes in the political offer make it difficult to conduct an empirical analysis that considers all the elections in 2008, 2013, and 2018 at the same time. On the contrary, they suggest focusing on the political elections of 2018.



Figure 6 – Analytical Framework

Notes. This figure illustrates the analytical framework underlying our study. We assume that voting decisions in a territory, e.g., abstention and voting for populist parties, are driven by at least some of the demographic and socioeconomic factors that characterize that territory. Many other factors may be involved in determining the voting behavior without, however, generally altering this fundamental relationship.

5.2 CORRELATION ANALYSIS

Having assumed that the consensus for one party in a province is associated with the socio-economic and demographic factors of that province, the first step of our analysis is to study the correlations between the votes for the different parties across provinces. We can put forward the following three working hypotheses. First, if the consensus for two parties is associated with the same factors, which the voters consider important or characterize the voters, but with correlations of the opposite sign with these factors, e.g., the consensus for one party grows and that for another party decreases as the average income increases, then the votes for these two parties in the different provinces will be negatively correlated because the voters consider these two parties as *substitutes*. Second, by the same logic, the votes for two parties will be positively correlated with each other when the voters consider them as *complements*, i.e., the voters regard them as similar, and the choice between one and another may be determined by factors other than demographic and socio-economic ones. The participation in the government of only one of the two parties or a scandal that hit one of them may be factors not correlated with socio-economic and demographic factors that are complements.¹⁸ Third, we interpret the absence of a significant correlation between consensus for two parties as the indication that the voting behavior is driven by factors that are national or specific to some provinces, such as cultural factors or the presence of linguistic minorities.

5.3 CLUSTER ANALYSIS

The second step of our empirical strategy is to apply cluster analysis for grouping the Italian provinces according to their electoral results in the political elections of 2008, 2013, and 2018. We consider abstention and both parties' and coalitions' votes. We aim to obtain an "objective" representation of the electoral results that can provide some early insights into the 2018 results as compared to previous elections' results.

We use cluster analysis to partition the 330 observations in the data set, i.e., the 110 Italian provinces observed in 2008, 2013, and 2018, into distinct groups so that provinces within each cluster are quite similar to each other, according to their electoral results, while provinces in different groups are quite different from each other. In detail, the similarity is measured by Euclidean (straight-line) distance and Manhattan (city-block) distance, computed on non-scaled electoral results. We use four linkage methods: the single linkage (i.e., the minimum distance), complete linkage (i.e., the maximum distance), average linkage (i.e., the average distance), and Ward's linkage (i.e., the smallest increase in error sum of squares). We apply a hierarchical clustering by building a dendrogram, i.e., a tree-like visual representation of the clustering, and decide where to cut the dendrogram, i.e., the number of the clusters, by looking at the heights of the branches of the tree, which indicate how different are the clusters that are joined from time to time, starting from the bottom of the tree where observations are represented as leaves of the tree. Finally, the selected number of clusters is validated by statistical analysis, and the clusters obtained are characterized by considering the average values

¹⁸ An example of this case are Forza Italia and Lega. While Forza Italia participated in the government shortly before the 2018 elections, the Lega remained in the opposition.

of abstention and votes obtained by parties and coalitions in each group. An F test is used to verify the significance of the variables used for clustering.

5.4 FACTOR ANALYSIS

In the third step of our analysis, we apply exploratory factor analysis to the data set of demographic and socio-economic variables to identify the latent factors that may affect abstention and voting behavior. The factor analysis, developed using the principal component factor as a method of estimation, allows us to uncover the underlying structure of the set of variables, i.e., the underlying relationships between the variables, and to reduce the dimensionality of the data set. Applying the Kaiser-Guttman criterion, we retain all factors with eigenvalues greater than one. We apply the factor analysis to the data set of the demographic and socio-economic variables measured in 2017, to obtain factors that are orthogonal to each other in this year. Finally, we calculate the factor scores relating to 2012, to be able to obtain the changes between 2012 and 2017.

5.5 REGRESSIONS ANALYSIS ON FACTOR SCORES

In the fourth and last step of our analysis, we estimate a province OLS regression model to investigate the determinants of abstention and voting for populist parties in the 2018 Italian general elections.

We specify the baseline linear model as follows:

 $y_{i,2018} = \alpha_1 + \beta_1 F_{i,2017} + \varepsilon_i$ (1)

where $y_{i,2018}$ is the share, expressed in percentage points, of citizens entitled to vote who abstained or voted for a given party, i.e., M5S, Lega, or PD, in province *i* in 2018, and $F_{i,2017}$ are the factor scores for province *i* in 2017. Factor scores are lagged at time *t*-1, i.e., 2017, to limit problems of reverse causality.

Through specification (1), we estimate the drivers of abstention and voting behavior in the 2018 general elections. However, because both M5S and Lega have been opposed to the government in office in the period 2013-2017, which has been led by PD, a possible problem of reverse causality arises more for the PD than for the two populist parties on which our analysis focuses. To limit reverse causality stemming from this aspect, we also estimate the following additional model:

$$y_{i,2018} = \alpha_2 + \beta_2 F_{i,2017} + \gamma_2 y_{i,2013} + \varepsilon_i$$
⁽²⁾

in which we add the lagged dependent variable in 2013 (i.e., the results of the previous general elections) as a control.

With similar purposes, we further enrich the model including the change of the factor scores between 2012 and 2017, in addition to their level in 2017.

$$y_{i,2018} = \alpha_3 + \beta_3 F_{i,2017} + \gamma_3 y_{i,2013} + \delta_3 \Delta F_{i,2017-2012} + \varepsilon_i$$
(3)

In summarizing, baseline specification (1) aims at estimating the relevance of social and economic factors on both abstention and voting behavior in the 2018 general elections, and specification (2) allows us to check whether these factors also drive the variations of abstention and voting behavior between 2013 and 2018, and specification (3) allows us to check the relevance of the variation of the factor scores between 2012 and 2017 in addition to their level in 2017.

5.6 SUPPLEMENTAL ANALYSIS

Whereas the main analysis is performed with OLS regressions on factor scores, we also performed two supplemental analyses. The first, more aligned with the mainstream empirical literature, employs OLS regressions on a smaller set of demographic and socio-economic variables, which are considered important in the literature, taking as reference the study done by Dijkstra et al. (2020). The second supplemental analysis employs fixed effects panel regressions on the same set of selected variables. These supplemental analyses aim to validate the methodological choices illustrated in the previous sections.

Going to the results, which are presented in the Supplemental material only, the first supplemental analysis (Appendix 6) shows that the choice of considering the two populist parties separately is crucial to understanding the Italian case and that the use of the factor analysis allows a deeper understanding of abstention and voting decisions. The second supplemental analysis (Appendix 7) shows that it is also crucial to focus on the results of the 2018 general elections. The reason is simple: between elections, voters have the opportunity to observe the action of parties and to change their views on them. This alters the relationship between demographic and socio-economic variables and voting decisions. Leaving aside this fact leads to unreliable results on the relationship between the voting decisions and the variables considered, because of the implicit assumption of an invariant relationship.

6. **RESULTS**

6.1 CORRELATION ANALYSIS

For each election, Table 3 reports the correlation matrixes between the electoral outcomes of the four main parties, i.e., FI, Lega, PD, and M5S, and abstention.¹⁹ Correlations reveal particularly informative and sometimes uncover unexpected aspects.

In 2008, abstention is significantly negatively correlated with voting for PD and Lega, while it is positively correlated with voting for FI, which means that abstention is a substitute for voting for PD and Lega, while it is a complement with voting for FI. As expected, there is a negative correlation between PD and FI, whereas the negative correlation between Lega and FI, is quite unexpected, as well as the absence of a significant correlation between voting PD and Lega. This suggests that in 2008 both PD and FI, on one side, and Lega

¹⁹ Corresponding correlation plots are reported in Appendix 1.

and FI, on the other side, were both considered substitutes by voters, while there was no such competition between PD and Lega.

In 2013, when the M5S adds to the political offer, there are some significant changes. In this election, many correlation coefficients are not significant anymore. Abstention is still significantly and negatively correlated with voting for PD and Lega, while now there is no significant correlation between voting for FI and M5S, which means that abstention is a substitute for voting for PD and Lega, while there is no correlation between voting for FI or M5S. The negative correlation between PD and FI is still present, while now there is no significant correlation between Lega and FI, and Lega and PD. Quite interesting is also the emergence of a significant negative correlation between voting for M5S and Lega. This means that PD and FI are again competing within a shared bunch of voters, while there is no such competition between Lega and FI, and vice versa is negligible in 2013. Finally, there is an interesting competition for voting between Lega and M5S.

In 2018, when the Lega becomes present throughout the national territory, the situation changes again in an interesting way. All correlation coefficients are now significant. Abstention is still significantly negatively correlated with voting for PD and Lega, while now there is a positive significant correlation between voting for FI and for M5S, which means that abstention is a substitute for voting for PD and Lega, while it is complementary with voting for FI or M5S. The negative correlation between PD and FI is still present, while now there is a significant negative correlation between PD and M5S. Moreover, there is a significant negative correlation between PD and M5S. Moreover, there is a significant negative correlation between PD and M5S. Finally, voting for Lega and M5S is significantly and highly negatively correlated. This means that PD and FI are again competing within a shared bunch of voters, but now there is also competition between M5S and PD and between Lega and M5S is confirmed. This means that the possibility of transferring voting from PD to Lega or FI or M5S and vice versa in 2018 is possible, while there is no such possibility between FI and M5S.

These results show how voters' political attitudes changed trough time from 2008 to 2018: while maintaining some invariant aspects, such as the substitutability between abstention and voting for PD and Lega, the emergence of M5S as a key player changes many aspects of the voters' choices. A significant negative correlation means that voters' intentions may switch from one party to the other depending on the underlying determinants, hence we expect these factors to affect the voting choices oppositely. Finally, notice that substitutability makes it difficult to cooperate between parties because they compete on the same bunch of voters, which might partially explain the fragility of the 2018 coalition between Lega and M5S.

Political elections 2008	Abstention	PD	Forza Italia	Lega	
Abstention	1.000^{***}	-0.457***	0.273***	-0.559***	
	(0.000)	(0.000)	(0.004)	(0.000)	
Partito Democratico	-0.457***	1.000^{***}	-0.289***	-0.200	
	(0.000)	(0.000)	(0.002)	(0.037)	
Forza Italia	0.273^{***}	-0.289***	1.000^{***}	-0.411***	
	(0.004)	(0.002)	(0.000)	(0.000)	
Lega	-0.559***	-0.200	-0.411***	1.000^{***}	
-	(0.000)	(0.037)	(0.000)	(0.000)	
Political elections 2013	Abstention	PD	Forza Italia	Lega	M5S
Abstention	1.000^{***}	-0.675***	0.174	-0.436***	-0.207
	(0.000)	(0.000)	(0.071)	(0.000)	(0.031)
Partito Democratico	-0.675***	1.000^{***}	-0.380***	0.022	0.165
	(0.000)	(0.000)	(0.000)	(0.817)	(0.086)
Forza Italia	0.174	-0.380***	1.000^{***}	-0.002	-0.019
	(0.071)	(0.000)	(0.000)	(0.982)	(0.841)
Lega	-0.436***	0.022	-0.002	1.000^{***}	-0.277***
	(0.000)	(0.817)	(0.982)	(0.000)	(0.004)
Movimento 5 Stelle	-0.207	0.165	-0.019	-0.277***	1.000^{***}
	(0.031)	(0.086)	(0.841)	(0.004)	(0.000)
Political elections 2018	Abstention	PD	Forza Italia	Lega	M5S
Abstention	1.000^{***}	-0.768***	0.434***	-0.766***	0.558***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Partito Democratico	-0.768***	1.000^{***}	-0.409***	0.468^{***}	-0.481***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Forza Italia	0.434***	-0.409***	1.000^{***}	-0.345***	0.402^{***}
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Lega	-0.766***	0.468^{***}	-0.345***	1.000^{***}	-0.817***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Movimento 5 Stelle	0.558^{***}	-0.481***	0.402^{***}	-0.817***	1.000^{***}
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)

Table 3 - Political elections 2008, 2013, and 2018, correlation matrixes

6.2 CLUSTER ANALYSIS

Cluster analysis of political election patterns in 2008, 2013, and 2018 leads to the identification of four clusters of the Italian provinces based on the similarities of their political election patterns.²⁰

These four clusters (Table 4) are Cluster 1, including the provinces with a prevalence of FI and Centerright prevalence; Cluster 2 including the provinces with a prevalence of the M5S and abstention; Cluster 3 including the provinces with a prevalence of Lega and Center-right, and Cluster 4 including the provinces with a prevalence of PD and Center-left.

²⁰ See Appendix 2 in the Supplemental material for the details. All linkage criteria suggest the choice of four clusters. The statistical analysis, in particular the sharp decrease of pseudo-F in the shift from one class to the next, and a relatively high value of pseudo-t-squared going from class 3 to 4 confirms this choice (Table A2.1). Furthermore, according to ANOVA tests all variables involved in the cluster analysis are significant (Table A2.3).

Cluster 1		luster 1	Cl	uster 2	С	luster 3	Cluster 4		
	FI and	Centre-right	M5S an	d Abstention	Lega an	d Centre-right	PD and Centre-left		
	•	"Blue"	"Y	ellow"	••	Green"	"Red"		
	No.	Mean	No.	Mean	No.	Mean	No.	Mean	
Abstention	108	22.96	45	36.53	59	26.58	118	26.91	
Extreme left	108	0.86	45	0.73	59	0.99	118	0.41	
Center-left	108	32.89	45	11.07	59	15.55	118	24.48	
Liberals	108	0.25	45	1.58	59	2.22	118	6.42	
Center-right	108	39.80	45	19.06	59	30.40	118	21.01	
Extreme right	108	2.19	45	0.76	59	1.25	118	0.89	
Partito Democratico	108	26.21	45	8.61	59	13.38	118	18.94	
Forza Italia	108	28.58	45	11.56	59	9.07	118	14.09	
Lega	108	5.95	45	3.74	59	17.32	118	3.84	
Movimento 5 Stelle	108	0	45	26.64	59	19.01	118	18.19	

Table 4 – Characterization of clusters

The maps of these four clusters (Figure 7) provide an immediate representation of the geographical distribution of the political earthquake that hit Italy in 2018. The elections in 2008 and 2013 rewarded Forza Italia before, and then the Democratic Party, continuing the alternation between the two parties that has characterized Italian politics since 1994, based on the rule that the ruling party loses the next elections. In 2013, there is also a first affirmation of the M5S in Sicily. The picture changes completely in 2018. The Lega in the center-north and the M5S in the center-south won the elections, while the PD prevailed in some of the provinces of central Italy with an old communist tradition. The country's political representation is shattered along historical borders.²¹ The geographical fragmentation corresponds to political fragmentation, with the transition from a bipolar Forza Italia-PD system to a tripolar Lega-PD-M5S system (Figure 8).

The marked regional differences in voting call into question the traditional geopolitical divisions of Italy. Some have noted they are fading away (Agnew & Shin, 2017). For instance, in 2008 PD was globally residual, in 2013 it was globally dominant, whereas in 2018 it was competitive only in some parts of the territory where it has been the most voted party for many years, possibly due to the equilibrium between the M5S (which was dominant in the South) and the Lega (which led the way in the North) in this "intermediate area". The markedly territorial nature of the vote reflects the importance given by voters to the demographic and socio-economic trends that we will analyze in the next section.

²¹ For example, the provinces where the M5S is successful coincide quite precisely, excluding Sardinia, with the Kingdom of the Two Sicilies.



Figure 7 – Maps of clusters, 2008-2018

Figure 8 – Plot of clusters in the Center-right vs. Center-right plane, 2008-2018



6.3 FACTOR ANALYSIS

Based on the varimax rotated factor loadings and characterization of factors (Table 5), and the scree plot of eigenvalues after factors²², the factor analysis developed using the principal component factor as a method of estimation allows us to characterize nine factors, which are by construction orthogonal in 2017²³. We interpret these factors, sorted in decreasing order of explained variance, as follows: Economic well-being (F1), Crime in densely populated areas (F2), Demographic growth (F3), Crime in less industrialized areas (F4), Organized crime violence (F5), Arsons and extortions in areas with high emigration (F6), Government management of uncontrolled immigration (F7), Crimes against women (F8), and House robberies (F9). The cumulative proportion of the total variance of the data set explained by these nine factors is 77.8% (Table 5). Figure 9 shows the geographical distribution of the scores for each factor in 2017.²⁴

Economic well-being (F1) is the most important factor, explaining 38% of the variance of the data set (Table 5). This factor captures the multi-dimensionality of economic well-being and shows that many of the variables usually considered in the explanations of the vote for populist parties represent different aspects of the same phenomenon. Higher economic well-being corresponds with a higher per capita added value, lower unemployment and higher average wages of employees, lower income inequality, a higher average per-capita wealth, a greater share of the added value of manufacturing and higher exports, and a greater household financial strength. Furthermore, higher economic well-being corresponds with a higher growth rate of population, thanks to greater immigration also from abroad, higher participation in the labor market, a smaller difference between male and female participation in the labor market, a population having a higher level of education, also thanks to the ability to attract young graduates, and a greater circulation of newspapers. The multi-dimensionality of economic well-being resulting from the factor analysis is the result of well-known virtuous and vicious processes of cumulative circular causation (Myrdal, 1957), which give the geographical representation of the scores of this factor the trend described in Figure 9, with increasingly lower values as you move from North to South Italy. Economic well-being is also associated with some forms of micro-crime and with greater emigration abroad, in particular of skilled workers.

The factor Demographic growth (F3) shows that the population trend cannot be reduced to economic wellbeing. In particular, it is possible to identify two distinct areas with higher population growth in relative terms: one in Southern Italy, where the population grows more thanks to the higher birth rate, and one in Northern Italy where the population grows more, mainly thanks to immigration (Figure 9).

²² See Figure A4.1 in Appendix 4 in the Supplemental material.

²³ See Table A4.3 and A4.4 in Appendix 4 in the Supplemental material.

²⁴ Appendix 4 provides more details on the factor analysis and its results. In particular, it contains graphic and geographical representations of the factor scores for both 2012 and 2017.

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Communality	Uniqueness
1. Arsons	-0.384					0.682				0.709	0.291
2. Attempted homicides	-0.380			0.328	0.593					0.680	0.320
3. Bag theft		0.917								0.868	0.132
4. Home burglaries	0.517	0.339	-0.314						0.428	0.767	0.233
5. Drug-related crimes		0.344		0.682						0.644	0.356
6. Extortions		0.311			0.319	0.379			0.329	0.564	0.436
7. House robberies		0.482							0.671	0.750	0.250
8. Intentional homicides					0.804					0.778	0.222
9. Mafia homicides		0.345			0.606					0.734	0.266
10. Micro criminality	0.403	0.796								0.904	0.096
11. Prostitution-related crimes								0.757		0.697	0.303
12. Sexual violence	0.369			0.474			0.340	0.471		0.773	0.227
13. Robbery		0.901								0.890	0.110
14. Robbery homicides				0.384	0.474	-0.323		0.398		0.692	0.308
15. Fertility rate	0.481		0.418				0.529			0.809	0.191
16. Total growth rate of population	0.781		0.456							0.893	0.107
17. Population between 15 and 64 years	-0.505		0.790							0.908	0.092
18. Population over 64 years	0.319		-0.875							0.933	0.067
19. Population density		0.655							-0.335	0.738	0.262
20. Total immigration	0.869									0.887	0.113
21. Isolation (highways, airports, and ports)		-0.491		0.421				-0.329		0.645	0.355
22. Participation in the labor market	0.882									0.911	0.089
23. Participation in the labor market: difference between men and women	-0.804		0.325							0.812	0.188
24. Exports per capita	0.668			-0.482						0.751	0.249
25. Income inequality	-0.656		0.391							0.697	0.303
26. Non-performing entry rate of loans to households	-0.648									0.646	0.354
27. Unemployment: job seekers aged 15 and over	-0.805									0.717	0.283
28. Value added: manufacturing	0.601			-0.668						0.881	0.119
29. Value added: public sector	-0.761			0.426						0.878	0.122
30. Value added: per capita	0.907									0.895	0.105

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Communality	Uniqueness
31. Median gross hourly wage of employees born abroad	0.639					-0.364	0.352			0.747	0.253
32. Median gross hourly wage of employees born in Italy	0.869									0.893	0.107
33. Mean wage of employees	0.833									0.874	0.126
34. Mean wealth per capita	0.870									0.868	0.132
35. Population having at least a secondary degree	0.699				-0.323					0.762	0.238
36. Immigration of graduates between 25 and 39 years	0.848									0.844	0.156
37. Foreign residents	0.763									0.768	0.232
38. Emigration to other Italian regions	-0.335					0.765				0.745	0.255
39. Emigration abroad	0.413						0.579			0.656	0.344
40. Beds in emergency residences for migrants							0.671			0.557	0.443
41. Newspaper circulation	0.708									0.747	0.253
Eigenvalues	15.569	4.517	2.981	2.473	1.607	1.352	1.330	1.056	1.027		
Difference	11.051	1.537	0.508	0.866	0.255	0.022	0.273	0.030			
Proportion	0.380	0.110	0.073	0.060	0.039	0.033	0.032	0.026	0.025		
Cumulative proportion	0.380	0.490	0.563	0.623	0.662	0.695	0.728	0.753	0.778		
Explained variance	13.468	4.209	2.890	2.691	2.354	1.903	1.640	1.453	1.302		
Number of variables	41.000										
Number of retained factors	9.000										

Notes. Factor loadings below 0.3 are omitted. The full table and all the details of the factor analysis performed are contained in Appendix 4.






Notes. This figure shows the geographical distribution of the scores in 2017 for each of the nine factors identified with the exploratory factor analysis. Higher scores are indicated with a darker green (red) when they are related to a factor that can be interpreted as having a positive (negative) meaning.

The presence of the factor Government management of uncontrolled immigration (F7) reflects the approach given by the government to the hospitality program for irregular immigrants, showing that it has been successful in obtaining a distribution in the national territory as homogeneous as possible with the resident population. However, it should be noted that some local administrations have refused to participate in the government program or have given very limited availability.

Finally, the factor analysis has highlighted some types of crime (F2, F4, F5, F6) that have a particular geographic distribution, distinct from those of the other factors. It is interesting to note that some of these are the types of crime (i.e., organized crime violence, crimes against women, crime in densely populated urban areas, arsons, and extortions in Southern provinces) that are most often discussed in the mass media and often feed the political controversy.

6.4 REGRESSION ANALYSIS ON FACTOR SCORES

Results of the regression analysis of voting behavior on factor scores are reported in Table 6.

Abstention (Table 6 Column (1)-(3)), is associated with three factors, as shown by the positive and significant coefficients in all the specifications: Crime in less industrialized areas (F4), Organized crime violence (F5), and Government management of uncontrolled immigration (F7). However, the factor with the highest coefficient in absolute value (with a negative sign, and significant only in the first specification) is Economic well-being (F1), which looks as an important determinant of abstention but does not explain its increase between 2013 and 2018. Based on these results, the drivers of abstention can be considered as three long-term failures of the Italian State: the lack of socio-economic development, the persistence of organized crime, and the inability to limit irregular immigration from poor countries. As such, abstention can be considered as a sign of distrust in the Italian political system as a whole, as a "none of the above" vote, and it signals a demand for protection that is not satisfied by the available political offer.

It is interesting to note that the factor Government management of uncontrolled immigration (F7), reports a significant parameter with a positive sign only for abstention, while it always has a negative sign, when significant, for all parties. This indicates that the government policy for the management of irregular immigration has penalized all parties, through its repercussions on the territories where immigrants and asylum seekers were hosted. A possible explanation is that the activation of the program required the consent of the local administrations, in which both the M5S and the Lega may have been involved.

Even when voting for parties is considered (Table 6 Column (4)-(15)), Economic well-being (F1) is the most important factor, having the greatest absolute value and being significant for all specifications and all parties. The signs and the values of the coefficients show that the M5S collects more votes in the most backward provinces, the Lega in the most advanced ones, and the PD and FI in those set in an intermediate position. The provinces in which the M5S collects the most votes are also characterized by higher demographic growth (F3) and higher crime rates (F2, F4, and F6). These results correspond with the importance given by the movement both to measures in favor of the poorest people and for the restoration of legality, recognized as contrasting crime at all levels.

Table 6 – Regression	Analysis on	Factor	Scores
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	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Abstention	Abstention	Abstention	M5S	M5S	M5S	Lega	Lega	Lega	PD	PD	PD	FI	FI	FI
F1 Economic well-being	-3.973***	-0.320	-0.473	-4.531***	-4.327***	-4.551***	5.106***	2.722***	2.751***	2.962***	0.825^{***}	0.796***	-1.311***	-0.784***	-0.621***
	(0.266)	(0.265)	(0.357)	(0.266)	(0.251)	(0.294)	(0.437)	(0.259)	(0.314)	(0.258)	(0.176)	(0.243)	(0.156)	(0.126)	(0.133)
F2 Crime in densely	-0.438*	-0.025	-0.019	0.697^{***}	0.423**	0.760^{***}	-0.862**	-0.222	-0.435	0.796^{***}	0.254**	0.252	0.252	-0.109	-0.142
populated areas	(0.237)	(0.146)	(0.142)	(0.199)	(0.212)	(0.241)	(0.341)	(0.230)	(0.282)	(0.236)	(0.113)	(0.159)	(0.193)	(0.136)	(0.151)
F3 Demographic growth	1.146***	0.297	0.385	0.900^{***}	1.868^{***}	1.897^{***}	-1.170***	-1.966***	-1.870***	-1.286***	-0.049	-0.064	0.472^{***}	0.315***	0.224**
	(0.239)	(0.223)	(0.252)	(0.222)	(0.230)	(0.259)	(0.427)	(0.214)	(0.206)	(0.280)	(0.129)	(0.153)	(0.163)	(0.107)	(0.108)
F4 Crime in less	2.028^{***}	1.067***	1.130****	0.600^{**}	0.572^{**}	0.789^{**}	-2.496***	-0.865***	-0.922***	-0.447^{*}	-0.490***	-0.573***	-0.400**	0.090	0.029
industrialized areas	(0.233)	(0.230)	(0.268)	(0.262)	(0.247)	(0.307)	(0.450)	(0.233)	(0.272)	(0.227)	(0.102)	(0.129)	(0.162)	(0.127)	(0.137)
F5 Organized crime violence	1.667***	0.494***	0.553***	-0.175	0.422	0.392	-0.910***	-0.808***	-0.653***	-0.734***	-0.393***	-0.460***	0.217	0.435**	0.373***
	(0.282)	(0.174)	(0.152)	(0.385)	(0.317)	(0.302)	(0.185)	(0.139)	(0.166)	(0.226)	(0.131)	(0.144)	(0.172)	(0.184)	(0.112)
F6 Arsons and extortions in	0.446^{*}	-0.186	-0.127	0.313	0.678^{***}	0.580^{**}	-1.327***	-0.315*	-0.299	-0.091	-0.128	-0.143	0.419**	0.350^{**}	0.374***
areas with high emigration	(0.238)	(0.145)	(0.165)	(0.253)	(0.225)	(0.244)	(0.270)	(0.177)	(0.190)	(0.204)	(0.112)	(0.142)	(0.175)	(0.135)	(0.121)
F7 Government management	1.185***	0.908^{***}	0.972^{**}	-1.116***	-1.016***	-1.308***	0.356	-0.436**	-0.269	-0.837***	0.042	0.195	-0.174	0.161	0.071
of uncontrolled immigration	(0.253)	(0.287)	(0.426)	(0.222)	(0.236)	(0.347)	(0.584)	(0.180)	(0.269)	(0.285)	(0.135)	(0.204)	(0.164)	(0.104)	(0.183)
F8 Crimes against women	-0.001	-0.113	-0.143	0.435^{*}	0.238	-0.164	-0.311	0.024	0.499^{**}	-0.373*	-0.080	0.029	0.061	-0.129	-0.238*
	(0.255)	(0.110)	(0.158)	(0.227)	(0.194)	(0.312)	(0.282)	(0.160)	(0.208)	(0.214)	(0.108)	(0.137)	(0.115)	(0.081)	(0.124)
F9 House robberies	-0.268	-0.048	0.036	0.351	0.068	-0.082	-0.310	0.333*	0.313	0.747^{***}	0.076	0.043	0.093	-0.010	0.030
	(0.252)	(0.144)	(0.137)	(0.255)	(0.239)	(0.240)	(0.330)	(0.195)	(0.233)	(0.254)	(0.119)	(0.152)	(0.153)	(0.106)	(0.117)
Constant	29.684***	9.535***	9.661***	21.819***	11.312***	11.636***	12.278***	9.161***	8.469***	12.531***	0.334	0.306	9.507***	1.596**	1.260^{*}
	(0.247)	(1.554)	(2.032)	(0.284)	(1.746)	(1.961)	(0.364)	(0.294)	(0.765)	(0.272)	(0.873)	(0.954)	(0.152)	(0.688)	(0.678)
Lagged dependent variable, 2013	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Factor score changes, 2017- 2012	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES
No. of observations	110	110	110	110	110	110	110	110	110	109	109	109	109	109	109
R-squared	.808	.938	.942	.746	.817	.851	.736	.914	.925	.645	.929	.935	.514	.764	.815
F test	51.6***	255***	145***	57.3***	72.3***	44.8***	59.9***	145***	95.5***	20.1***	77.9***	58.3***	11.3***	27.7***	21.5***

Prest255110210Notes. Robust standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

As far as the Lega is concerned, is interesting to note that it collects more votes where population growth is lower, i.e., in provinces where immigration is lower, given that this is the main factor of demographic growth in the provinces of northern Italy. Furthermore, the parameter associated with the factor Crimes against women (F8) is positive and significant in the third specification (Col. (9)), indicating that the vote for the Lega may have been driven by a demand for greater protection, which is a major focus on the party's agenda.

The fit of the models can be considered more than satisfactory in all specifications and for all the dependent variables.

7. DISCUSSION AND CONCLUSIONS

This paper aimed to understand the demographic and socio-economic drivers of the electoral success in Italy in 2018 of two parties, i.e., M5S and Lega, usually considered left-wing and right-wing populists, and of the decreasing electoral turnout. Our contribution consists of the use of an innovative empirical methodology applied to the above problem.

For this purpose, we first provided detailed descriptive evidence useful to frame the problem, then we used hierarchical cluster analysis to unfold the *natural* groupings of the provinces based on the similarities of their political election results in 2008, 2013, and 2018. We identified four clusters, one with FI and center-right prevalence, a second with M5S and abstention prevalence, a third with Lega and center-right prevalence, and finally a cluster with PD and center-left prevalence. This evidence was particularly insightful in raising concerns about abstention choices.

Then, we proceeded with factor analysis to characterize nine factors out of 41 demographic and socioeconomic variables that are likely to influence voting behavior. These factors encompass different phenomena, such as economic well-being, demographic growth, organized crime violence, government management of irregular immigration, and some types of crimes that are subject to political debate, such as extortion, home robbery, and crimes against women. One specific advantage of factorizing a large number of available variables into nine main factors is to allow bypassing the non-conclusive contraposition between cultural or economic determinants of populist electoral success. Finally, we performed a regression analysis to understand the extent to which each factor affected voters' electoral preferences.

In conclusion, this paper offered a methodological contribution that simultaneously uses machine learning techniques (cluster analysis and factor analysis) and more traditional regression techniques to explain the drivers of voting behavior, with specific attention to the phenomenon of abstention. We applied this methodology using an original dataset including a set of indicators much larger than those normally employed by other scholars in the field. We leave to future research the task of improving the analysis through a perfect identification of the relationships of main interest.

Results show that an important phenomenon emerging from the Italian 2018 general elections, and strongly intertwined with the persistence of electoral instability, is the resurgence of territory as one of the major elements affecting voting patterns. However, when only the national context is considered, Italy does not exactly fit into the narrative that sees populism as revenge for places that don't matter or have been left behind, as proposed, for example, by Rodríguez-Pose (2018). With this perspective, it would not be possible to explain

the success of the Lega in the most economically advanced provinces of Northern Italy. However, if we consider Italy in the international context, the whole country has lagged behind the other main European countries, and its political and economic weight in the international context, and Europe in particular, has decreased. In this broader context, the success of the M5S, on the one hand, can be seen as the revenge of the Southern provinces, which have remained behind and marginalized compared to the rest of the country. The success of the Lega, on the other hand, can be seen as the revenge of the Northern provinces, whose reference points are the most advanced European regions with which the gap has widened. The holding of the PD in some central provinces can be considered as an intermediate position of temporary satisfaction with the status quo, especially by older people.

In the Italian case, the mainstream parties are besieged by populism that comes from both the richer and poorer parts of society. On the one hand, this particularity of the Italian case indicates that the interpretative category of populism should be qualified, not being able to fully convey the complexity of this phenomenon. On the other hand, it indicates that the Italian case has European relevance since the success of the Lega is at least in part the result of a contestation of European policies, supported and endorsed by the mainstream parties, which come from a large part of the voters of the more economical advanced Italia provinces. As regards the ever-decreasing participation in the vote, our analysis highlighted that abstention is associated with three factors that can be considered three long-term failures of the Italian State: the lack of socio-economic development and security, the persistence of organized crime, and the inability to limit irregular immigration from poor countries. As such, abstention can be considered as a sign of distrust in the Italian political system as a whole, as a "none of the above" vote, and a demand for protection not satisfied by the political offer.

Despite some measures, it cannot be said that the expectations of the citizens who voted for populist parties in 2018 have been met, and the latest emergency government chaired by Mario Draghi, supported by all Italian parties except Fratelli d'Italia (FdI, Brothers of Italy), testifies to the normalization of these parties. Part of the consensus gathered in 2018 by Lega and M5S, and that these two parties will lose, can flow into FdI, and part into abstention.

We think the most likely outcome will be a further drastic increase in abstention, which could lead to a new unpredictable balance between mainstream and populist parties. The main unknown factor is the possibility that new parties can be formed and stand for election. With a higher abstention, even small shifts in consensus can prove decisive.

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APPENDIX - SUPPLEMENTAL MATERIAL

Appendix 1 Political elections results, 2008-2018

Table A1.1 - Political elections 2008, 2013, and 2018: Results

Political elections	2008			2013			2018		
	Number	% of citizens	% of valid votes	Number	% of citizens	% of valid votes	Number	% of citizens	% of valid votes
Abstention and turnout									
Citizens entitled to vote	47,142,436	100%		47,005,432	100%		46,604,896	100%	
Abstention	10,617,017	22.5%		12,932,157	27.5%		14,955,989	32.1%	
Turnout	36,525,420	77.5%	100%	34,073,272	72.5%	100%	31,648,908	67.9%	100%
Parties									
Movimento 5 Stelle				8,702,987	18.5%	25.5%	10,252,280	22.0%	32.4%
Lega	3,026,844	6.4%	8.3%	1,392,537	3.0%	4.1%	5,587,146	12.0%	17.7%
Partito Democratico	12,092,998	25.7%	33.1%	8,644,542	18.4%	25.4%	5,887,357	12.6%	18.6%
Forza Italia	13,642,745	28.9%	37.4%	7,332,829	15.6%	21.5%	4,471,741	9.6%	14.1%
Fratelli d'Italia				668,886	1.4%	2.0%	1,398,109	3.0%	4.4%
Political areas and alignments									
Extreme Left	378,116	0.8%	1.0%	95,150	0.2%	0.3%	480,285	1.0%	1.5%
Center-Left	15,343,652	32.5%	42.0%	10,852,847	23.1%	31.9%	7,085,809	15.2%	22.4%
Center-Liberals	103,760	0.2%	0.3%	3,364,715	7.2%	9.9%	971,815	2.1%	3.1%
Center-Right	19,130,396	40.6%	52.4%	10,180,386	21.7%	29.9%	11,905,528	25.5%	37.6%
Extreme Right	1,026,485	2.2%	2.8%	421,367	0.9%	1.2%	502,238	1.1%	1.6%
Movimento 5 Stelle				8,702,987	18.5%	25.5%	10,252,280	22.0%	32.4%

Notes. In 2008, Forza Italia and Alleanza Nazionale (which later became Fratelli d'Italia) stood in the elections together with a list called Il popolo delle libertà (The people of freedom). The source of the data is the Italian Ministry of the Interior.

	No.	Mean	Std. Dev.	Min.	1st Quartile	Median	3rd Quartile	Max
Abstention	330	26.9	6.53	14.7	22.1	26.2	30.9	44.1
Extreme left	330	.703	.498	0	.39	.63	1	3.28
Center-left	330	23.8	9.79	6.52	16.4	22.7	29.5	53.4
Liberals	330	2.99	3.16	0	.31	1.9	5.07	16.3
Center-right	330	28.6	10.2	6.35	20	26.5	36.2	55.6
Extreme right	330	1.36	.79	.31	.79	1.12	1.75	3.88
Partito Democratico	330	18.9	8.21	0	12.9	17.9	23.6	44.3
Forza Italia	330	17.6	8.73	0	10.6	15.1	25	43.3
Lega	330	6.93	7.67	0	.17	3.73	12.6	29
Movimento 5 Stelle	330	13.5	10.4	0	0	16.6	20.9	33.4

Table A1.2 - Political elections 2008, 2013, and 2018: Descriptive statistics

Notes. The total number of voters who abstained or did not cast a valid vote (abstention) and the total number of valid votes obtained by each party or political area are expressed in percentage points as a share of citizens entitled to vote.

Table A1.3 - Politica	l elections 2018:	Descriptive	statistics
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	No.	Mean	Std. Dev.	Min.	1st Quartile	Median	3rd Quartile	Max
Abstention	110	29.7	5.66	21.7	25.2	28.2	33.7	43.3
Extreme left	110	1.03	.528	.3	.62	.92	1.35	3.28
Center-left	110	15	5.37	6.52	11.1	14.5	17.5	36.9
Liberals	110	1.87	.76	0	1.32	1.91	2.32	4.03
Center-right	110	25.5	6.79	10.3	20.2	24.4	30.5	40.8
Extreme right	110	1.08	.355	.38	.84	1.02	1.28	2.56
Partito Democratico	110	12.4	4.68	0	8.84	12.2	14.9	27.7
Forza Italia	110	9.43	2.35	0	7.87	9.26	10.8	14.6
Lega	110	12.3	7.12	1.82	4.78	12.6	18.1	28.4
Movimento 5 Stelle	110	21.8	5.66	8.32	16.9	20.5	26.8	33.4

Notes. The total number of voters who abstained or did not cast a valid vote (abstention) and the total number of valid votes obtained by each party or political area are expressed in percentage points as a share of citizens entitled to vote.



Figure A1.1 - Political elections 2008

Notes. The total number of voters who abstained or did not cast a valid vote (abstention) and the total number of valid votes obtained by each party or political area are expressed in percentage points as a share of citizens entitled to vote.



Figure A1.2 - Political elections 2013

Notes. The total number of voters who abstained or did not cast a valid vote (abstention) and the total number of valid votes obtained by each party or political area are expressed in percentage points as a share of citizens entitled to vote.



Figure A1.3 - Political elections 2018

Notes. The total number of voters who abstained or did not cast a valid vote (abstention) and the total number of valid votes obtained by each party or political area are expressed in percentage points as a share of citizens entitled to vote.



Figure A1.4 - Abstention, 2008-2018

Notes. The total number of voters who abstained or did not cast a valid vote is expressed in percentage points as a share of citizens entitled to vote.





Notes. The total number of valid votes obtained by the party is expressed in percentage points as a share of citizens entitled to vote.



Figure A1.6 - Lega, 2008-2018

Notes. The total number of valid votes obtained by the party is expressed in percentage points as a share of citizens entitled to vote.



Figure A1.7 - Partito Democratico, 2008-2018

Notes. The total number of valid votes obtained by the party is expressed in percentage points as a share of citizens entitled to vote.



Figure A1.8 - Forza Italia, 2008-2018

Notes. The total number of valid votes obtained by the party is expressed in percentage points as a share of citizens entitled to vote. In 2008, Forza Italia and Alleanza Nazionale (which later became Fratelli d'Italia) stood in the elections together with a list called II popolo delle libertà (The people of freedom).



Figure A1.9 - Lega and Movimento 5 Stelle, 2008-2018

Notes. The total number of valid votes obtained by the parties is expressed in percentage points as a share of citizens entitled to vote.

Figure A1.10 - Political elections 2008: Scatterplots



Figure A1.11 - Political elections 2013: Scatterplots



Figure A1.12 - Political elections 2018: Scatterplots





Figure A1.13 - Center-left vs. Center-right, 2008-2018: Scatterplot

Figure A1.14 - Lega vs. Forza Italia, 2008-2018: Scatterplot



2008	Abstention	Extreme left	Center-left	Liberals	Center-right	Extreme right	PD	Forza Italia	Lega
Abstention	1.000^{***}	-0.452***	-0.453***	-0.013	-0.207	-0.585***	-0.457***	0.273***	-0.559***
	(0.000)	(0.000)	(0.000)	(0.897)	(0.031)	(0.000)	(0.000)	(0.004)	(0.000)
Extreme left	-0.452***	1.000***	0.604***	0.436***	-0.333***	0.580^{***}	0.718^{***}	-0.103	-0.097
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.284)	(0.318)
Center-left	-0.453***	0.604^{***}	1.000^{***}	0.232	-0.770***	0.315***	0.853***	-0.447***	-0.274***
	(0.000)	(0.000)	(0.000)	(0.015)	(0.000)	(0.001)	(0.000)	(0.000)	(0.004)
Liberals	-0.013	0.436***	0.232	1.000^{***}	-0.258***	0.308***	0.248^{***}	-0.083	-0.161
	(0.897)	(0.000)	(0.015)	(0.000)	(0.007)	(0.001)	(0.009)	(0.388)	(0.095)
Center-right	-0.207	-0.333***	-0.770***	-0.258***	1.000^{***}	0.027	-0.574***	0.319***	0.682^{***}
	(0.031)	(0.000)	(0.000)	(0.007)	(0.000)	(0.780)	(0.000)	(0.001)	(0.000)
Extreme right	-0.585***	0.580^{***}	0.315***	0.308***	0.027	1.000^{***}	0.412^{***}	0.036	0.116
	(0.000)	(0.000)	(0.001)	(0.001)	(0.780)	(0.000)	(0.000)	(0.707)	(0.231)
Partito Democratico	-0.457***	0.718^{***}	0.853***	0.248^{***}	-0.574***	0.412^{***}	1.000^{***}	-0.289***	-0.200
	(0.000)	(0.000)	(0.000)	(0.009)	(0.000)	(0.000)	(0.000)	(0.002)	(0.037)
Forza Italia	0.273***	-0.103	-0.447***	-0.083	0.319***	0.036	-0.289***	1.000^{***}	-0.411***
	(0.004)	(0.284)	(0.000)	(0.388)	(0.001)	(0.707)	(0.002)	(0.000)	(0.000)
Lega	-0.559***	-0.097	-0.274***	-0.161	0.682^{***}	0.116	-0.200	-0.411***	1.000***
	(0.000)	(0.318)	(0.004)	(0.095)	(0.000)	(0.231)	(0.037)	(0.000)	(0.000)

 Table A1.4 - Political elections 2008: Correlation matrix

2013	Abstention	Extreme left	Center-left	Liberals	Center-right	Extreme right	PD	Forza Italia	Lega	M5S
Abstention	1.000^{***}	-0.160	-0.617***	-0.667***	-0.089	-0.103	-0.675***	0.174	-0.436***	-0.207
	(0.000)	(0.096)	(0.000)	(0.000)	(0.356)	(0.287)	(0.000)	(0.071)	(0.000)	(0.031)
Extreme left	-0.160	1.000^{***}	0.423***	-0.266***	-0.498***	0.179	0.452***	-0.130	-0.450***	0.348***
	(0.096)	(0.000)	(0.000)	(0.005)	(0.000)	(0.063)	(0.000)	(0.178)	(0.000)	(0.000)
Center-left	-0.617***	0.423***	1.000^{***}	0.124	-0.567***	-0.062	0.815***	-0.556***	-0.138	-0.049
	(0.000)	(0.000)	(0.000)	(0.200)	(0.000)	(0.523)	(0.000)	(0.000)	(0.152)	(0.611)
Liberals	-0.667***	-0.266***	0.124	1.000***	0.403***	-0.124	0.257***	-0.129	0.754***	-0.073
	(0.000)	(0.005)	(0.200)	(0.000)	(0.000)	(0.198)	(0.007)	(0.183)	(0.000)	(0.450)
Center-right	-0.089	-0.498***	-0.567***	0.403***	1.000^{***}	0.089	-0.324***	0.659***	0.699***	-0.288***
	(0.356)	(0.000)	(0.000)	(0.000)	(0.000)	(0.357)	(0.001)	(0.000)	(0.000)	(0.002)
Extreme right	-0.103	0.179	-0.062	-0.124	0.089	1.000^{***}	-0.081	0.338***	-0.186	0.143
	(0.287)	(0.063)	(0.523)	(0.198)	(0.357)	(0.000)	(0.405)	(0.000)	(0.053)	(0.139)
Partito Democratico	-0.675***	0.452^{***}	0.815***	0.257***	-0.324***	-0.081	1.000^{***}	-0.380***	0.022	0.165
	(0.000)	(0.000)	(0.000)	(0.007)	(0.001)	(0.405)	(0.000)	(0.000)	(0.817)	(0.086)
Forza Italia	0.174	-0.130	-0.556***	-0.129	0.659^{***}	0.338***	-0.380***	1.000^{***}	-0.002	-0.019
	(0.071)	(0.178)	(0.000)	(0.183)	(0.000)	(0.000)	(0.000)	(0.000)	(0.982)	(0.841)
Lega	-0.436***	-0.450***	-0.138	0.754***	0.699***	-0.186	0.022	-0.002	1.000***	-0.277***
	(0.000)	(0.000)	(0.152)	(0.000)	(0.000)	(0.053)	(0.817)	(0.982)	(0.000)	(0.004)
Movimento 5 Stelle	-0.207	0.348***	-0.049	-0.073	-0.288***	0.143	0.165	-0.019	-0.277***	1.000***
	(0.031)	(0.000)	(0.611)	(0.450)	(0.002)	(0.139)	(0.086)	(0.841)	(0.004)	(0.000)

Table A1.5 - Political elections 2013: Correlation matrix

2018	Abstention	Extreme left	Center-left	Liberals	Center-right	Extreme right	PD	Forza Italia	Lega	M5S
Abstention	1.000^{***}	-0.333***	-0.643***	-0.675***	-0.664***	-0.471***	-0.768***	0.434***	-0.766***	0.558***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Extreme left	-0.333***	1.000^{***}	0.531***	0.209	-0.238	0.033	0.557***	-0.433***	-0.088	-0.028
	(0.000)	(0.000)	(0.000)	(0.029)	(0.012)	(0.729)	(0.000)	(0.000)	(0.358)	(0.772)
Center-left	-0.643***	0.531***	1.000***	0.515***	0.131	0.279***	0.813***	-0.647***	0.375***	-0.592***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.172)	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)
Liberals	-0.675***	0.209	0.515***	1.000***	0.486^{***}	0.194	0.641***	-0.249***	0.552***	-0.553***
	(0.000)	(0.029)	(0.000)	(0.000)	(0.000)	(0.042)	(0.000)	(0.009)	(0.000)	(0.000)
Center-right	-0.664***	-0.238	0.131	0.486^{***}	1.000^{***}	0.481***	0.324***	-0.003	0.930***	-0.711***
	(0.000)	(0.012)	(0.172)	(0.000)	(0.000)	(0.000)	(0.001)	(0.975)	(0.000)	(0.000)
Extreme right	-0.471***	0.033	0.279***	0.194	0.481^{***}	1.000***	0.215	-0.312***	0.518^{***}	-0.462***
	(0.000)	(0.729)	(0.003)	(0.042)	(0.000)	(0.000)	(0.024)	(0.001)	(0.000)	(0.000)
Partito Democratico	-0.768***	0.557***	0.813***	0.641***	0.324***	0.215	1.000***	-0.409***	0.468^{***}	-0.481***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.024)	(0.000)	(0.000)	(0.000)	(0.000)
Forza Italia	0.434***	-0.433***	-0.647***	-0.249***	-0.003	-0.312***	-0.409***	1.000^{***}	-0.345***	0.402^{***}
	(0.000)	(0.000)	(0.000)	(0.009)	(0.975)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Lega	-0.766***	-0.088	0.375***	0.552***	0.930***	0.518***	0.468^{***}	-0.345***	1.000^{***}	-0.817***
	(0.000)	(0.358)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Movimento 5 Stelle	0.558^{***}	-0.028	-0.592***	-0.553***	-0.711***	-0.462***	-0.481***	0.402^{***}	-0.817***	1.000^{***}
	(0.000)	(0.772)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)

 Table A1.6 - Political elections 2018: Correlation matrix

Appendix 2 Cluster analysis



Figure A2.1 - Dendrograms with Euclidean distance

Figure A2.2 - Dendrograms with Manhattan distance



Figure A2.3 - Dendrograms with Ward's linkage



Table A2.1 – Choice of the number of clusters: statistics

Number of clusters	Calinski-Harabasz pseudo-F L2	Duda-Hart pseudo-T- squared L2	Calinski-Harabasz pseudo-F L1
1		344.793	
2	344.793	87.366	344.793
3	252.217	181.892	238.913
4	230.279	57.491	214.610
5	225.012	75.858	208.055
6	227.702	35.310	208.508
7	225.447	25.644	212.473
8	220.645	54.725	207.598
9	212.539	35.800	211.820
10	211.416	63.209	211.062
11	208.276	14.994	215.424
12	210.438	16.529	219.444
13	216.695	23.891	217.707
14	212.477	23.143	217.332
15	211.914	20.620	214.498

Table A2.2 – Cluster description

	Clust	er 1	Clust	er 2	Clust	ter 3	Clust	ter 4	Tot	al
	"Blu	1e''	"Y ell	OW''	"Gre	een''	"Re	ed″		
	No.	Mean	No	Mean	No.	Mean	No.	Mean	No.	Mean
Abstention	108	22.96	45	36.53	59	26.58	118	26.91	330	26.87
Extreme left	108	0.86	45	0.73	59	0.99	118	0.41	330	0.70
Center-left	108	32.89	45	11.07	59	15.55	118	24.48	330	23.81
Liberals	108	0.25	45	1.58	59	2.22	118	6.42	330	2.99
Center-right	108	39.80	45	19.06	59	30.40	118	21.01	330	28.57
Extreme right	108	2.19	45	0.76	59	1.25	118	0.89	330	1.36
Partito Democratico	108	26.21	45	8.61	59	13.38	118	18.94	330	18.92
Forza Italia	108	28.58	45	11.56	59	9.07	118	14.09	330	17.59
Lega	108	5.95	45	3.74	59	17.32	118	3.84	330	6.93
Movimento 5 Stelle	108	0	45	26.64	59	19.01	118	18.19	330	13.54

Table A2.3 - ANOVA table

	F_test	p-value
Abstention	77.87	0
Extreme left	30.34	0
Center-left	195.45	0
Liberals	266.69	0
Center-right	271.31	0
Extreme right	145.99	0
Partito Democratico	136.52	0
Forza Italia	473.05	0
Lega	77.72	0
Movimento 5 Stelle	918.58	0







Figure A2.5 – Plot of clusters in the Center-right vs. Center-left plane, 2008-2018







Figure A2.7 – Plot of clusters in the Movimento 5 Stelle vs. Abstention plane, 2013-2018





Appendix 3 Data description

	Variable	Description		Mean	Standard. Deviation	Min.	1st Quartile	Median	3rd Quartile	Max	
	Crime										
1.	Arsons	Reported crimes per 10,000 inhabitants	220	2.325	2.359	0.158	0.919	1.403	2.738	11.891	
2.	Attempted homicides	Reported crimes per 10,000 inhabitants	220	0.214	0.157	0.000	0.109	0.181	0.277	1.114	
3.	Bag theft	Reported crimes per 10,000 inhabitants	220	1.877	1.844	0.048	0.747	1.246	2.267	10.686	
4.	Home burglaries	Reported crimes per 10,000 inhabitants	220	34.877	14.258	10.837	23.911	32.863	45.341	74.711	
5.	Drug-related crimes	Reported crimes per 10,000 inhabitants	220	5.709	2.088	1.449	4.047	5.521	7.185	11.399	
6.	Extortions	Reported crimes per 10,000 inhabitants	220	1.184	0.493	0.411	0.833	1.114	1.452	2.861	
7.	House robberies	Reported crimes per 10,000 inhabitants	220	0.454	0.244	0.079	0.295	0.398	0.576	1.769	
8.	Intentional homicides	Reported crimes per 10,000 inhabitants	220	0.079	0.086	0.000	0.031	0.059	0.102	0.735	
9.	Mafia homicides	Reported crimes per 10,000 inhabitants	220	0.006	0.027	0.000	0.000	0.000	0.000	0.245	
10.	Micro criminality	Reported crimes per 10,000 inhabitants	220	187	84.145	23.000	131.250	174.400	229.250	531.500	
11.	Prostitution-related crimes	Reported crimes per 10,000 inhabitants	220	0.172	0.138	0.000	0.078	0.136	0.220	0.739	
12.	Sexual violence	Reported crimes per 10,000 inhabitants	220	0.738	0.262	0.234	0.561	0.701	0.864	2.344	
13.	Robbery	Reported crimes per 10,000 inhabitants	220	3.863	3.216	0.551	1.958	3.182	4.309	26.107	
14.	Robbery homicides	Reported crimes per 10,000 inhabitants	220	0.005	0.012	0.000	0.000	0.000	0.000	0.064	
	Demography										
15.	Fertility rate	Number of children per woman	220	1.330	0.127	0.930	1.240	1.325	1.420	1.740	
16.	Total growth rate of population	Rate per thousand inhabitants	220	-1.146	4.582	-12.900	-4.500	-1.500	1.750	15.700	
17.	Population between 15 and 64 years	Percentage at January 1	220	64.344	1.747	59.800	63.200	64.500	65.550	68.700	
18.	Population over 64 years	Percentage at January 1	220	22.425	2.655	15.300	20.650	22.350	24.250	28.900	
19.	Population density	Number of inhabitants per square kilometer	220	260	371	30.8	104	173	274	2,635	
20.	Total immigration	Rate per thousand inhabitants	220	2.013	3.872	-8.300	-0.700	2.200	4.350	15.800	
	Economics										
21.	Isolation (highways, airports, and ports)	Travel times to urban and logistic nodes	220	52.245	15.735	25.481	41.419	50.220	58.552	120.355	
22.	Participation to labor market	Labor force aged 15-64 years out of the total population aged 15-64 (percentage)	220	64.538	8.067	45.409	57.134	67.897	70.769	75.747	

Table 3.1 – Summary statistics of explanatory variables used for factor analysis

	Variable	Description		Mean	Standard. Deviation	Min.	1st Quartile	Median	3rd Quartile	Max	
23.	Participation to labor market: difference between men and women	Percentage	220	19.331	6.590	8.288	14.449	17.749	23.981	37.005	
24.	Exports per capita	Euro per inhabitant	220	6,569	5,435	2,139	1,441	5,9918	10,629	25,905	
25.	Income inequality	Gini concentration index on equivalent net household income	220	0.312	0.030	0.251	0.290	0.300	0.336	0.389	
26.	Non-performing entry rate of loans to households	Percentage of loans to households	220	1.320	0.391	0.400	1.000	1.300	1.600	2.300	
27.	Unemployment: job seekers aged 15 and over	Percentage of population between 15 and 64 years	220	7.292	2.726	2.353	5.171	6.756	8.984	16.953	
28.	Value added: manufacturing	Percentage of the total value added	220	15.399	8.546	2.925	7.828	14.067	21.406	37.663	
29.	Value added: public sector	Percentage of the total value added	220	19.563	6.363	9.453	14.147	18.219	24.930	32.968	
30.	Value added: per capita	Euro per inhabitant	220	23,079	6,206	13,251	18,137	22,635	26,967	48,751	
31.	Median gross hourly wage of employees born abroad	Euro	220	9.859	0.536	8.330	9.550	9.915	10.185	11.810	
32.	Median gross hourly wage of employees born in Italy	Euro	220	11.180	0.843	9.520	10.480	11.165	11.790	13.550	
33.	Mean wage of employees	Euro	220	18,652	3,543	11,720	15,312	18,685	21,649	29,714	
34.	Mean wealth per capita	Euro	220	148,340	44,806	69,310	108,594	154,120	181,852	295,154	
	Education, innovation, migration										
35.	Population having at least a secondary degree	Percentage of the population between 25 and 64 years	220	57.772	7.849	39.300	51.900	59.050	63.750	75.700	
36.	Immigration of graduates between 25 and 39 years	Rate per 1,000 resident graduates	220	-10.160	16.290	-58.700	-20.400	-7.550	0.300	36.600	
37.	Foreign residents	Rate per 10,000 inhabitants between 15 and 64 years	220	10.996	5.514	1.274	5.761	11.692	15.524	26.135	
38.	Emigration to other Italian regions	Number of residents emigrated to other Italian regions per 10,000 inhabitants	220	62.634	21.213	25.675	47.902	58.412	75.677	148.959	
39.	Emigration abroad	Number of residents emigrated abroad per 10,000 inhabitants	220	22.397	7.991	6.242	16.888	22.036	27.776	50.510	
40.	Beds in emergency residences for migrants	Rate per 10,000 inhabitants between 15 and 64 years	220	8.829	13.907	0.000	2.086	5.080	10.151	134.386	
41.	Newspaper circulation	Average number of newspapers distributed per day per 10,000 inhabitants above 14 years	220	560	326	62	313	510	744	1.932	

Notes. The Ministry of Interior is the source for the variable 40, and ADS is the source for the variable 41. For all other variables, the source is Istat. All the variables are at the provincial level except variable 25, which is at the regional level.

Figure A3.1 - Correlation Heatmap



Table 3.2 – Correlation matrix – Part I

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.
1.	Arsons	1.000	0.247*	-0.085	-0.302*	-0.005	0.218*	-0.019	0.085	0.199*	-0.277*	-0.013	-0.223*	-0.122*	-0.049	-0.263*	-0.243*	0.274*	-0.172*	-0.197*	-0.287*	0.214*
••	110010	1.000	(0.000)	(0.207)	(0.000)	(0.943)	(0.001)	(0.777)	(0.209)	(0.003)	(0,000)	(0.844)	(0.001)	(0.071)	(0.469)	(0,000)	(0.000)	(0.000)	(0.011)	(0.003)	(0.000)	(0.001)
2	Attempted homicides	0.247*	1,000	0.120*	0.261*	0.180*	0.343*	0.210*	0.640*	0.501*	0.131*	0.050	0.115*	0.132*	0.178*	0.162*	0.166*	0.361*	0.208*	0.043	0.302*	0.273*
2.	Attempted homicides	(0.000)	1.000	(0.076)	-0.201	(0.007)	(0.000)	(0.001)	(0.000)	(0.000)	(0.052)	-0.050	-0.115	(0.051)	(0.008)	-0.102	(0.014)	(0.000)	-0.298	-0.043	-0.302	(0.000)
2	Dec the ft	(0.000)	0.120*	(0.076)	(0.000)	(0.007)	(0.000)	(0.001)	(0.000)	(0.000)	(0.052)	(0.461)	(0.090)	(0.031)	(0.008)	(0.016)	(0.014)	(0.000)	(0.000)	(0.323)	(0.000)	(0.000)
3.	Bag then	-0.085	0.120*	1.000	0.242*	0.280*	0.273*	0.535*	0.090	0.194*	0.038*	0.196*	0.141*	0.870*	0.020	0.242*	0.232*	0.120*	-0.248*	0.467*	0.095	-0.298*
		(0.207)	(0.076)		(0.000)	(0.000)	(0.000)	(0.000)	(0.183)	(0.004)	(0.000)	(0.003)	(0.036)	(0.000)	(0.770)	(0.000)	(0.001)	(0.075)	(0.000)	(0.000)	(0.159)	(0.000)
4.	Home burglaries	-0.302*	-0.261*	0.242*	1.000	-0.001	-0.248*	0.333*	-0.257*	-0.247*	0.693*	0.319*	0.248*	0.204*	-0.108	0.404*	0.469*	-0.412*	0.302*	0.114*	0.589*	-0.404*
		(0.000)	(0.000)	(0.000)		(0.984)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)	(0.111)	(0.000)	(0.000)	(0.000)	(0.000)	(0.093)	(0.000)	(0.000)
5.	Drug-related crimes	-0.005	0.180*	0.280*	-0.001	1.000	0.270*	0.060	-0.009	-0.034	0.269*	0.120*	0.317*	0.229*	0.088	-0.194*	-0.000	-0.137*	0.199*	0.093	0.093	0.010
		(0.943)	(0.007)	(0.000)	(0.984)		(0.000)	(0.375)	(0.896)	(0.617)	(0.000)	(0.076)	(0.000)	(0.001)	(0.191)	(0.004)	(0.996)	(0.043)	(0.003)	(0.168)	(0.169)	(0.887)
6.	Extortions	0.218*	0.343*	0.273*	-0.248*	0.270*	1.000	0.137*	0.193*	0.250*	-0.000	-0.034	-0.032	0.276*	-0.044	-0.201*	-0.311*	0.153*	-0.157*	0.085	-0.371*	-0.014
		(0.001)	(0.000)	(0.000)	(0.000)	(0.000)		(0.043)	(0.004)	(0.000)	(0.998)	(0.618)	(0.639)	(0.000)	(0.516)	(0.003)	(0.000)	(0.024)	(0.020)	(0.208)	(0.000)	(0.837)
7.	House robberies	-0.019	0.219*	0.535*	0.333*	0.060	0.137*	1.000	0.200*	0.127*	0.420*	0.222*	0.067	0.555*	0.094	0.129*	0.212*	0.203*	-0.215*	0.107	0.130*	-0.202*
		(0.777)	(0.001)	(0.000)	(0.000)	(0.375)	(0.043)		(0.003)	(0.060)	(0.000)	(0.001)	(0.320)	(0.000)	(0.163)	(0.056)	(0.002)	(0.003)	(0.001)	(0.113)	(0.054)	(0.003)
8.	Intentional homicides	0.085	0.640*	0.090	-0.257*	-0.009	0.193*	0.200*	1.000	0.655*	-0.147*	-0.129*	-0.201*	0.140*	0.266*	-0.153*	-0.187*	0.316*	-0.275*	-0.032	-0.322*	0.173*
		(0.209)	(0.000)	(0.183)	(0.000)	(0.896)	(0.004)	(0.003)		(0.000)	(0.030)	(0.056)	(0.003)	(0.038)	(0.000)	(0.023)	(0.006)	(0.000)	(0.000)	(0.636)	(0.000)	(0.010)
9.	Mafia homicides	0.199*	0.501*	0.194*	-0.247*	-0.034	0.250*	0.127*	0.655*	1.000	-0.099	-0.052	-0.212*	0.241*	-0.019	0.033	-0.156*	0.237*	-0.306*	0.146*	-0.315*	0.047
		(0.003)	(0.000)	(0.004)	(0.000)	(0.617)	(0.000)	(0.060)	(0.000)		(0.143)	(0.441)	(0.002)	(0.000)	(0.777)	(0.629)	(0.021)	(0.000)	(0.000)	(0.030)	(0.000)	(0.490)
10.	Micro criminality	-0.277*	-0.131*	0.638*	0.693*	0.269*	-0.000	0.420*	-0.147*	-0.099	1.000	0.352*	0.397*	0.618*	-0.070	0.426*	0.555*	-0.205*	0.068	0.373*	0.551*	-0.445*
		(0.000)	(0.052)	(0,000)	(0,000)	(0,000)	(0.998)	(0.000)	(0.030)	(0.143)		(0,000)	(0,000)	(0,000)	(0.301)	(0,000)	(0.000)	(0.002)	(0.318)	(0,000)	(0,000)	(0.000)
11	Prostitution-related	-0.013	-0.050	0.196*	0.319*	0.120*	-0.034	0 222*	-0.129*	-0.052	0.352*	1,000	0 241*	0.182*	0.045	0.235*	0.295*	-0.162*	0.117*	0.065	0 341*	-0.286*
	crimes	(0.844)	(0.461)	(0.003)	(0.000)	(0.076)	(0.618)	(0.001)	(0.056)	(0.441)	(0.000)	1.000	(0.000)	(0.007)	(0.504)	(0.000)	(0.000)	(0.016)	(0.084)	(0.338)	(0.000)	(0.000)
12	Sexual violence	-0.223*	-0.115*	0.141*	0.248*	0.317*	-0.032	0.067	-0.201*	-0.212*	0.397*	0.241*	1,000	0 149*	0.088	0.168*	0 339*	-0.271*	0.262*	0 191*	0.457*	-0.117*
12.	Sexual violence	(0.001)	(0.090)	(0.036)	(0.000)	(0.000)	(0.639)	(0.320)	(0.003)	(0.002)	(0.000)	(0.000)	1.000	(0.027)	(0.196)	(0.012)	(0.000)	(0.000)	(0.000)	(0.004)	(0,000)	(0.084)
13	Robbery	-0.122*	0.132*	0.870*	0.204*	0.229*	0.276*	0.555*	0.140*	(0.002) 0.241*	0.618*	0.182*	0.149*	1.000	0.023	0.288*	0 324*	0.221*	-0.346*	0.623*	0.148*	-0.310*
15.	Robbery	(0.071)	(0.051)	(0,000)	(0.002)	(0.001)	(0.000)	(0.000)	(0.038)	(0.000)	(0.000)	(0.007)	(0.027)	1.000	(0.733)	(0.000)	(0.024)	(0.001)	(0,000)	(0.023	(0.028)	(0.000)
14	Dobhamy homioidae	0.040	(0.051)	(0.000)	0.102	0.001)	(0.000)	0.000)	0.058)	0.000)	0.000)	0.007)	(0.027)	0.022	1.000	0.162*	(0.000)	0.152*	0.061	(0.000)	0.020	(0.000)
14.	Robbery nonnerdes	-0.049	(0.008)	0.020	-0.108	0.088	-0.044	(0.162)	(0.000)	-0.019	-0.070	0.043	0.088	0.025	1.000	-0.105*	(0.208)	(0.133°)	-0.001	(0.826)	(0.050)	(0.021)
15	En stillten meter	(0.409)	(0.008)	(0.770)	(0.111)	(0.191)	(0.516)	(0.105)	(0.000)	(0.777)	(0.501)	(0.304)	(0.190)	(0.755)	0.1(2*	(0.013)	(0.398)	(0.025)	(0.570)	(0.820)	(0.403)	(0.021)
15.	Fertility rate	-0.263*	-0.162*	0.242*	0.404*	-0.194*	-0.201*	0.129*	-0.153*	0.033	0.426*	0.235*	0.168*	0.288*	-0.163*	1.000	0.640*	-0.042	-0.277*	0.262*	0.435*	-0.234*
	T 1 1 1	(0.000)	(0.016)	(0.000)	(0.000)	(0.004)	(0.003)	(0.056)	(0.023)	(0.629)	(0.000)	(0.000)	(0.012)	(0.000)	(0.015)	0.640%	(0.000)	(0.557)	(0.000)	(0.000)	(0.000)	(0.000)
16.	Total growth rate of	-0.243*	-0.166*	0.232*	0.469*	-0.000	-0.311*	0.212*	-0.18/*	-0.156*	0.555*	0.295*	0.339*	0.324*	0.057	0.640*	1.000	0.108	-0.232*	0.290*	0.857*	-0.160*
	population	(0.000)	(0.014)	(0.001)	(0.000)	(0.996)	(0.000)	(0.002)	(0.006)	(0.021)	(0.000)	(0.000)	(0.000)	(0.000)	(0.398)	(0.000)		(0.111)	(0.001)	(0.000)	(0.000)	(0.018)
17.	Population between 15	0.274*	0.361*	0.120*	-0.412*	-0.137*	0.153*	0.203*	0.316*	0.237*	-0.205*	-0.162*	-0.271*	0.221*	0.153*	-0.042	0.108	1.000	-0.911*	0.045	-0.319*	0.252*
	and 64 years	(0.000)	(0.000)	(0.075)	(0.000)	(0.043)	(0.024)	(0.003)	(0.000)	(0.000)	(0.002)	(0.016)	(0.000)	(0.001)	(0.023)	(0.537)	(0.111)		(0.000)	(0.509)	(0.000)	(0.000)
18.	Population over 64 years	-0.172*	-0.298*	-0.248*	0.302*	0.199*	-0.157*	-0.215*	-0.275*	-0.306*	0.068	0.117*	0.262*	-0.346*	-0.061	-0.277*	-0.232*	-0.911*	1.000	-0.167*	0.272*	-0.141*
		(0.011)	(0.000)	(0.000)	(0.000)	(0.003)	(0.020)	(0.001)	(0.000)	(0.000)	(0.318)	(0.084)	(0.000)	(0.000)	(0.370)	(0.000)	(0.001)	(0.000)		(0.013)	(0.000)	(0.037)
19.	Population density	-0.197*	-0.043	0.467*	0.114*	0.093	0.085	0.107	-0.032	0.146*	0.373*	0.065	0.191*	0.623*	0.015	0.262*	0.290*	0.045	-0.167*	1.000	0.181*	-0.327*
		(0.003)	(0.525)	(0.000)	(0.093)	(0.168)	(0.208)	(0.113)	(0.636)	(0.030)	(0.000)	(0.338)	(0.004)	(0.000)	(0.826)	(0.000)	(0.000)	(0.509)	(0.013)		(0.007)	(0.000)
20.	Total immigration	-0.287*	-0.302*	0.095	0.589*	0.093	-0.371*	0.130*	-0.322*	-0.315*	0.551*	0.341*	0.457*	0.148*	0.050	0.435*	0.857*	-0.319*	0.272*	0.181*	1.000	-0.228*
		(0.000)	(0.000)	(0.159)	(0.000)	(0.169)	(0.000)	(0.054)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.028)	(0.465)	(0.000)	(0.000)	(0.000)	(0.000)	(0.007)		(0.001)
21.	Isolation (highways,	0.214*	0.273*	-0.298*	-0.404*	0.010	-0.014	-0.202*	0.173*	0.047	-0.445*	-0.286*	-0.117*	-0.310*	0.156*	-0.234*	-0.160*	0.252*	-0.141*	-0.327*	-0.228*	1.000
	airports, and ports)	(0.001)	(0.000)	(0.000)	(0.000)	(0.887)	(0.837)	(0.003)	(0.010)	(0.490)	(0.000)	(0.000)	(0.084)	(0.000)	(0.021)	(0.000)	(0.018)	(0.000)	(0.037)	(0.000)	(0.001)	
22.	Participation to labor	-0.467*	-0.545*	-0.145*	0.552*	0.053	-0.383*	-0.253*	-0.448*	-0.408*	0.368*	0.190*	0.368*	-0.165*	-0.112*	0.357*	0.446*	-0.649*	0.550*	0.058	0.681*	-0.232*
	market	(0.000)	(0.000)	(0.032)	(0.000)	(0.435)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.005)	(0.000)	(0.014)	(0.098)	(0.000)	(0.000)	(0.000)	(0.000)	(0.391)	(0.000)	(0.001)
23.	Participation to labor	0.407*	0.353*	0.131*	-0.463*	-0.156*	0.328*	0.161*	0.275*	0.294*	-0.331*	-0.206*	-0.386*	0.129*	-0.014	-0.188*	-0.352*	0.665*	-0.633*	-0.063	-0.645*	0.134*
	market: difference	(0.000)	(0.000)	(0.052)	(0.000)	(0.020)	(0.000)	(0.017)	(0.000)	(0.000)	(0.000)	(0.002)	(0.000)	(0.057)	(0.832)	(0.005)	(0.000)	(0.000)	(0.000)	(0.351)	(0.000)	(0.047)
	between men and																					
	women																					
24.	Exports per capita	-0.408*	-0.475*	-0.074	0.377*	-0.182*	-0.261*	-0.143*	-0.326*	-0.244*	0.244*	0.077	0.163*	-0.067	-0.112*	0.397*	0.323*	-0.366*	0.225*	0.132*	0.389*	-0.303*
		(0.000)	(0.000)	(0.273)	(0.000)	(0.007)	(0.000)	(0.034)	(0.000)	(0.000)	(0.000)	(0.253)	(0.016)	(0.322)	(0.098)	(0.000)	(0.000)	(0.000)	(0.001)	(0.050)	(0.000)	(0.000)
25.	Income inequality:	0.430*	0.431*	0.170*	-0.382*	0.078	0.377*	0.137*	0.257*	0.240*	-0.289*	-0.198*	-0.235*	0.159*	0.054	-0.281*	-0.348*	0.455*	-0.389*	0.055	-0.487*	0.190*
		(0.000)	(0.000)	(0.012)	(0.000)	(0.249)	(0.000)	(0.043)	(0.000)	(0.000)	(0.000)	(0.003)	(0.000)	(0.018)	(0.427)	(0.000)	(0.000)	(0.000)	(0.000)	(0.418)	(0.000)	(0.005)
26.	Non-performing entry	0.199*	0.182*	0.172*	-0.105	-0.095	0.253*	0.197*	0.035	0.196*	-0.048	0.044	-0.321*	0.143*	-0.061	0.007	-0.171*	0.283*	-0.332*	0.018	-0.304*	-0.097
	rate of loans to	(0.003)	(0.007)	(0.011)	(0.121)	(0.162)	(0.000)	(0.003)	(0.601)	(0.004)	(0.474)	(0.519)	(0.000)	(0.034)	(0.366)	(0.917)	(0.011)	(0.000)	(0.000)	(0.791)	(0.000)	(0.151)
	households	,,	()	()										()						()		···· /
		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.
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27.	Unemployment: job	0.364*	0.475*	0.076	-0.429*	0.141*	0.412*	0.069	0.311*	0.274*	-0.334*	-0.192*	-0.235*	0.051	0.113*	-0.502*	-0.478*	0.410*	-0.252*	-0.076	-0.570*	0.285*
	seekers aged 15 and over	(0.000)	(0.000)	(0.264)	(0.000)	(0.036)	(0.000)	(0.310)	(0.000)	(0.000)	(0.000)	(0.004)	(0.000)	(0.450)	(0.093)	(0.000)	(0.000)	(0.000)	(0.000)	(0.261)	(0.000)	(0.000)
	ũ	` ´	. ,	. ,	. ,	· /	· /	. ,	. ,	. ,	. ,	. ,	. ,	. ,	. ,	. ,	· /	. ,	. ,	. ,	` '	` <i>´</i>
28.	Value added:	-0.410*	-0.542*	-0.138*	0.417*	-0.317*	-0.294*	-0.189*	-0.346*	-0.241*	0.173*	0.074	-0.043	-0.119*	-0.134*	0.403*	0.305*	-0.359*	0.196*	0.094	0.357*	-0.349*
	manufacturing	(0.000)	(0.000)	(0.041)	(0.000)	(0.000)	(0.000)	(0.005)	(0.000)	(0.000)	(0.010)	(0.276)	(0.524)	(0.077)	(0.047)	(0.000)	(0.000)	(0.000)	(0.004)	(0.166)	(0.000)	(0.000)
29.	Value added: public	0.434*	0.529*	-0.053	-0.606*	0.085	0.296*	0.138*	0.421*	0.258*	-0.485*	-0.220*	-0.183*	-0.063	0.154*	-0.499*	-0.476*	0.500*	-0.311*	-0.230*	-0.575*	0.363*
	sector	(0.000)	(0.000)	(0.435)	(0.000)	(0.211)	(0.000)	(0.040)	(0.000)	(0.000)	(0.000)	(0.001)	(0.006)	(0.350)	(0.022)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)
30.	Value added: per capita	-0.488*	-0.395*	0.066	0.448*	0.150*	-0.264*	-0.143*	-0.330*	-0.294*	0.501*	0.117*	0.493*	0.083	-0.043	0.470*	0.572*	-0.439*	0.292*	0.260*	0.660*	-0.206*
		(0.000)	(0.000)	(0.327)	(0.000)	(0.026)	(0.000)	(0.035)	(0.000)	(0.000)	(0.000)	(0.083)	(0.000)	(0.221)	(0.529)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)
31.	Median gross hourly	-0.520*	-0.439*	-0.246*	0.197*	-0.023	-0.283*	-0.320*	-0.358*	-0.331*	0.054	-0.059	0.286*	-0.258*	-0.094	0.236*	0.128*	-0.494*	0.407*	-0.052	0.287*	-0.015
	wage of employees born	(0.000)	(0.000)	(0.000)	(0.003)	(0.738)	(0.000)	(0.000)	(0.000)	(0.000)	(0.422)	(0.384)	(0.000)	(0.000)	(0.167)	(0.000)	(0.059)	(0.000)	(0.000)	(0.445)	(0.000)	(0.826)
	abroad																					
32.	Median gross hourly	-0.517*	-0.476*	0.002	0.496*	-0.041	-0.334*	-0.164*	-0.364*	-0.283*	0.431*	0.052	0.400*	0.038	-0.114*	0.515*	0.473*	-0.526*	0.357*	0.298*	0.595*	-0.274*
	wage of employees born	(0.000)	(0.000)	(0.979)	(0.000)	(0.546)	(0.000)	(0.015)	(0.000)	(0.000)	(0.000)	(0.447)	(0.000)	(0.574)	(0.091)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
22	in Italy	0.51.44	0.5154	0.000	0.500.0	0.0.50	0.010*	0.1.10*	0.005*	0.000#	0.440*	0.000	0.05.4*	0.070	0.105*	0.400.0	0.450%	0.505.	0.000#	0.004#	0.505*	0.0.00
33.	Mean wage of	-0.514*	-0.515*	0.028	0.500*	-0.069	-0.312*	-0.149*	-0.395*	-0.288*	0.442*	0.092	0.374*	0.079	-0.12/*	0.499*	0.469*	-0.50/*	0.332*	0.324*	0.585*	-0.360*
24	employees	(0.000)	(0.000)	(0.682)	(0.000)	(0.311)	(0.000)	(0.027)	(0.000)	(0.000)	(0.000)	(0.174)	(0.000)	(0.244)	(0.061)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
34.	Mean wealth per capita	-0.470*	-0.481*	0.021	0.564*	0.007	-0.309*	-0.102	-0.397*	-0.318*	0.475*	0.20/*	0.450*	0.035	-0.131*	0.486*	0.454*	-0.622*	0.468*	0.206*	0.645*	-0.297*
25	D 1 (1 1)	(0.000)	(0.000)	(0.757)	(0.000)	(0.922)	(0.000)	(0.130)	(0.000)	(0.000)	(0.000)	(0.002)	(0.000)	(0.608)	(0.051)	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)	(0.000)	(0.000)
35.	Population having at	-0.1/1*	-0.46/*	-0.074	0.272*	0.085	-0.168*	-0.278*	-0.414*	-0.275*	0.2/1*	0.116*	0.339*	-0.131*	-0.159*	0.182*	0.233*	-0.561*	0.489*	0.110	0.466*	-0.323*
	least a secondary degree	(0.011)	(0.000)	(0.274)	(0.000)	(0.209)	(0.013)	(0.000)	(0.000)	(0.000)	(0.000)	(0.085)	(0.000)	(0.052)	(0.018)	(0.007)	(0.000)	(0.000)	(0.000)	(0.104)	(0.000)	(0.000)
36.	Immigration of	-0.455*	-0.453*	0.161*	0.605*	0.115*	-0.281*	0.014	-0.403*	-0.366*	0.608*	0.257*	0.455*	0.156*	-0.060	0.414*	0.619*	-0.443*	0.343*	0.266*	0.774*	-0.360*
	graduates between 25																					
	and 39 years	(0.000)	(0,000)	(0.017)	(0.000)	(0.080)	(0,000)	(0.841)	(0.000)	(0.000)	(0.000)	(0.000)	(0,000)	(0, 021)	(0.272)	(0.000)	(0.000)	(0.000)	(0,000)	(0.000)	(0.000)	(0,000)
27	Eoroign residents	0.284*	0.427*	0.015	(0.000)	0.062	(0.000)	0.140*	(0.000)	(0.000)	0.452*	0.000)	0.000)	0.004	(0.372) 0.141*	0.486*	(0.000)	0.505*	0.204*	0.120*	(0.000)	(0.000)
57.	1 ofergir residents	-0.364	-0.437	(0.831)	(0.000)	(0.354)	(0.001)	-0.140	(0.000)	(0.000)	(0.000)	(0.204)	(0.000)	(0.004	(0.037)	(0.000)	(0.000)	-0.393	(0.000)	(0.054)	(0.000)	-0.380
38	Emigration to other	0.512*	0.360*	0.006	-0.174*	-0.062	0.163*	0.140*	0.253*	0.353*	-0.128*	0.068	-0.169*	0.019	-0.001	-0.116*	-0.198*	0.107	-0.052	-0.158*	-0.178*	0.039
50.	Italian regions	(0.000)	(0.000)	(0.031)	(0.010)	(0.361)	(0.015)	(0.038)	(0.000)	(0.000)	(0.058)	(0.318)	(0.012)	(0.781)	(0.087)	(0.085)	(0.003)	(0.114)	(0.440)	(0.010)	(0.008)	(0.566)
30	Emigration abroad	0.304*	0.315*	0.266*	0.005	0.053	0.101	0.456*	0.280*	0.176*	0.081	0.100	(0.012) 0.247*	0.324*	0.155*	0.141*	0.003)	0.520*	0.415*	0.006	0.057	0.025
39.	Emigration abroau	(0.000)	-0.313	(0.000)	(0.003)	(0.055)	(0.136)	-0.430	(0.000)	(0,000)	(0.233)	(0.130)	(0.247)	(0.000)	(0.021)	(0.037)	(0.145)	(0.000)	(0.000)	(0.031)	(0.037)	-0.023
40	Bade in amargancy	0.005	0.024	0.050	0.057	0.050	0.033	0.000	0.060	0.011	0.042	0.031	0.100*	0.000	0.102	0.164*	0.007	0.053	0.016	0.055	0.030	0.065
+0.	residences for migrants	(0.043)	(0.718)	(0.381)	(0.401)	(0.460)	(0.621)	(0.011)	(0.310)	(0.866)	(0.537)	(0.645)	(0.003)	(0.736)	(0.131)	(0.015)	(0.014)	-0.033	(0.816)	(0.418)	(0.563)	(0.330)
41	Newspaper circulation	0.353*	0.107	0.057	0.401)	0.034	0.021)	0.101	0.010	0.175*	0.337)	0.045)	0.376*	0.002	0.137*	0.268*	0.714)	0.436)	0.010)	0.048	0.528*	0.035
41.	rewspaper circulation	(0.000)	(0.112)	(0.404)	(0.000)	(0.610)	(0.000)	(0.137)	(0.780)	(0.000)	(0.000)	(0.208)	(0.000)	(0.002	(0.043)	(0.000)	(0.000)	(0.002)	(0.002)	(0.470)	(0.000)	(0.603)
		(0.000)	(0.112)	(0.404)	(0.000)	(0.019)	(0.000)	(0.137)	(0.780)	(0.009)	(0.000)	(0.002)	(0.000)	(0.9/9)	(0.043)	(0.000)	(0.000)	(0.002)	(0.002)	(0.479)	(0.000)	(0.005)

Table 3.3 – Correlation matrix – Part II

12 2 2 2 2 2 8 3	$\begin{array}{cccc} & 41. \\ 005 & -0.353^* \\ 943) & (0.000) \\ 024 & -0.107 \\ 718) & (0.112) \\ 159 & -0.057 \\ 381) & (0.404) \\ 957 & 0.307^* \\ 401) & (0.000) \\ 50 & 0.034 \\ 460) & (0.619) \\ 33 & -0.453^* \end{array}$	40.	39.	38.	37.	36.	35.	34.	33.	32.	31.	30.	29.	28.	27.	26.	25.	24.	23.	22.		
1. Anome 0.467 0.478 0.488 0.418 0.489 0.517* 0.517* 0.514* 0.479 0.517* 0	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	-0.005	0.204*	0.510*	-0.384*	0.455*	0.171*															
Image and set of the	$\begin{array}{cccc} 0.000 \\ 0.000 \\ 024 & -0.107 \\ 718 \\ (0.112) \\ 159 & -0.057 \\ 381 \\ (0.404) \\ 057 & 0.307* \\ 401 \\ (0.000) \\ 50 & 0.034 \\ 460 \\ (0.619) \\ 33 & -0.453* \end{array}$	(0.042)	-0 104*	0.512*	-1/ 1/1	-04)	-0 1/1*	-0 470*	-0 514*	-0 517*	-0 520*	-0 488*	0 434*	-0410*	0 364*	0 199*	0.430*	-0 408*	0.407*	-0 467*	Arsons	1
2 Accepted bannicide (3) 0.55* 0.41* 0.43* <td>$\begin{array}{c} (0.100)\\ (0.112)\\ (0.112)\\ (0.112)\\ (0.112)\\ (0.001)\\ (0.001)\\ (0.000)\\ (0.001)\\ (0.000)\\ (0.012)\\ (0.01$</td> <td>(1) 9/13)</td> <td>(0,000)</td> <td>(0,000)</td> <td>(0,000)</td> <td>(0,000)</td> <td>(0,011)</td> <td>(0,000)</td> <td>(0,000)</td> <td>(0,000)</td> <td>(0,000)</td> <td>(0,000)</td> <td>(0.000)</td> <td>(0,000)</td> <td>(0,000)</td> <td>(0, 003)</td> <td>(0,000)</td> <td>(0,000)</td> <td>(0.000)</td> <td>(0,000)</td> <td></td> <td></td>	$\begin{array}{c} (0.100)\\ (0.112)\\ (0.112)\\ (0.112)\\ (0.112)\\ (0.001)\\ (0.001)\\ (0.000)\\ (0.001)\\ (0.000)\\ (0.012)\\ (0.01$	(1) 9/13)	(0,000)	(0,000)	(0,000)	(0,000)	(0,011)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0.000)	(0,000)	(0,000)	(0, 003)	(0,000)	(0,000)	(0.000)	(0,000)		
α α	$\begin{array}{rrrr} & -0.107 \\ 718 & (0.112) \\ 159 & -0.057 \\ 381) & (0.404) \\ 057 & 0.307* \\ 401) & (0.000) \\ 50 & 0.034 \\ 460) & (0.619) \\ 33 & -0.453* \end{array}$	0.024	0.215*	0.260*	0.427*	0.452*	0.467*	(0.000)	(0.000)	(0.000)	0.420*	0.205*	0.520*	0.542*	(0.000)	0.182*	0.421*	0.475*	0.252*	0.545*	Attempted homigides	2
Bag theft 0.0000 0.00	$\begin{array}{cccc} (112) & (0.112) \\ (0.112) & (0.112) \\ (0.57) & (0.404) \\ (0.57) & (0.307* \\ (401) & (0.000) \\ (50) & (0.034 \\ (460) & (0.619) \\ (33) & -0.453* \end{array}$	-0.024	-0.313*	0.500*	-0.437*	-0.435*	-0.467*	-0.481*	-0.313*	-0.476*	-0.439*	-0.393*	0.329*	-0.342*	0.473*	0.162*	0.451*	-0.473**	0.555*	-0.343*	Attempted nonnicides	Ζ.
3. Bag Intert 40.13* 0.074 0.170* 0.070* 0.013* 0.003 0.021* 0.012 0.012* 0.012* 0.012* 0.012* 0.012* 0.012* 0.012* 0.012* 0.012* 0.012* 0.013* 0.025* <td>159 -0.057 381) (0.404) 057 0.307* 401) (0.000) 50 0.034 460) (0.619) 33 -0.453*</td> <td>(0.718)</td> <td>(0.000)</td> <td>(0.007)</td> <td>(0.000)</td> <td>(0.000)</td> <td>(0.000)</td> <td>(0.000)</td> <td>-</td> <td></td>	159 -0.057 381) (0.404) 057 0.307* 401) (0.000) 50 0.034 460) (0.619) 33 -0.453*	(0.718)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.007)	(0.000)	(0.000)	(0.000)	(0.000)	-	
Here 0.032 0.032 0.032 0.031 0.031 0.034 0.034 0.037	381) (0.404) 057 0.307* 401) (0.000) 150 0.034 460) (0.619) 33 -0.453*	0.059	-0.266*	0.006	0.015	0.161*	-0.074	0.021	0.028	0.002	-0.246*	0.066	-0.053	-0.138*	0.076	0.172*	0.170*	-0.074	0.131*	-0.145*	Bag theft	3.
4. Home bargianes 0.52° 0.43° 0.32° 0.43° 0.43° 0.48° 0.197 0.496° 0.496° 0.500 0.000	057 0.307* 401) (0.000) 150 0.034 460) (0.619) 33 -0.453*	(0.381)	(0.000)	(0.931)	(0.831)	(0.017)	(0.274)	(0.757)	(0.682)	(0.979)	(0.000)	(0.327)	(0.435)	(0.041)	(0.264)	(0.011)	(0.012)	(0.273)	(0.052)	(0.032)		
b b	401) (0.000) 50 0.034 460) (0.619) 33 -0.453*	-0.057	0.005	-0.174*	0.555*	0.605*	0.272*	0.564*	0.500*	0.496*	0.197*	0.448*	-0.606*	0.417*	-0.429*	-0.105	-0.382*	0.377*	-0.463*	0.552*	Home burglaries	4.
5. Degrelated crimes 0.035 0.156 ² 0.047 0.045 ² 0.041 ² 0.060 ² 0.047 ² 0.085 ³ 0.063 ³ 0.037 0.037	050 0.034 460) (0.619) 33 -0.453*	(0.401)	(0.945)	(0.010)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)	(0.121)	(0.000)	(0.000)	(0.000)	(0.000)	-	
Dask Constraint 10 Mare cri	460) (0.619) 33 -0.453*	0.050	0.053	-0.062	0.063	0.115*	0.085	0.007	-0.069	-0.041	-0.023	0.150*	0.085	-0.317*	0.141*	-0.095	0.078	-0.182*	-0.156*	0.053	Drug-related crimes	5
6. Extorians 0.333 0.329 0.329 0.329 0.329 0.329 0.329 0.312 0.312 0.329 <t< td=""><td>33 -0.453*</td><td>(0.460)</td><td>(0.434)</td><td>(0.361)</td><td>(0.354)</td><td>(0.080)</td><td>(0.200)</td><td>(0.922)</td><td>(0.311)</td><td>(0.546)</td><td>(0.738)</td><td>(0.026)</td><td>(0.211)</td><td>(0.000)</td><td>(0.036)</td><td>(0.162)</td><td>(0.249)</td><td>(0.007)</td><td>(0.020)</td><td>(0.435)</td><td>Drug related errites</td><td>5.</td></t<>	33 -0.453*	(0.460)	(0.434)	(0.361)	(0.354)	(0.080)	(0.200)	(0.922)	(0.311)	(0.546)	(0.738)	(0.026)	(0.211)	(0.000)	(0.036)	(0.162)	(0.249)	(0.007)	(0.020)	(0.435)	Drug related errites	5.
0. Examinants 10.38 ³ 0.248 ³ 0.248 ³ 0.312 ⁴ 0.312 ⁴ 0.312 ⁴ 0.310 ⁸ 0.241 ⁸ 0.121 ⁸ 0.111 ⁸ 0.111 ⁸ 0.113 ⁸ 0.113 ⁸ 0.110 ⁸ 0.111 ⁸ 0.113 ⁸ 0.113 ⁸ 0.110 ⁸ 0.111 ⁸ <th0.121<sup>8 0.111⁸ <th0< td=""><td>-0.455*</td><td>(0.400)</td><td>(0.434)</td><td>(0.301)</td><td>(0.334)</td><td>(0.039)</td><td>0.169*</td><td>0.922)</td><td>(0.311)</td><td>(0.340)</td><td>(0.758)</td><td>(0.020)</td><td>(0.211)</td><td>(0.000)</td><td>(0.030)</td><td>(0.102)</td><td>(0.249)</td><td>(0.007)</td><td>(0.020)</td><td>(0.433)</td><td>Entertions</td><td>~</td></th0<></th0.121<sup>	-0.455*	(0.400)	(0.434)	(0.301)	(0.334)	(0.039)	0.169*	0.922)	(0.311)	(0.340)	(0.758)	(0.020)	(0.211)	(0.000)	(0.030)	(0.102)	(0.249)	(0.007)	(0.020)	(0.433)	Entertions	~
House robberies 0.0000 <		0.055	-0.101	0.165*	-0.227*	-0.281*	-0.168*	-0.309*	-0.312*	-0.334*	-0.285*	-0.264*	0.296*	-0.294*	0.412*	0.253*	0.377*	-0.261**	0.328*	-0.383*	Extortions	0.
7. House robberies 0.161* 0.143* 0.143* 0.139* 0.138* 0.143* 0.164* 0.164* 0.164* 0.164* 0.164* 0.164* 0.164* 0.164* 0.164* 0.164* 0.164* 0.164* 0.014* 0.000* 0.000 0.0000 0.000	521) (0.000)	(0.621)	(0.136)	(0.015)	(0.001)	(0.000)	(0.013)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		
Intend (0.00) (0.11) (0.03) (0.03) (0.03) (0.04) (0.03) (0.03) (0.04) (0.05) (0.05) (0.00) (0.00) (0.04) (0.03) (0.04)<	0.101	-0.008	-0.456*	0.140*	-0.140*	0.014	-0.278*	-0.102	-0.149*	-0.164*	-0.320*	-0.143*	0.138*	-0.189*	0.069	0.197*	0.137*	-0.143*	0.161*	-0.253*	House robberies	7.
8. Intentional homicides -0.448 0.327* 0.327* 0.327* 0.328* 0.338* 0.339* 0.439* 0.339* 0.439* 0.339* 0.439* 0.339* 0.439* 0.339* 0.439* 0.439* 0.439* 0.439* 0.439* 0.439* 0.439* 0.439* 0.439* <	911) (0.137)	(0.911)	(0.000)	(0.038)	(0.038)	(0.841)	(0.000)	(0.130)	(0.027)	(0.015)	(0.000)	(0.035)	(0.040)	(0.005)	(0.310)	(0.003)	(0.043)	(0.034)	(0.017)	(0.000)		
9. Mafia homicides 0.000	069 -0.019	-0.069	-0.280*	0.253*	-0.375*	-0.403*	-0.414*	-0.397*	-0.395*	-0.364*	-0.358*	-0.330*	0.421*	-0.346*	0.311*	0.035	0.257*	-0.326*	0.275*	-0.448*	Intentional homicides	8.
9. Mafa homicides 0.408* 0.294* 0.244* 0.283* 0.283* 0.283* 0.283* 0.283* 0.274* 0.318* 0.027* 0.368* 0.217* 0.333* 0.017* 0. Micro criminality 0.0000 0	310) (0.780)	(0.310)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0.601)	(0,000)	(0,000)	(0,000)	(0,000)		
Jointal formations 0.000 0.000 0.000 0.0000 <t< td=""><td>011 0.175*</td><td>0.011</td><td>0.176*</td><td>0.353*</td><td>0.247*</td><td>0.366*</td><td>0.275*</td><td>0.318*</td><td>0.288*</td><td>0.283*</td><td>0.331*</td><td>0.204*</td><td>0.258*</td><td>0.241*</td><td>0.274*</td><td>0.196*</td><td>0.240*</td><td>0.244*</td><td>0.204*</td><td>0.408*</td><td>Mafia homicides</td><td>0</td></t<>	011 0.175*	0.011	0.176*	0.353*	0.247*	0.366*	0.275*	0.318*	0.288*	0.283*	0.331*	0.204*	0.258*	0.241*	0.274*	0.196*	0.240*	0.244*	0.204*	0.408*	Mafia homicides	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	9(() (0.000)	-0.011	-0.170	(0.000)	-0.247	-0.300	-0.275	-0.518	-0.288	-0.285	-0.331	-0.294	(0.000)	-0.241	(0.000)	(0.004)	(0.000)	-0.244	(0.000)	-0.408	Maria nonneides	9.
10. Micro criminality 0.68* -0.31* 0.243* -0.043* 0.043* 0.044* 0.442* 0.442* 0.427* 0.000 0.0	300) (0.009)	(0.866)	(0.009)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.004)	(0.000)	(0.000)	(0.000)	(0.000)		
(0.000 (0.000) (0.000) (0.000) (0.010) (0.000) <th< td=""><td>42 0.306*</td><td>0.042</td><td>-0.081</td><td>-0.128*</td><td>0.453*</td><td>0.608*</td><td>0.271*</td><td>0.475*</td><td>0.442*</td><td>0.431*</td><td>0.054</td><td>0.501*</td><td>-0.485*</td><td>0.173*</td><td>-0.334*</td><td>-0.048</td><td>-0.289*</td><td>0.244*</td><td>-0.331*</td><td>0.368*</td><td>Micro criminality</td><td>10.</td></th<>	42 0.306*	0.042	-0.081	-0.128*	0.453*	0.608*	0.271*	0.475*	0.442*	0.431*	0.054	0.501*	-0.485*	0.173*	-0.334*	-0.048	-0.289*	0.244*	-0.331*	0.368*	Micro criminality	10.
11. Prostitution-related crimes 0.005 0.007 0.017 0.118* 0.017 0.018* 0.013* 12. Sexual violence 0.005 0.0001 0.023* 0.023 0.030* 0.044* 0.018* 0.038* 0.445* 0.005* 0.000 0.000 0.016* 0.013* 12. Sexual violence 0.368* 0.388* 0.438* 0.439* 0.458* 0.338* 0.450* 0.339* 0.455* 0.278* 0.168* 0.030* 0.0000 0.0000 0.000	537) (0.000)	(0.537)	(0.233)	(0.058)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.422)	(0.000)	(0.000)	(0.010)	(0.000)	(0.474)	(0.000)	(0.000)	(0.000)	(0.000)		
crimes (0.005) (0.003) (0.139) (0.004) (0.276) (0.001) (0.383) (0.477) (0.174) (0.002) (0.385) (0.002) (0.002) (0.002) (0.002) (0.002) (0.012) (0.012) (0.012) (0.012) (0.134) (0.000) (0.000) (0.000) (0.001)	031 0.208*	-0.031	-0.100	0.068	0.204*	0.257*	0.116*	0.207*	0.092	0.052	-0.059	0.117*	-0.220*	0.074	-0.192*	0.044	-0.198*	0.077	-0.206*	0.190*	Prostitution-related	11.
12. Sexual violence 0.368* 0.163* 0.235* 0.043 0.183* 0.493* 0.426* 0.400* 0.339* 0.455* 0.278* 0.109* 0.137* 0.139* 0.455* 0.278* 0.109 0.000 <th< td=""><td>645) (0.002)</td><td>(0.645)</td><td>(0.139)</td><td>(0.318)</td><td>(0.002)</td><td>(0.000)</td><td>(0.085)</td><td>(0.002)</td><td>(0.174)</td><td>(0.447)</td><td>(0.384)</td><td>(0.083)</td><td>(0.001)</td><td>(0.276)</td><td>(0.004)</td><td>(0.519)</td><td>(0.003)</td><td>(0.253)</td><td>(0.002)</td><td>(0.005)</td><td>crimes</td><td></td></th<>	645) (0.002)	(0.645)	(0.139)	(0.318)	(0.002)	(0.000)	(0.085)	(0.002)	(0.174)	(0.447)	(0.384)	(0.083)	(0.001)	(0.276)	(0.004)	(0.519)	(0.003)	(0.253)	(0.002)	(0.005)	crimes	
Instrume (0.000) (0.016) (0.000) <	99* 0.376*	0.199*	0.247*	-0.169*	0.278*	0.455*	0.339*	0.450*	0.374*	0.400*	0.286*	0.493*	-0.183*	-0.043	-0.235*	-0.321*	-0.235*	0.163*	-0.386*	0.368*	Sexual violence	12.
13. Robbery 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0507 0.0517 0.0134 0.0134 0.0134 0.0137 0.0134 0.0137 0.0134 0.0137 0.0134 0.007 0.0337 0.0134 0.007 0.0207 0.000 0.007 0.0037 0.0037 0.0134 0.0157 0.0134 0.0157 0.0134 0.0157 0.0134 0.0157 0.0134 0.0157 0.000 0.0001 0.0001 0.0001 0.0001 0.0017 0.0017 0.0001 0.0001 0.0001 0.0001 0.0007 0.0007 0.0001 0.0001 0.0001 0.0001 0.0007 0.0007 0.0001 0.0007 0.0001 0.0007 0.0007 0.0007 0.0007 0.0000 0.0007 0.00	003) (0.000)	(0.003)	(0,000)	(0.012)	(0,000)	(0.000)	(0,000)	(0.000)	(0,000)	(0,000)	(0,000)	(0,000)	(0.006)	(0.524)	(0,000)	(0,000)	(0,000)	(0.016)	(0,000)	(0,000)		
15. Robiedy -0.165* 0.129* 0.169* 0.014 -0.011* -0.014* 0.0053 0.0153 -0.151* 0.1635 0.0044 0.0019 -0.024* 14. Robbery homicides -0.014 -0.012* 0.0034 (0.034) (0.0350 (0.077) (0.053) -0.114* -0.155* (0.021) (0.021) (0.021) (0.021) (0.037) (0.021) (0.037) (0.021) (0.037) (0.021) (0.037) (0.021) (0.037) (0.021) (0.051) (0.018) (0.021) (0.037) (0.097) (0.021) (0.051) (0.018) (0.021) (0.051) (0.018) (0.021) (0.051) (0.031) (0.037) (0.097) (0.021) (0.051) (0.001) (0.003) (0.011) (0.000) (0.0	0.000	0.003	0.224*	(0.012)	(0.000)	0.156*	0.121*	(0.000)	(0.000)	(0.000)	0.259*	(0.000)	0.062	0.110*	0.051	0.142*	0.150*	0.067	(0.000)	0.165*	Dohhami	12
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	25 0.002	0.025	-0.324*	0.019	0.004	0.150*	-0.151*	0.033	0.079	0.038	-0.238*	0.085	-0.065	-0.119*	0.031	0.145*	0.139*	-0.067	0.129*	-0.165*	Robbery	15.
14. Robbery homicides -0.112* -0.014 -0.113* -0.114* -0.114* -0.127* -0.131* -0.158* -0.001 -0.158* (0.098) (0.832) (0.098) (0.427) (0.366) (0.093) (0.047) (0.022) (0.529) (0.167) (0.001) (0.011) (0.037)	/36) (0.9/9)	(0.736)	(0.000)	(0.781)	(0.957)	(0.021)	(0.052)	(0.608)	(0.244)	(0.574)	(0.000)	(0.221)	(0.350)	(0.077)	(0.450)	(0.034)	(0.018)	(0.322)	(0.057)	(0.014)		
(0.098) (0.427) (0.369) (0.047) (0.022) (0.167) (0.061) (0.061) (0.018) (0.372) (0.377) (0.021) 15. Fertility rate (0.377) -0.188 0.397* -0.281* (0.000) (0.	102 0.137*	-0.102	-0.155*	-0.001	-0.141*	-0.060	-0.159*	-0.131*	-0.127*	-0.114*	-0.094	-0.043	0.154*	-0.134*	0.113*	-0.061	0.054	-0.112*	-0.014	-0.112*	Robbery homicides	14.
15. Fertility rate 0.357* -0.18* 0.397* -0.281* 0.007 -0.502* 0.403* -0.499* 0.236* 0.515* 0.499* 0.486* 0.182* 0.414* 0.486* -0.116* 0.141* (0.000) (0.000	131) (0.043)	(0.131)	(0.021)	(0.987)	(0.037)	(0.372)	(0.018)	(0.051)	(0.061)	(0.091)	(0.167)	(0.529)	(0.022)	(0.047)	(0.093)	(0.366)	(0.427)	(0.098)	(0.832)	(0.098)		
16. 10.000 (0.005) (0.000) (0.	64* 0.268*	0.164*	0.141*	-0.116*	0.486*	0.414*	0.182*	0.486*	0.499*	0.515*	0.236*	0.470*	-0.499*	0.403*	-0.502*	0.007	-0.281*	0.397*	-0.188*	0.357*	Fertility rate	15.
16. Total growth rate of population 0.446^{\pm} -0.322^{\pm} 0.323^{\pm} -0.348^{\pm} -0.171^{\pm} -0.478^{\pm} 0.305^{\pm} -0.476^{\pm} 0.572^{\pm} 0.128^{\pm} 0.454^{\pm} 0.233^{\pm} 0.619^{\pm} 0.428^{\pm} -0.198^{\pm} -0.099^{\pm} 17. Population between 15 -0.649^{\pm} 0.665^{\pm} -0.366^{\pm} 0.445^{\pm} 0.233^{\pm} -0.473^{\pm} 0.494^{\pm} -0.526^{\pm} -0.507^{\pm} -0.622^{\pm} -0.641^{\pm} -0.443^{\pm} -0.595^{\pm} 0.500^{\pm} -0.418^{\pm} -0.494^{\pm} -0.526^{\pm} -0.507^{\pm} -0.622^{\pm} -0.561^{\pm} -0.443^{\pm} -0.995^{\pm} 0.100^{\pm} (0.000)	015) (0.000)	(0.015)	(0.037)	(0.085)	(0.000)	(0.000)	(0.007)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.917)	(0.000)	(0.000)	(0.005)	(0.000)		
Normalized Order Output file Outpu file Outpu file <thout< td=""><td>007 0 445*</td><td>-0.007</td><td>-0.099</td><td>-0 198*</td><td>0.428*</td><td>0.619*</td><td>0.233*</td><td>0 454*</td><td>0.469*</td><td>0 473*</td><td>0.128*</td><td>0.572*</td><td>-0 476*</td><td>0 305*</td><td>-0 478*</td><td>-0.171*</td><td>-0 348*</td><td>0 323*</td><td>-0 352*</td><td>0 446*</td><td>Total growth rate of</td><td>16</td></thout<>	007 0 445*	-0.007	-0.099	-0 198*	0.428*	0.619*	0.233*	0 454*	0.469*	0 473*	0.128*	0.572*	-0 476*	0 305*	-0 478*	-0.171*	-0 348*	0 323*	-0 352*	0 446*	Total growth rate of	16
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	914) (0.000)	(0.914)	(0.145)	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)	(0,000)	(0.000)	(0.059)	(0,000)	(0,000)	(0.000)	(0,000)	(0.011)	(0,000)	(0.000)	(0.000)	(0,000)	population	10.
17. Population between 15 and 64 years -0.649^{++} 0.030^{++} -0.530^{++} 0.230^{++} -0.439^{++} -0.250^{++} -0.444^{++} -0.520^{++} -0.444^{++} -0.520^{++} -0.445^{++} -0.539^{++} -0.59^{++} -0.445^{++} -0.590^{++} -0.445^{++} -0.590^{++} -0.500^{++} -0.5	052 0.205*	0.052	0.520*	(0.005)	(0.000)	0.442*	0.561*	0.622*	(0.000)	(0.000)	0.404*	0.420*	0.500*	0.250*	0.410*	0.292*	(0.000)	0.266*	0.665*	0.640*	Population between 15	17
and 64 years (0.000)	JJJJ -0.203*	-0.033	-0.329*	0.107	-0.393*	-0.445*	-0.301*	-0.622*	-0.307*	-0.326*	-0.494*	-0.439*	0.300*	-0.339*	0.410*	0.285*	0.433*	-0.300*	0.003*	-0.649*	Population between 15	17.
18. Population over 64 years 0.550^* -0.633^* 0.225^* -0.389^* -0.322^* 0.196^* -0.311^* 0.292^* 0.407^* 0.332^* 0.468^* 0.489^* 0.343^* 0.394^* -0.052 0.415^* 19. Population density 0.000 (0.000) (0.001) (0.000) <td>438) (0.002)</td> <td>(0.438)</td> <td>(0.000)</td> <td>(0.114)</td> <td>(0.000)</td> <td>and 64 years</td> <td></td>	438) (0.002)	(0.438)	(0.000)	(0.114)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	and 64 years	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0.207*	-0.016	0.415*	-0.052	0.394*	0.343*	0.489*	0.468*	0.332*	0.357*	0.407*	0.292*	-0.311*	0.196*	-0.252*	-0.332*	-0.389*	0.225*	-0.633*	0.550*	Population over 64 years	18.
19. 19. Population density 0.058 -0.063 0.132* 0.055 0.018 -0.076 0.094 -0.230* 0.260* -0.052 0.298* 0.324* 0.206* 0.110 0.266* 0.130* -0.158* -0.006 (0.391) (0.351) (0.050) (0.418) (0.791) (0.261) (0.166) (0.001) (0.000) (0.00	816) (0.002)	(0.816)	(0.000)	(0.440)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.004)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)		
(0.391) (0.351) (0.050) (0.418) (0.791) (0.261) (0.166) (0.001) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.019) (0.931) 20. Total immigration 0.681* -0.645* 0.389* -0.487* -0.304* -0.570* 0.357* -0.575* 0.660* 0.287* 0.595* 0.585* 0.645* 0.466* 0.774* 0.590* -0.178* 0.057 (0.000)	-0.048	0.055	-0.006	-0.158*	0.130*	0.266*	0.110	0.206*	0.324*	0.298*	-0.052	0.260*	-0.230*	0.094	-0.076	0.018	0.055	0.132*	-0.063	0.058	19. Population density	19.
20. Total immigration 0.681* -0.645* 0.389* -0.487* -0.304* -0.570* 0.357* -0.575* 0.660* 0.287* 0.595* 0.585* 0.6645* 0.466* 0.774* 0.590* -0.178* 0.057 21. Isolation (highways, airports, and ports) 0.001 (0.000)	418) (0.479)	(0.418)	(0.931)	(0.019)	(0.054)	(0.000)	(0.104)	(0.002)	(0.000)	(0.000)	(0.445)	(0.000)	(0.001)	(0.166)	(0.261)	(0.791)	(0.418)	(0.050)	(0.351)	(0.391)		
21. Isolation (highways, airports, and ports) 0.001 0.000	039 0 528*	-0.039	0.057	-0 178*	0 590*	0 774*	0.466*	0.645*	0 585*	0 595*	0.287*	0.660*	-0 575*	0 357*	-0 570*	-0 304*	-0 487*	0 389*	-0.645*	0.681*	Total immigration	20
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	563) (0.000)	(0.563)	(0.403)	(0.008)	(0.000)	(0.000)	(0.000)	(0,000)	(0,000)	(0,000)	(0.000)	(0,000)	(0,000)	(0.000)	(0,000)	(0.000)	(0.000)	(0,000)	(0.000)	(0,000)		
21. Isolation (inginverys) airports, and ports) $(0.202 - 0.134 - 0.303 - 0.100 - 0.003 - 0.007 - 0.000 - 0.007 - 0.000$	065 0.035	-0.065	-0.025	0.030	_0 380*	-0.360*	_0 272*	-0.207*	-0.360*	-0.274*	-0.015	-0.206*	0.363*	_0 3/0*	0.285*	-0.007	0.100*	_0 303*	0.134*	-0.222*	Isolation (highwave	21
airports, and ports (0.001) (0.047) (0.000) (0.005) (0.151) (0.000) <td>303 0.033</td> <td>-0.005</td> <td>-0.025</td> <td>0.039</td> <td>-0.380</td> <td>-0.300</td> <td>-0.323</td> <td>-0.297</td> <td>-0.500</td> <td>-0.274</td> <td>-0.015</td> <td>-0.200</td> <td>0.505</td> <td>-0.349</td> <td>0.285</td> <td>-0.097</td> <td>0.190</td> <td>-0.303</td> <td>0.134</td> <td>-0.232</td> <td>isolation (ingliways,</td> <td>21.</td>	303 0.033	-0.005	-0.025	0.039	-0.380	-0.300	-0.323	-0.297	-0.500	-0.274	-0.015	-0.200	0.505	-0.349	0.285	-0.097	0.190	-0.303	0.134	-0.232	isolation (ingliways,	21.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	559) (0.605)	(0.339)	(0.717)	(0.566)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.826)	(0.002)	(0.000)	(0.000)	(0.000)	(0.151)	(0.005)	(0.000)	(0.047)	(0.001)	airports, and ports)	
market (0.000) (0.00	0.450*	-0.015	0.505*	-0.346*	0.810*	0.776*	0.659*	0.844*	0.787*	0.804*	0.655*	0.808*	-0.800*	0.649*	-0.666*	-0.405*	-0.707*	0.630*	-0.823*	1.000	Participation to labor	22.
	830) (0.000)	(0.830)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		market	
23. Participation to labor -0.823* 1.000 -0.464* 0.582* 0.440* 0.581* -0.433* 0.590* -0.714* -0.524* -0.676* -0.638* -0.729* -0.594* -0.711* -0.653* 0.206* -0.410*	-0.478*	0.030	-0.410*	0.206*	-0.653*	-0.711*	-0.594*	-0.729*	-0.638*	-0.676*	-0.524*	-0.714*	0.590*	-0.433*	0.581*	0.440*	0.582*	-0.464*	1.000	-0.823*	Participation to labor	23.
market: difference (0.000) (0.	655) (0.000)	(0.655)	(0.000)	(0.002)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	market: difference	
between men and																				. ,	between men and	
women																					women	
24. Exports per capita 0.630* -0.464* 1.000 -0.493* -0.148* -0.551* 0.809* -0.733* 0.596* 0.505* 0.711* 0.739* 0.590* 0.445* 0.544* 0.616* -0.347* 0.363*	41 0.213*	0.041	0.363*	-0.347*	0.616*	0.544*	0.445*	0.590*	0.739*	0.711*	0.505*	0.596*	-0.733*	0.809*	-0.551*	-0.148*	-0.493*	1.000	-0.464*	0.630*	Exports per capita	24
	543) (0.002)	(0.543)	(0.000)	(0,000)	(0.000)	(0.000)	(0.000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0.000)	(0.000)	(0,000)	(0.028)	(0.000)	1.000	(0.000)	(0,000)	porto per cupitu	
(0.000) (0.0	(0.002)	0.072	0.204*	0.100*	0.524*	0.525*	0.202*	0.500	0.555*	0.560*	0.402*	0.570*	0.5000	0.550*	0.000	0.020)	1.000	0.402*	0.5000	0.000)	In come in caughtry	25
2.5. Income mequanty. $-0.707^{}$ $0.362^{}$ $-0.493^{}$ $1.000^{}$ $0.353^{}$ $0.007^{}$ $-0.369^{}$ $-0.500^{}$ $-0.500^{}$ $-0.500^{}$ $-0.500^{}$ $-0.525^{}$ $-0.535^{}$ $-0.524^{}$ $0.194^{}$ $-0.535^{}$ $-0.535^{}$ $-0.524^{}$ $0.194^{}$ $-0.505^{}$ $-0.515^{}$ $-0.535^{}$ $-0.525^{}$ $-0.535^{}$ $-0.525^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{}$ $-0.535^{$	12 -0.409 ^{**}	0.072	-0.384*	0.199*	-0.324*	-0.335*	-0.382*	-0.390*	-0.355*	-0.360**	-0.492*	-0.370*	0.589*	-0.359*	0.00/*	0.558~	1.000	-0.493*	0.382*	-0.707*	meome mequanty:	<i>23</i> .
10000 (0.000) (0.00	288) (0.000)	(0.288)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)		
26. Non-performing entry -0.405* 0.440* -0.148* 0.358* 1.000 0.379* -0.064 0.174* -0.475* -0.416* -0.412* -0.381* -0.465* -0.253* -0.324* -0.138* 0.235* -0.231*	-0.513*	0.038	-0.231*	0.235*	-0.138*	-0.324*	-0.253*	-0.465*	-0.381*	-0.412*	-0.416*	-0.475*	0.174*	-0.064	0.379*	1.000	0.358*	-0.148*	0.440*	-0.405*	Non-performing entry	26.
rate of loans to (0.000) (0.000) (0.028) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.001) (0.001)		(0.572)	(0.001)	(0.000)	(0.041)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.010)	(0.345)	(0.000)		(0.000)	(0.028)	(0.000)	(0.000)	rate of loans to	
households	572) (0.000)																				households	
27. Unemployment: job -0.666* 0.581* -0.551* 0.607* 0.379* 1.000 -0.620* 0.666* -0.654* -0.484* -0.689* -0.694* -0.728* -0.512* -0.641* -0.633* 0.293* -0.308*	572) (0.000)	0.071	-0.308*	0.293*	-0.633*	-0.641*	-0.512*	-0.728*	-0.694*	-0.689*	-0.484*	-0.654*	0.666*	-0.620*	1.000	0.379*	0.607*	-0.551*	0.581*	-0.666*	Unemployment: job	27.
	572) (0.000) 71 -0.412*	(0.202)	(0,000)	(0,000)	(0, 000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0, 000)	(0,000)		(0,000)	(0,000)	(0,000)	(0,000)	(0.000)	seekers aged 15 and over	

		22.	23.	24.	25.	26.	27.	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.	38.	39.	40.	41.
28.	Value added:	0.649*	-0.433*	0.809*	-0.559*	-0.064	-0.620*	1.000	-0.816*	0.500*	0.456*	0.651*	0.698*	0.538*	0.371*	0.479*	0.633*	-0.373*	0.346*	-0.060	0.092
	manufacturing	(0.000)	(0.000)	(0.000)	(0.000)	(0.345)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.379)	(0.173)
29.	Value added: public	-0.800*	0.590*	-0.733*	0.589*	0.174*	0.666*	-0.816*	1.000	-0.695*	-0.484*	-0.764*	-0.787*	-0.766*	-0.464*	-0.684*	-0.808*	0.407*	-0.393*	0.058	-0.229*
	sector	(0.000)	(0.000)	(0.000)	(0.000)	(0.010)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.389)	(0.001)
30.	Value added: per capita	0.808*	-0.714*	0.596*	-0.570*	-0.475*	-0.654*	0.500*	-0.695*	1.000	0.622*	0.861*	0.841*	0.842*	0.594*	0.777*	0.708*	-0.363*	0.454*	0.062	0.508*
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.363)	(0.000)
31.	Median gross hourly	0.655*	-0.524*	0.505*	-0.492*	-0.416*	-0.484*	0.456*	-0.484*	0.622*	1.000	0.712*	0.647*	0.630*	0.497*	0.472*	0.429*	-0.467*	0.629*	0.093	0.381*
	wage of employees born abroad	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.169)	(0.000)
32.	Median gross hourly	0.804*	-0.676*	0.711*	-0.560*	-0.412*	-0.689*	0.651*	-0.764*	0.861*	0.712*	1.000	0.953*	0.863*	0.596*	0.745*	0.729*	-0.393*	0.498*	0.096	0.412*
	wage of employees born in Italy	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.155)	(0.000)
33.	Mean wage of	0.787*	-0.638*	0.739*	-0.555*	-0.381*	-0.694*	0.698*	-0.787*	0.841*	0.647*	0.953*	1.000	0.845*	0.596*	0.734*	0.723*	-0.403*	0.439*	0.053	0.344*
	employees	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.432)	(0.000)
34.	Mean wealth per capita	0.844*	-0.729*	0.590*	-0.590*	-0.465*	-0.728*	0.538*	-0.766*	0.842*	0.630*	0.863*	0.845*	1.000	0.570*	0.764*	0.730*	-0.304*	0.478*	0.005	0.489*
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.947)	(0.000)
35.	Population having at	0.659*	-0.594*	0.445*	-0.382*	-0.253*	-0.512*	0.371*	-0.464*	0.594*	0.497*	0.596*	0.596*	0.570*	1.000	0.631*	0.577*	-0.108	0.386*	0.025	0.171*
	least a secondary degree	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.112)	(0.000)	(0.712)	(0.011)
36.	Immigration of graduates between 25 and 39 years	0.776*	-0.711*	0.544*	-0.535*	-0.324*	-0.641*	0.479*	-0.684*	0.777*	0.472*	0.745*	0.734*	0.764*	0.631*	1.000	0.705*	-0.337*	0.271*	-0.009	0.448*
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.899)	(0.000)
37.	Foreign residents	0.810*	-0.653*	0.616*	-0.524*	-0.138*	-0.633*	0.633*	-0.808*	0.708*	0.429*	0.729*	0.723*	0.730*	0.577*	0.705*	1.000	-0.215*	0.490*	0.089	0.235*
		(0.000)	(0.000)	(0.000)	(0.000)	(0.041)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.001)	(0.000)	(0.188)	(0.000)
38.	Emigration to other	-0.346*	0.206*	-0.347*	0.199*	0.235*	0.293*	-0.373*	0.407*	-0.363*	-0.467*	-0.393*	-0.403*	-0.304*	-0.108	-0.337*	-0.215*	1.000	-0.299*	-0.080	-0.131*
	Italian regions	(0.000)	(0.002)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.112)	(0.000)	(0.001)		(0.000)	(0.237)	(0.052)
39.	Emigration abroad	0.505*	-0.410*	0.363*	-0.384*	-0.231*	-0.308*	0.346*	-0.393*	0.454*	0.629*	0.498*	0.439*	0.478*	0.386*	0.271*	0.490*	-0.299*	1.000	0.201*	0.109
		(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.003)	(0.107)
40.	Beds in emergency	-0.015	0.030	0.041	0.072	0.038	0.071	-0.060	0.058	0.062	0.093	0.096	0.053	0.005	0.025	-0.009	0.089	-0.080	0.201*	1.000	-0.025
	residences for migrants	(0.830)	(0.655)	(0.543)	(0.288)	(0.572)	(0.293)	(0.379)	(0.389)	(0.363)	(0.169)	(0.155)	(0.432)	(0.947)	(0.712)	(0.899)	(0.188)	(0.237)	(0.003)		(0.717)
41.	Newspaper circulation	0.450*	-0.478*	0.213*	-0.469*	-0.513*	-0.412*	0.092	-0.229*	0.508*	0.381*	0.412*	0.344*	0.489*	0.171*	0.448*	0.235*	-0.131*	0.109	-0.025	1.000
		(0.000)	(0.000)	(0.002)	(0.000)	(0.000)	(0.000)	(0.173)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.011)	(0.000)	(0.000)	(0.052)	(0.107)	(0.717)	

 Table A3.4 – Italian provinces in 2018

Province	Acronym	Province	Acronym	Province	Acronym
Agrigento	AG	Genova	GE	Pordenone	PN
Alessandria	AL	Gorizia	GO	Potenza	PZ
Ancona	AN	Grosseto	GR	Prato	PO
Aosta	AO	Imperia	IM	Ragusa	RG
Arezzo	AR	Isernia	IS	Ravenna	RA
Ascoli Piceno	AP	La Spezia	SP	Reggio di Calabria	RC
Asti	AT	L'Aquila	AQ	Reggio nell'Emilia	RE
Avellino	AV	Latina	LT	Rieti	RI
Bari	BA	Lecce	LE	Rimini	RN
Barletta-Andria-Trani	BT	Lecco	LC	Roma	RM
Belluno	BL	Livorno	LI	Rovigo	RO
Benevento	BN	Lodi	LO	Salerno	SA
Bergamo	BG	Lucca	LU	Sassari	SS
Biella	BI	Macerata	MC	Savona	SV
Bologna	BO	Mantova	MN	Siena	SI
Bolzano/Bozen	BZ	Massa-Carrara	MS	Siracusa	SR
Brescia	BS	Matera	MT	Sondrio	SO
Brindisi	BR	Medio Campidano	VS	Sud Sardegna	SU
Cagliari	CA	Messina	ME	Taranto	ТА
Caltanissetta	CL	Milano	MI	Teramo	TE
Campobasso	CB	Modena	MO	Terni	TR
Carbonia-Iglesias	CI	Monza e della Brianza	MB	Torino	ТО
Caserta	CE	Napoli	NA	Trapani	ТР
Catania	СТ	Novara	NO	Trento	TN
Catanzaro	CZ	Nuoro	NU	Treviso	TV
Chieti	СН	Ogliastra	OG	Trieste	TS
Como	CO	Olbia-Tempio	OT	Udine	UD
Cosenza	CS	Oristano	OR	Varese	VA
Cremona	CR	Padova	PD	Venezia	VE
Crotone	KR	Palermo	PA	Verbano-Cusio-Ossola	VB
Cuneo	CN	Parma	PR	Vercelli	VC
Enna	EN	Pavia	PV	Verona	VR
Fermo	FM	Perugia	PG	Vibo Valentia	VV
Ferrara	FE	Pesaro e Urbino	PU	Vicenza	VI
Firenze	FI	Pescara	PE	Viterbo	VT
Foggia	FG	Piacenza	PC		
Forlì-Cesena	FC	Pisa	PI		
Frosinone	FR	Pistoia	PT		

Appendix 4 Factor analysis

Table A4.1 – Factor analysis, loading factors greater than 0.3

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Communality	Uniqueness
1. Arsons	-0.384					0.682				0.709	0.291
2. Attempted homicides	-0.380			0.328	0.593					0.680	0.320
3. Bag theft		0.917								0.868	0.132
4. Home burglaries	0.517	0.339	-0.314						0.428	0.767	0.233
5. Drug-related crimes		0.344		0.682						0.644	0.356
6. Extortions		0.311			0.319	0.379			0.329	0.564	0.436
7. House robberies		0.482							0.671	0.750	0.250
8. Intentional homicides					0.804					0.778	0.222
9. Mafia homicides		0.345			0.606					0.734	0.266
10. Micro criminality	0.403	0.796								0.904	0.096
11. Prostitution-related crimes								0.757		0.697	0.303
12. Sexual violence	0.369			0.474			0.340	0.471		0.773	0.227
13. Robbery		0.901								0.890	0.110
14. Robbery homicides				0.384	0.474	-0.323		0.398		0.692	0.308
15. Fertility rate	0.481		0.418				0.529			0.809	0.191
16. Total growth rate of population	0.781		0.456							0.893	0.107
17. Population between 15 and 64 years	-0.505		0.790							0.908	0.092
18. Population over 64 years	0.319		-0.875							0.933	0.067
19. Population density		0.655							-0.335	0.738	0.262
20. Total immigration	0.869									0.887	0.113
21. Isolation (highways, airports, and ports)		-0.491		0.421				-0.329		0.645	0.355
22. Participation to labor market	0.882									0.911	0.089
23. Participation to labor market: difference between men and women	-0.804		0.325							0.812	0.188
24. Exports per capita	0.668			-0.482						0.751	0.249
25. Income inequality: Gini concentration index on equivalent net household income	-0.656		0.391							0.697	0.303
26. Non-performing entry rate of loans to households	-0.648									0.646	0.354
27. Unemployment: job seekers aged 15 and over	-0.805									0.717	0.283

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Communality	Uniqueness
28. Value added: manufacturing	0.601			-0.668						0.881	0.119
29. Value added: public sector	-0.761			0.426						0.878	0.122
30. Value added: per capita	0.907									0.895	0.105
31. Median gross hourly wage of employees born abroad	0.639					-0.364	0.352			0.747	0.253
32. Median gross hourly wage of employees born in Italy	0.869									0.893	0.107
33. Mean wage of employees	0.833									0.874	0.126
34. Mean wealth per capita	0.870									0.868	0.132
35. Population having at least a secondary degree	0.699				-0.323					0.762	0.238
36. Immigration of graduates between 25 and 39 years	0.848									0.844	0.156
37. Foreign residents	0.763									0.768	0.232
38. Emigration to other Italian regions	-0.335					0.765				0.745	0.255
39. Emigration abroad	0.413						0.579			0.656	0.344
40. Beds in emergency residences for migrants							0.671			0.557	0.443
41. Newspaper circulation	0.708									0.747	0.253
Eigenvalues	15.569	4.517	2.981	2.473	1.607	1.352	1.330	1.056	1.027		
Difference	11.051	1.537	0.508	0.866	0.255	0.022	0.273	0.030			
Proportion	0.380	0.110	0.073	0.060	0.039	0.033	0.032	0.026	0.025		
Cumulative proportion	0.380	0.490	0.563	0.623	0.662	0.695	0.728	0.753	0.778		
Explained variance	13.468	4.209	2.890	2.691	2.354	1.903	1.640	1.453	1.302		
Number of variables	41.000										
Number of retained factors	9.000										

Notes. Factor loadings below 0.3 are omitted.

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Communality	Uniqueness
1. Arsons	-0.384	-0.183	0.117	0.117	-0.120	0.682	-0.142	0.024	0.027	0.709	0.291
2. Attempted homicides	-0.380	0.018	0.128	0.328	0.593	0.122	0.055	-0.154	0.137	0.680	0.320
3. Bag theft	0.090	0.917	0.048	0.083	0.014	-0.039	0.049	-0.030	0.073	0.868	0.132
4. Home burglaries	0.517	0.339	-0.314	-0.147	-0.245	-0.069	-0.030	-0.124	0.428	0.767	0.233
5. Drug-related crimes	-0.036	0.344	-0.217	0.682	0.017	-0.030	-0.090	0.057	0.007	0.644	0.356
6. Extortions	-0.268	0.311	0.123	0.106	0.319	0.379	0.027	0.124	0.329	0.564	0.436
7. House robberies	-0.063	0.482	-0.022	-0.045	0.010	-0.034	-0.011	0.243	0.671	0.750	0.250
8. Intentional homicides	-0.277	-0.054	0.059	0.094	0.804	-0.071	-0.160	-0.083	-0.050	0.778	0.222
9. Mafia homicides	-0.279	0.345	0.071	-0.262	0.606	0.286	0.041	-0.009	-0.114	0.734	0.266
10. Micro criminality	0.403	0.796	-0.114	0.082	-0.140	-0.011	0.013	-0.062	0.256	0.904	0.096
11. Prostitution-related crimes	0.133	0.161	-0.205	-0.035	-0.104	0.020	0.083	0.757	0.139	0.697	0.303
12. Sexual violence	0.369	0.191	-0.150	0.474	-0.078	0.001	0.340	0.471	-0.097	0.773	0.227
13. Robbery	0.052	0.901	0.204	0.045	0.126	-0.019	-0.018	0.112	0.054	0.890	0.110
14. Robbery homicides	0.063	-0.022	0.037	0.384	0.474	-0.323	-0.200	0.398	0.106	0.692	0.308
15. Fertility rate	0.481	0.190	0.418	-0.274	-0.082	0.040	0.529	-0.034	-0.042	0.809	0.191
16. Total growth rate of population	0.781	0.164	0.456	0.078	-0.055	-0.074	-0.040	0.144	0.105	0.893	0.107
17. Population between 15 and 64 years	-0.505	0.024	0.790	0.058	0.100	-0.011	-0.089	-0.077	-0.022	0.908	0.092
18. Population over 64 years	0.319	-0.168	-0.875	0.106	-0.062	0.013	-0.082	0.120	0.028	0.933	0.067
19. Population density	0.172	0.655	0.280	-0.049	0.030	-0.112	-0.085	0.255	-0.335	0.738	0.262
20. Total immigration	0.869	0.036	-0.073	0.132	-0.101	-0.012	-0.145	0.233	0.149	0.887	0.113
21. Isolation (highways, airports, and ports)	-0.154	-0.491	0.210	0.421	0.214	-0.018	0.015	-0.329	0.065	0.645	0.355
22. Participation to labor market	0.882	-0.002	-0.290	-0.109	-0.172	-0.087	0.022	-0.003	-0.012	0.911	0.089
23. Participation to labor market: difference between men and women	-0.804	0.038	0.325	-0.140	0.071	0.124	0.104	-0.053	-0.070	0.812	0.188
24. Exports per capita	0.668	-0.024	-0.038	-0.482	-0.102	-0.195	0.111	0.094	-0.015	0.751	0.249
25. Income inequality: Gini concentration index on equivalent net household income	-0.656	0.059	0.391	0.285	0.019	0.061	-0.080	-0.129	0.043	0.697	0.303
26. Non-performing entry rate of loans to households	-0.648	0.173	0.103	-0.257	-0.298	0.044	0.026	0.056	0.160	0.646	0.354
27. Unemployment: job seekers aged 15 and over	-0.805	0.051	0.041	0.200	0.123	0.087	-0.022	-0.008	0.034	0.717	0.283
28. Value added: manufacturing	0.601	-0.069	-0.045	-0.668	-0.131	-0.212	-0.008	0.012	0.065	0.881	0.119
29. Value added: public sector	-0.761	-0.190	0.107	0.426	0.195	0.153	0.001	0.035	-0.085	0.878	0.122

Table A4.2 – Factor analysis – Full table

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Communality	Uniqueness
30. Value added: per capita	0.907	0.170	-0.023	0.054	-0.025	-0.135	0.120	-0.014	-0.078	0.895	0.105
31. Median gross hourly wage of employees born abroad	0.639	-0.153	-0.163	-0.042	0.008	-0.364	0.352	-0.088	-0.149	0.747	0.253
32. Median gross hourly wage of employees born in Italy	0.869	0.142	-0.067	-0.153	-0.040	-0.191	0.198	-0.012	-0.108	0.893	0.107
33. Mean wage of employees	0.833	0.171	-0.079	-0.261	-0.106	-0.171	0.120	0.050	-0.137	0.874	0.126
34. Mean wealth per capita	0.870	0.131	-0.211	-0.066	-0.079	-0.083	0.169	0.018	-0.047	0.868	0.132
35. Population having at least a secondary degree	0.699	0.052	-0.254	-0.007	-0.323	0.163	-0.059	0.086	-0.252	0.762	0.238
36. Immigration of graduates between 25 and 39 years	0.848	0.241	-0.091	0.051	-0.158	-0.112	-0.100	0.067	0.065	0.844	0.156
37. Foreign residents	0.763	0.208	-0.143	-0.186	-0.206	0.099	0.102	0.025	0.156	0.768	0.232
38. Emigration to other Italian regions	-0.335	-0.080	-0.152	0.054	0.097	0.765	0.015	-0.041	-0.057	0.745	0.255
39. Emigration abroad	0.413	-0.231	-0.200	-0.050	-0.062	-0.136	0.579	0.021	-0.177	0.656	0.344
40. Beds in emergency residences for migrants	-0.130	0.038	0.098	0.075	-0.148	-0.037	0.671	0.156	0.163	0.557	0.443
41. Newspaper circulation	0.708	-0.130	-0.220	0.286	0.154	-0.195	0.172	0.080	-0.003	0.747	0.253
Eigenvalues	15.569	4.517	2.981	2.473	1.607	1.352	1.330	1.056	1.027		
Difference	11.051	1.537	0.508	0.866	0.255	0.022	0.273	0.030			
Proportion	0.380	0.110	0.073	0.060	0.039	0.033	0.032	0.026	0.025		
Cumulative proportion	0.380	0.490	0.563	0.623	0.662	0.695	0.728	0.753	0.778		
Explained variance	13.468	4.209	2.890	2.691	2.354	1.903	1.640	1.453	1.302		
Number of variables	41.000										
Number of retained factors	9.000										





Table A4.3 – Factor scores correlation matrix, 2017

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
Factor 1	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Factor 2	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Factor 3	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Factor 4	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Factor 5	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Factor 6	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Factor 7	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Factor 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Factor 9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00

Table A4.4 – Factor scores correlation matrix, 2012 and 2017

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
Factor 1	1.00	-0.05	0.08	0.09	-0.13	0.01	0.06	0.06	0.07
Factor 2	-0.05	1.00	0.03	-0.03	0.09	0.06	0.06	-0.03	0.09
Factor 3	0.08	0.03	1.00	0.04	-0.01	0.04	-0.19	0.16	0.21
Factor 4	0.09	-0.03	0.04	1.00	-0.16	-0.09	-0.06	0.01	0.06
Factor 5	-0.13	0.09	-0.01	-0.16	1.00	0.15	0.07	0.03	0.02
Factor 6	0.01	0.06	0.04	-0.09	0.15	1.00	0.01	0.08	-0.01
Factor 7	0.06	0.06	-0.19	-0.06	0.07	0.01	1.00	-0.22	-0.17
Factor 8	0.06	-0.03	0.16	0.01	0.03	0.08	-0.22	1.00	0.22
Factor 9	0.07	0.09	0.21	0.06	0.02	-0.01	-0.17	0.22	1.00



Figure A4.2 - Factor 2 Crime in densely populated areas vs. Factor 1 Economic well-being

Figure A4.3 – Factor 3 Demographic growth vs. Factor 1 Economic well-being





Figure A4.4 - Factor 4 Crime in less industrialized areas vs. Factor 1 Economic well-being

Figure A4.5 - Factor 5 Organized crime violence vs. Factor 1 Economic well-being





Figure A4.6 - Factor 6 Arsons and extortions in areas with high emigration vs. Factor 1 Economic well-being

Figure A4.7 - Factor 7 Government management of uncontrolled immigration vs. Factor 1 Economic well-being





Figure A4.8 - Factor 8 Crimes against women vs. Factor 1 Economic well-being

Figure A4.9 - Factor 9 House robberies vs. Factor 1 Economic well-being





Figure A4.10 – Factor 1 Economic well-being, 2012 and 2017







Figure A4.12 – Factor 3 Demographic growth, 2012 and 2017







Figure A4.14 – Factor 5 Organized crime violence, 2012 and 2017

















Appendix 5 Regression analysis on factor scores

 Table A5.1 – Political elections 2018: OLS regressions on factor scores

		0													
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Abstention	Abstention	Abstention	M5S	M5S	M5S	Lega	Lega	Lega	PD	PD	PD	FI	FI	FI
F1 Economic well-being	-3.973***	-0.320	-0.473	-4.531***	-4.327***	-4.551***	5.106***	2.722***	2.751***	2.962^{***}	0.825***	0.796***	-1.311***	-0.784***	-0.621***
	(0.266)	(0.265)	(0.357)	(0.266)	(0.251)	(0.294)	(0.437)	(0.259)	(0.314)	(0.258)	(0.176)	(0.243)	(0.156)	(0.126)	(0.133)
F2 Crime in densely	-0.438*	-0.025	-0.019	0.697^{***}	0.423**	0.760^{***}	-0.862**	-0.222	-0.435	0.796^{***}	0.254**	0.252	0.252	-0.109	-0.142
populated areas	(0.237)	(0.146)	(0.142)	(0.199)	(0.212)	(0.241)	(0.341)	(0.230)	(0.282)	(0.236)	(0.113)	(0.159)	(0.193)	(0.136)	(0.151)
F3 Demographic growth	1.146***	0.297	0.385	0.900^{***}	1.868^{***}	1.897^{***}	-1.170***	-1.966***	-1.870***	-1.286***	-0.049	-0.064	0.472^{***}	0.315***	0.224**
	(0.239)	(0.223)	(0.252)	(0.222)	(0.230)	(0.259)	(0.427)	(0.214)	(0.206)	(0.280)	(0.129)	(0.153)	(0.163)	(0.107)	(0.108)
F4 Crime in non-	2.028^{***}	1.067^{***}	1.130***	0.600^{**}	0.572**	0.789^{**}	-2.496***	-0.865***	-0.922***	-0.447^{*}	-0.490***	-0.573***	-0.400**	0.090	0.029
industrialized areas	(0.233)	(0.230)	(0.268)	(0.262)	(0.247)	(0.307)	(0.450)	(0.233)	(0.272)	(0.227)	(0.102)	(0.129)	(0.162)	(0.127)	(0.137)
F5 Organized crime violence	1.667***	0.494^{***}	0.553***	-0.175	0.422	0.392	-0.910***	-0.808***	-0.653***	-0.734***	-0.393***	-0.460***	0.217	0.435**	0.373***
	(0.282)	(0.174)	(0.152)	(0.385)	(0.317)	(0.302)	(0.185)	(0.139)	(0.166)	(0.226)	(0.131)	(0.144)	(0.172)	(0.184)	(0.112)
F6 Arsons and extortions in	0.446^{*}	-0.186	-0.127	0.313	0.678^{***}	0.580^{**}	-1.327***	-0.315*	-0.299	-0.091	-0.128	-0.143	0.419**	0.350**	0.374***
areas with high emigration	(0.238)	(0.145)	(0.165)	(0.253)	(0.225)	(0.244)	(0.270)	(0.177)	(0.190)	(0.204)	(0.112)	(0.142)	(0.175)	(0.135)	(0.121)
F7 Government management	1.185***	0.908^{***}	0.972^{**}	-1.116***	-1.016***	-1.308***	0.356	-0.436**	-0.269	-0.837***	0.042	0.195	-0.174	0.161	0.071
of uncontrolled immigration	(0.253)	(0.287)	(0.426)	(0.222)	(0.236)	(0.347)	(0.584)	(0.180)	(0.269)	(0.285)	(0.135)	(0.204)	(0.164)	(0.104)	(0.183)
F8 Crimes against women	-0.001	-0.113	-0.143	0.435^{*}	0.238	-0.164	-0.311	0.024	0.499**	-0.373*	-0.080	0.029	0.061	-0.129	-0.238*
	(0.255)	(0.110)	(0.158)	(0.227)	(0.194)	(0.312)	(0.282)	(0.160)	(0.208)	(0.214)	(0.108)	(0.137)	(0.115)	(0.081)	(0.124)
F9 House robberies	-0.268	-0.048	0.036	0.351	0.068	-0.082	-0.310	0.333*	0.313	0.747^{***}	0.076	0.043	0.093	-0.010	0.030
	(0.252)	(0.144)	(0.137)	(0.255)	(0.239)	(0.240)	(0.330)	(0.195)	(0.233)	(0.254)	(0.119)	(0.152)	(0.153)	(0.106)	(0.117)
Abstention in 2013		0.720^{***}	0.708^{***}												
		(0.054)	(0.065)												
M5S in 2013					0.559^{***}	0.611***									
					(0.092)	(0.096)									
Lega in 2013								1.185***	1.209^{***}						
								(0.076)	(0.077)						
PD in 2013											0.653***	0.652^{***}			
											(0.049)	(0.053)			
FI in 2013														0.522***	0.537***
														(0.046)	(0.049)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Abstention	Abstention	Abstention	M5S	M5S	M5S	Lega	Lega	Lega	PD	PD	PD	FI	FI	FI
F1 Change 2012-2017			0.834			3.108			-2.726			-0.572			0.163
			(1.225)			(2.260)			(1.660)			(1.052)			(0.790)
F2 Change 2012-2017			0.500			1.407^{*}			-0.408			-0.364			-0.575^{*}
			(0.485)			(0.826)			(0.655)			(0.499)			(0.332)
F3 Change 2012-2017			-0.251			0.803			0.457			-0.301			-0.308
			(0.665)			(1.161)			(0.969)			(0.578)			(0.472)
F4 Change 2012-2017			-0.376			-1.071			-0.019			0.746			0.729^{*}
			(0.478)			(0.874)			(0.514)			(0.473)			(0.430)
F5 Change 2012-2017			-0.147			-0.028			0.214			0.238			-0.061
			(0.249)			(0.474)			(0.296)			(0.231)			(0.182)
F6 Change 2012-2017			-0.080			-0.948			0.128			0.274			0.316
			(0.329)			(0.708)			(0.472)			(0.386)			(0.331)
F7 Change 2012-2017			-0.080			1.350***			-0.586			-0.309			-0.001
			(0.355)			(0.503)			(0.431)			(0.328)			(0.254)
F8 Change 2012-2017			0.247			0.372			-0.747**			-0.293*			0.165
			(0.203)			(0.370)			(0.298)			(0.163)			(0.143)
F9 Change 2012-2017			-0.368*			0.135			0.038			0.283			-0.071
			(0.188)			(0.332)			(0.276)			(0.191)			(0.157)
Constant	29.684***	9.535***	9.661***	21.819***	11.312***	11.636***	12.278***	9.161***	8.469***	12.531***	0.334	0.306	9.507***	1.596**	1.260^{*}
	(0.247)	(1.554)	(2.032)	(0.284)	(1.746)	(1.961)	(0.364)	(0.294)	(0.765)	(0.272)	(0.873)	(0.954)	(0.152)	(0.688)	(0.678)
No. of observations	110	110	110	110	110	110	110	110	110	109	109	109	109	109	109
R-squared	.808	.938	.942	.746	.817	.851	.736	.914	.925	.645	.929	.935	.514	.764	.815
F test	51.6***	255***	145***	57.3***	72.3***	44.8***	59.9***	145***	95.5***	20.1***	77.9***	58.3***	11.3***	27.7***	21.5***

Notes. Robust standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

Appendix 6 Regression analysis on selected variables

Table A6.1 - Political elections 2018: Regressions on selected variables

		0													
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	M5S+Lega	M5S+Lega	M5S+Lega	M5S	M5S	M5S	Lega	Lega	Lega	PD	PD	PD	FI	FI	FI
Value added: per capita	0.322	0.415	0.628	-1.382***	-1.316***	-0.660	1.704***	1.732***	1.288^{**}	0.815^{**}	0.866**	0.461	-0.559***	-0.538***	-0.237
change 2012-2017	(0.460)	(0.428)	(0.393)	(0.433)	(0.419)	(0.426)	(0.603)	(0.574)	(0.570)	(0.340)	(0.341)	(0.389)	(0.166)	(0.156)	(0.162)
Population density	-0.362	-0.098	0.137	0.646	0.419	1.143	-1.008	-0.517	-1.006	0.063	0.029	-0.394	0.354	0.292	0.607
	(1.022)	(0.859)	(0.902)	(1.082)	(1.105)	(1.046)	(1.423)	(1.341)	(1.488)	(0.769)	(0.724)	(0.894)	(0.470)	(0.481)	(0.690)
Isolation	-0.059	-0.062^{*}	-0.059^{*}	-0.039	-0.019	-0.008	-0.020	-0.043	-0.050	-0.008	-0.001	-0.008	-0.038***	-0.037***	-0.032***
	(0.036)	(0.035)	(0.034)	(0.030)	(0.029)	(0.029)	(0.047)	(0.046)	(0.046)	(0.025)	(0.024)	(0.025)	(0.010)	(0.011)	(0.010)
Elderly population	0.010	0.024	-0.015	-0.194	-0.207	-0.327**	0.204	0.231	0.312	0.287	0.285	0.348^{*}	-0.102	-0.111	-0.158**
	(0.295)	(0.282)	(0.253)	(0.197)	(0.177)	(0.158)	(0.301)	(0.284)	(0.281)	(0.196)	(0.190)	(0.189)	(0.077)	(0.073)	(0.068)
Education	0.008	-0.063	-0.037	-0.148**	-0.095	-0.015	0.156^{*}	0.032	-0.023	0.119^{*}	0.125^{*}	0.079	-0.068**	-0.054^{*}	-0.020
	(0.072)	(0.073)	(0.071)	(0.065)	(0.071)	(0.076)	(0.081)	(0.082)	(0.086)	(0.061)	(0.065)	(0.061)	(0.026)	(0.029)	(0.030)
Net migration	0.075	0.058	0.178	-0.643***	-0.748***	-0.376**	0.718^{***}	0.806^{***}	0.554^{**}	0.439***	0.391***	0.200	-0.192***	-0.214***	-0.071
	(0.159)	(0.172)	(0.173)	(0.161)	(0.158)	(0.161)	(0.187)	(0.197)	(0.223)	(0.125)	(0.137)	(0.175)	(0.070)	(0.069)	(0.074)
Management of uncontrolled		-0.038	-0.037		-0.017	-0.014		-0.021	-0.023		-0.017	-0.020		-0.014^{*}	-0.013*
immigration		(0.027)	(0.025)		(0.020)	(0.015)		(0.023)	(0.023)		(0.014)	(0.014)		(0.008)	(0.007)
House robberies		-2.082	-2.480		6.509**	5.280**		-8.592**	-7.760**		2.235	2.639		1.323	1.023
		(2.628)	(2.409)		(2.491)	(2.167)		(3.384)	(3.291)		(2.590)	(2.487)		(1.029)	(0.956)
Intentional homicides		-13.551*	-14.000^{*}		0.284	-1.102		-13.835**	-12.898**		-2.840	-2.534		1.617	1.389
		(7.187)	(7.520)		(7.700)	(8.628)		(5.828)	(5.619)		(3.478)	(3.721)		(2.849)	(2.312)
Value added: per capita 2017			-0.125			-0.387***			0.262^{*}			0.209^{*}			-0.155****
			(0.133)			(0.094)			(0.149)			(0.118)			(0.057)
Constant	36.189***	42.228***	44.138***	38.892***	32.951***	38.852***	-2.703	9.277	5.285	-2.013	-3.078	-5.827	18.597***	17.462***	19.507***
	(5.073)	(6.252)	(5.763)	(5.484)	(5.569)	(5.144)	(7.286)	(8.100)	(7.869)	(5.217)	(6.339)	(6.376)	(2.042)	(2.199)	(2.472)
No. of observations	110	110	110	110	110	110	110	110	110	109	109	109	109	109	109
R-squared	.0851	.158	.17	.506	.532	.593	.456	.5	.517	.485	.495	.519	.48	.501	.56
F test	2.16^{*}	2.07^{**}	2.05^{**}	22.6***	17.3***	21.2***	19.5***	19.4***	19.5***	16.5***	13.5***	13.3***	19.9***	14.7***	13.5***

Appendix 7 Panel regressions on selected variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Abstention	Abstention	M5S	M5S	Lega	Lega	PD	PD	FI	FI
	(FE)	(RE)	(FE)	(RE)	(FE)	(RE)	(FE)	(RE)	(FE)	(RE)
Value added: per capita	0.503**	-0.356***	-2.138***	-0.433***	1.840^{***}	0.529^{***}	-0.106	0.290^{***}	-0.240	-0.285***
	(0.206)	(0.074)	(0.461)	(0.079)	(0.356)	(0.097)	(0.196)	(0.074)	(0.178)	(0.038)
Population density	3.311	1.467	34.373	0.308	-40.417	-1.107	22.323	0.019	-7.296	0.822^{*}
	(14.427)	(1.107)	(32.186)	(0.996)	(24.890)	(1.362)	(13.578)	(1.105)	(12.333)	(0.491)
Isolation	0.000	0.095***	0.000	-0.043*	0.000	-0.019	0.000	-0.019	0.000	-0.044***
	(.)	(0.026)	(.)	(0.023)	(.)	(0.031)	(.)	(0.025)	(.)	(0.011)
Elderly population	-0.703*	-0.403***	2.056^{**}	0.114	-1.163	-0.084	1.021***	0.734***	-0.080	-0.216***
	(0.407)	(0.155)	(0.909)	(0.152)	(0.703)	(0.198)	(0.383)	(0.150)	(0.348)	(0.073)
Education	0.008	-0.069	-0.375***	-0.106*	0.216**	0.155**	0.028	0.024	-0.011	-0.011
	(0.061)	(0.047)	(0.135)	(0.057)	(0.105)	(0.067)	(0.057)	(0.044)	(0.052)	(0.026)
Net migration	-0.168**	-0.236***	0.551***	0.272^{**}	-0.395***	-0.198^{*}	0.026	0.055	0.177^{**}	0.173***
	(0.081)	(0.076)	(0.180)	(0.123)	(0.139)	(0.119)	(0.076)	(0.069)	(0.069)	(0.051)
year=2013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
year=2018	1.925**	2.421***	4.341**	4.326***	8.174***	8.201***	-7.868***	-7.599***	-4.799***	-4.582***
	(0.876)	(0.433)	(1.954)	(0.698)	(1.511)	(0.647)	(0.824)	(0.401)	(0.748)	(0.274)
Constant	31.001**	43.968***	32.955	33.331***	-14.171	-14.207***	-8.446	-4.202	24.248**	28.423***
	(12.104)	(4.202)	(27.002)	(4.235)	(20.882)	(5.394)	(11.389)	(4.103)	(10.344)	(1.999)
No. of observations	220	220	220	220	220	220	218	218	218	218
No. of provinces	110	110	110	110	110	110	109	109	109	109
R-squared: within	.457	.311	.499	.335	.885	.858	.908	.9	.91	.91
R-squared: between	.116	.635	.136	.298	.0646	.307	.0355	.461	.0121	.492
R-squared: overall	.0767	.615	.119	.306	.141	.582	.11	.59	.31	.756
Hausman test chi-squared	838		42.8		35.1		17.4		1.13	
Hausman test p-value for the chi-squared	8.8e-178		1.30e-07		4.18e-06		.00795		.98	

Table A7.1 - Political elections 2013 and 2018: Panel regressions on selected variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Abstention	Abstention	M5S	M5S	Lega	Lega	PD	PD	FI	FI
	(FE)	(RE)	(FE)	(RE)	(FE)	(RE)	(FE)	(RE)	(FE)	(RE)
Value added: per capita	0.437^{*}	-0.145**	-1.832***	-0.354***	1.496***	0.390***	-0.359*	0.144^{*}	-0.052	-0.279***
	(0.233)	(0.073)	(0.515)	(0.085)	(0.386)	(0.107)	(0.214)	(0.083)	(0.195)	(0.044)
Population density	4.012	1.015	25.238	0.073	-34.692	-0.640	36.668***	0.387	-9.729	0.829^{*}
	(15.512)	(0.911)	(34.276)	(0.971)	(25.723)	(1.290)	(13.955)	(1.063)	(12.675)	(0.497)
Isolation	0.000	0.060^{***}	0.000	-0.059**	0.000	0.010	0.000	0.010	0.000	-0.047***
	(.)	(0.022)	(.)	(0.025)	(.)	(0.032)	(.)	(0.026)	(.)	(0.012)
Elderly population	-0.821*	-0.213	2.712**	0.113	-1.713**	-0.092	0.538	0.687^{***}	0.164	-0.225***
	(0.474)	(0.131)	(1.048)	(0.147)	(0.786)	(0.189)	(0.428)	(0.146)	(0.388)	(0.073)
Education	0.007	-0.054	-0.374***	-0.121**	0.190^{*}	0.140^{**}	0.039	0.019	-0.005	-0.022
	(0.062)	(0.043)	(0.137)	(0.058)	(0.103)	(0.066)	(0.056)	(0.044)	(0.051)	(0.027)
Net migration	-0.165**	-0.267***	0.551***	0.302**	-0.424***	-0.237*	-0.013	0.062	0.189***	0.172^{***}
	(0.083)	(0.074)	(0.184)	(0.129)	(0.138)	(0.122)	(0.075)	(0.070)	(0.068)	(0.053)
Foreign residents	-0.035	-0.422***	0.392	-0.208**	-0.328	0.316***	-0.572***	0.285^{***}	0.116	-0.017
	(0.216)	(0.076)	(0.477)	(0.093)	(0.358)	(0.112)	(0.201)	(0.082)	(0.182)	(0.045)
Management of uncontrolled	0.001	0.021^{*}	-0.010	0.006	-0.017	-0.037*	0.017	0.002	-0.001	-0.007
immigration	(0.013)	(0.012)	(0.028)	(0.021)	(0.021)	(0.019)	(0.011)	(0.011)	(0.010)	(0.008)
House robberies	0.184	2.160^{**}	-0.405	-0.356	2.338	1.669	0.790	0.318	-1.406*	-0.391
	(0.964)	(0.854)	(2.130)	(1.417)	(1.599)	(1.387)	(0.866)	(0.809)	(0.787)	(0.591)
Intentional homicides	3.393	5.711**	-10.665	-9.768**	8.439	3.143	-3.217	-1.334	-5.264**	-3.095*
	(3.086)	(2.593)	(6.820)	(3.880)	(5.118)	(4.116)	(2.779)	(2.514)	(2.524)	(1.717)
year=2013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
year=2018	2.370^{*}	3.104***	1.914	4.507***	10.817***	8.206***	-5.817***	-7.917***	-5.992***	-4.607***
	(1.259)	(0.423)	(2.781)	(0.740)	(2.087)	(0.680)	(1.145)	(0.416)	(1.040)	(0.292)
Constant	34.861**	38.656***	11.508	36.292***	6.882	-15.726***	8.844	-4.166	15.114	29.933***
	(14.536)	(3.744)	(32.120)	(4.667)	(24.106)	(5.528)	(13.191)	(4.107)	(11.981)	(2.193)
No. of observations	220	220	220	220	220	220	218	218	218	218
No. of provinces	110	110	110	110	110	110	109	109	109	109
R-squared: within	.465	.341	.515	.346	.895	.86	.917	.897	.919	.914
R-squared: between	.0218	.756	.0949	.357	.00709	.375	.0188	.54	.0659	.49
R-squared: overall	.0091	.732	.104	.345	.095	.619	.0000525	.645	.108	.757
Hausman test chi-squared	43.5		47.7		24.3		19.3		20.2	
Hausman test p-value for the chi- squared	1.71e-06		6.98e-07		.0069		.0369		.027	

Table A7.2 - Political elections 2013 and 2018: Panel regressions on selected variables

				0						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Abstention	Abstention	M5S	M5S	Lega	Lega	PD	PD	FI	FI
	(FE)	(FE)	(FE)	(FE)	(FE)	(FE)	(FE)	(FE)	(FE)	(FE)
Value added: per capita	0.503**	0.437*	-2.138***	-1.832***	1.840***	1.496***	-0.106	-0.359*	-0.240	-0.052
	(0.206)	(0.233)	(0.461)	(0.515)	(0.356)	(0.386)	(0.196)	(0.214)	(0.178)	(0.195)
Population density	3.311	4.012	34.373	25.238	-40.417	-34.692	22.323	36.668***	-7.296	-9.729
	(14.427)	(15.512)	(32.186)	(34.276)	(24.890)	(25.723)	(13.578)	(13.955)	(12.333)	(12.675)
Isolation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Elderly population	-0.703*	-0.821*	2.056**	2.712**	-1.163	-1.713**	1.021***	0.538	-0.080	0.164
	(0.407)	(0.474)	(0.909)	(1.048)	(0.703)	(0.786)	(0.383)	(0.428)	(0.348)	(0.388)
Education	0.008	0.007	-0.375***	-0.374***	0.216**	0.190^{*}	0.028	0.039	-0.011	-0.005
	(0.061)	(0.062)	(0.135)	(0.137)	(0.105)	(0.103)	(0.057)	(0.056)	(0.052)	(0.051)
Net migration	-0.168**	-0.165**	0.551***	0.551***	-0.395***	-0.424***	0.026	-0.013	0.177^{**}	0.189***
	(0.081)	(0.083)	(0.180)	(0.184)	(0.139)	(0.138)	(0.076)	(0.075)	(0.069)	(0.068)
year=2013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
year=2018	1.925**	2.370^{*}	4.341**	1.914	8.174***	10.817^{***}	-7.868***	-5.817***	-4.799***	-5.992***
	(0.876)	(1.259)	(1.954)	(2.781)	(1.511)	(2.087)	(0.824)	(1.145)	(0.748)	(1.040)
Foreign residents		-0.035		0.392		-0.328		-0.572***		0.116
		(0.216)		(0.477)		(0.358)		(0.201)		(0.182)
Management of		0.001		-0.010		-0.017		0.017		-0.001
uncontrolled immigration		(0.013)		(0.028)		(0.021)		(0.011)		(0.010)
House robberies		0.184		-0.405		2.338		0.790		-1.406*
		(0.964)		(2.130)		(1.599)		(0.866)		(0.787)
Intentional homicides		3.393		-10.665		8.439		-3.217		-5.264**
		(3.086)		(6.820)		(5.118)		(2.779)		(2.524)
Constant	31.001**	34.861**	32.955	11.508	-14.171	6.882	-8.446	8.844	24.248**	15.114
	(12.104)	(14.536)	(27.002)	(32.120)	(20.882)	(24.106)	(11.389)	(13.191)	(10.344)	(11.981)
No. of observations	220	220	220	220	220	220	218	218	218	218
No. of provinces	110	110	110	110	110	110	109	109	109	109
R-squared: within	.457	.465	.499	.515	.885	.895	.908	.917	.91	.919
R-squared: between	.116	.0218	.136	.0949	.0646	.00709	.0355	.0188	.0121	.0659
R-squared: overall	.0767	.0091	.119	.104	.141	.095	.11	.0000525	.31	.108
Hausman test chi- squared	838	43.5	42.8	47.7	35.1	24.3	17.4	19.3	1.13	20.2
Hausman test p-value for the chi-squared	8.8e-178	1.71e-06	1.30e-07	6.98e-07	4.18e-06	.0069	.00795	.0369	.98	.027

Table A7.3 - Political elections 2013 and 2018: Fixed effects panel regressions on selected variables

			1	9						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Abstention	Abstention	M5S	M5S	Lega	Lega	PD	PD	FI	FI
	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)	(RE)
Value added: per capita	-0.356***	-0.145**	-0.433***	-0.354***	0.529***	0.390****	0.290***	0.144^{*}	-0.285***	-0.279***
	(0.074)	(0.073)	(0.079)	(0.085)	(0.097)	(0.107)	(0.074)	(0.083)	(0.038)	(0.044)
Population density	1.467	1.015	0.308	0.073	-1.107	-0.640	0.019	0.387	0.822^{*}	0.829^{*}
	(1.107)	(0.911)	(0.996)	(0.971)	(1.362)	(1.290)	(1.105)	(1.063)	(0.491)	(0.497)
Isolation	0.095^{***}	0.060^{***}	-0.043*	-0.059**	-0.019	0.010	-0.019	0.010	-0.044***	-0.047***
	(0.026)	(0.022)	(0.023)	(0.025)	(0.031)	(0.032)	(0.025)	(0.026)	(0.011)	(0.012)
Elderly population	-0.403***	-0.213	0.114	0.113	-0.084	-0.092	0.734***	0.687^{***}	-0.216***	-0.225***
	(0.155)	(0.131)	(0.152)	(0.147)	(0.198)	(0.189)	(0.150)	(0.146)	(0.073)	(0.073)
Education	-0.069	-0.054	-0.106*	-0.121**	0.155**	0.140^{**}	0.024	0.019	-0.011	-0.022
	(0.047)	(0.043)	(0.057)	(0.058)	(0.067)	(0.066)	(0.044)	(0.044)	(0.026)	(0.027)
Net migration	-0.236***	-0.267***	0.272^{**}	0.302^{**}	-0.198^{*}	-0.237*	0.055	0.062	0.173***	0.172^{***}
	(0.076)	(0.074)	(0.123)	(0.129)	(0.119)	(0.122)	(0.069)	(0.070)	(0.051)	(0.053)
year=2013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
year=2018	2.421***	3.104***	4.326***	4.507***	8.201***	8.206***	-7.599***	-7.917***	-4.582***	-4.607***
	(0.433)	(0.423)	(0.698)	(0.740)	(0.647)	(0.680)	(0.401)	(0.416)	(0.274)	(0.292)
Foreign residents		-0.422***		-0.208**		0.316***		0.285***		-0.017
		(0.076)		(0.093)		(0.112)		(0.082)		(0.045)
Management of		0.021^{*}		0.006		-0.037*		0.002		-0.007
uncontrolled immigration		(0.012)		(0.021)		(0.019)		(0.011)		(0.008)
House robberies		2.160**		-0.356		1.669		0.318		-0.391
		(0.854)		(1.417)		(1.387)		(0.809)		(0.591)
Intentional homicides		5.711**		-9.768**		3.143		-1.334		-3.095*
		(2.593)		(3.880)		(4.116)		(2.514)		(1.717)
Constant	43.968***	38.656***	33.331****	36.292***	-14.207***	-15.726***	-4.202	-4.166	28.423***	29.933***
	(4.202)	(3.744)	(4.235)	(4.667)	(5.394)	(5.528)	(4.103)	(4.107)	(1.999)	(2.193)
No. of observations	220	220	220	220	220	220	218	218	218	218
No. of provinces	110	110	110	110	110	110	109	109	109	109
R-squared: within	.311	.341	.335	.346	.858	.86	.9	.897	.91	.914
R-squared: between	.635	.756	.298	.357	.307	.375	.461	.54	.492	.49
R-squared: overall	.615	.732	.306	.345	.582	.619	.59	.645	.756	.757

 Table A7.4 - Political elections 2013 and 2018: Random effects panel regressions on selected variables

Appendix 8 Selected social and economic data for Italy



Figure A8.1 – Total Population

Figure A8.2 – Real Gross Domestic Product



Figure A8.3 – Constant GDP per Capita



Figure A8.4 – General Government Gross Debt







Figure A8.6 - Spread between Italian and German Long-Term Government Bond Yields







Figure A8.8 – Current Account Balance



Figure A8.9 – Unemployment Rate



Figure A8.10 – Value Added of the Industrial Sector



Figure A8.11 – Migrants Disembarked

