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Demography and Democracy: Exploring the linkage between age and voter turnout in Italy with geospatial analysis

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INTRODUCTION

Electoral outcomes in both established and new democracies alike generate a flurry of interest and analysis. One of the statistics that frequently accompanies election results is that for electoral participation or voter turnout. Since the right to vote is fundamental to democracy, the extent to which this right is exercised is often used as a barometer of the quality of a democracy or the legitimacy of an election. Despite the spread of democracy around the world, increased opportunities to vote in supra-national, national and sub-national elections, and local efforts to 'get out the vote', since 1990 turnout rates around the world have declined (Fruncillo 2004). Though several explanations for declining rates of voter participation have been put forth, such as voter apathy, weakening levels of partisanship and party system change, the recent drop in turnout in many democracies remains a mystery. Though in US politics older voters are often seen as much more active and likely to vote in a given election than younger ones, elsewhere in the world this relationship doesn't seem to hold up, at least not to the same extent. Thus, age would seem to be a useful demographic variable to examine in relation to electoral turnout. As populations age, as is characteristic of many countries today, turnout in elections seems to be declining. Is this truly the case?

The reasons to vote or not are varied. Herein lays a large part of the problem in trying to provide a single explanation for declining turnout for an entire country. In different places within

a country different mixes of reasons may be at work. Much of the political science literature, particularly in the United States, tends to ascribe non-voting to voting's self-evident "irrationality" for an individual voter engaged in weighing its personal costs and benefits: the fact that a single vote makes very little difference to the final outcome and is thus not worth the effort needed to cast it (e.g. Downs 1957; Riker and Ordeshook 1968). Seeming mass apathy can thus be put in a positive light. Some commentators, however, dispute this, suggesting that non-voting results much more from either increased barriers to voting (as in the historic and contemporary voter suppression efforts by both parties in the United States at different times to bar their opponent's presumed voters from actually voting), the rising number of so-called "ineligibles" in a given potential voting population (non-citizens, convicted felons, etc.) or in active abstention because the alternatives available are not to the taste or interests of specific segments of the electorate (e.g. Burnham 1982: McDonald and Popkin 2001). Finally, many people who do not turn out to vote probably do so because they have other priorities at or around election time that prevent their participation: working away from home, failing to register because they have moved (in countries that require this), or even not knowing how to cast a ballot or where to cast it. This sort of indifference can be seen as reflecting a view of electoral politics as not so much systemically problematic (as with individualist apathy), lacking in appealing alternatives (protest), or the result of suppressing votes but as simply a routinized activity like all others in a modern society in which some people are simply not seriously invested. This can be symptomatic of abstention from politics in general more than simply from participation in a given election (e.g. Galli 2012).

Turnout rates are most frequently reported as a single statistic for an entire democracy. Though convenient, the practice of using a single statistic to summarize the behavior of national

electorates obscures the geographically contingent process of voting. Furthermore, it encourages the use of sweeping generalizations to characterize political attitudes and behaviors as universal across a democracy. Recognizing that electoral participation varies across a democracy, explanations for voter turnout may benefit from approaches that are more geographically sensitive. Rather than devising a single, universal model of turnout for an entire polity, developing domain-specific models to examine turnout within particular geographic contexts, such as regions, states or provinces may yield improved insights into the decision to vote or not to vote, and more generally, into judgments about the universal and the particular.

Though parties and candidates devise national platforms on many issues, campaign strategies often reflect and make use of regional themes or local points of reference that may mobilize citizens to vote or even to abstain. Regional economic expansion or contraction, the introduction and implementation of a national welfare or educational program in certain places, or the triumphs and travails of a family or individual are often used as contextual backdrops during national campaigns, and serve to bring the issues, parties and candidates of the day home to the voter, where the voter will hopefully vote. Identifying and evaluating such sub-national contexts, and examining and comparing the correlates of electoral participation within and between such contexts, helps to clarify the socio-geographic processes underlying electoral participation (Diamanti 2012).

This geographic analysis of voter turnout focuses upon contemporary Italian democracy. Italy is a compelling case in which to examine the relationship between demography and democracy for several reasons. First, Italy is renowned for its historically high voter turnout rates. In the eighteen national elections since 1948, well over 80 percent of voters turned out in each and every political contest. Second, as alluded to previously, Italy has one of the highest

proportions of citizens aged 65 and over in the world. Coupled with one of the world's lowest birthrates, it is projected that Italy will experience a significant population decline in the decades to come. Third, Italy is often considered to be divided into two distinct geographic regions: a prosperous, civic-minded and European-oriented north versus an underdeveloped, peripheral, stagnant and corrupt south. Sub-divisions of this twofold division are also very common, as we discuss later. Fourth, the economic crisis of 2008 ushered in a remarkable period of social, political and economic turmoil across the Eurozone, and resulted in several austerity measures, some of which have been particularly acute for Italy and many Italians. Finally, the 2013 general election marked low-points in terms of voter turnout, and more generally, public attitudes towards Italian politics and politicians. Recognizing how such factors influence political participation differently in different places across Italy will shed light on the age-turnout nexus, and highlight the value of incorporating spatial concepts and theories into demographic-based accounts of politics.

TURNOUT, AGE AND PLACE IN ITALY

Electoral studies struggle with, "the Scylla of hasty overgeneralization and the Charybdis of myopic attention to local and national peculiarities" Rokkan (1966, 265). In many respects, the theories and methods of electoral studies still tend to predispose research into making either gross overgeneralizations or to providing local and particular anecdotes about voting behavior, with little middle-ground in between. Consequently, explanations of voter turnout usually fall into one of two categories (Niemi and Weisberg, 1993). The first category considers the act of voting to be primarily a function of individual and psychological factors such as a voter's degree of party identification or attitudes on various social or economic issues. The second category

considers group and sociological factors such as political mobilization and group membership to play an important role in the decision to vote.

With regard to the first category, there is a long tradition in political science and other disciplines to identify and evaluate the individual correlates of electoral participation (Franklin 1996; Lijphart 1997). For instance, one of the most cited predictors of turnout is level of education. People who are more educated tend to vote in higher proportions than those with less education (Caramani 1996; Denver and Hands 2004; Wolfinger and Rosenstone 1980). Based on responses from large scale pre- and post-election surveys, the turnout-education nexus is premised upon the argument that individuals with higher levels of education are more likely to follow the news, express a high degree of civic engagement, be interested in politics and political issues, and are thus more likely to vote (Wattenberg 2002). There is also the expectation that the middle-class and the wealthy are more likely to turn out than those with lower incomes, and that younger and older citizens are less likely to cast ballots in elections.

Contrasting such individual approaches to voter behavior are perspectives that consider group factors and socialization to be important determinants of turnout. Though an individual's income, religiosity, age, and level of education may indeed be related to political attitudes and behaviors, group effects and social interaction are posited to actually shape and an influence them. For instance, political campaigns often target certain groups (e.g., unions, retirees, factory-workers) in an effort to generate electoral support. Should such mobilization efforts resonate with group members, they may be more likely to vote and to encourage other group members to vote as well. Such effects are not limited to election campaigns (Goldstein and Ridout 2002; Johnston 1986b), but include canvassing by parties and candidates (Krassa 1988),

memberships to clubs and associations (Putnam 1993), as well as conversations between individuals (Johnston and Pattie 2000b; Leighley 1990).

It is unlikely that the act of voting is determined by individual or group effects alone. Treating each approach to of voter turnout as mutually exclusive provides theoretical clarity, but also obscures important insights into the motivations behind voting. The middle-range approach that we use recognizes that the vote is an individual act but is also a function of group socialization. The concept of age as it relates to politics is simultaneously an individual trait and a social determinant. Age itself is used as a threshold both to vote and to hold political office, and cohorts, generations and group membership often use age to define membership. While age in itself can provide insights into political attitudes and behaviors, the types and intensity of political socialization within cohorts or generations can also be a function of age (e.g., the use of social media was crucial to influence young voters in recent US elections). In this respect, a middle-range approach that appreciates the particular and more general influences of age on turnout may yield important insights into voting.

As suggested above, age matters in relation to politics because it reflects both life cycle changes and generational effects. As people age their identities and interest shift. What was once important can become less so. Concerns about income security, for example, become more important than increasing the level of income. Access to reliable health care facilities becomes more important than the quality of local schools. At the same time, people come to political maturity in vastly different historical circumstances. For example, in Italy, those who first voted in the 1948 elections had just lived through twenty years of Fascism and were faced by two "families" of political parties on the left and right. Those first voting in the 1990s were introduced to electoral politics after the end of the cold war, the removal of compulsory voting,

the collapse of a truly left-right dimension to party ideologies and the arrival on the electoral scene of the media baron and political salesman Silvio Berlusconi. The political memories of these generations are therefore fundamentally different. If the "new" politics fails to engage in some way with the older vocabularies and repertoires of political engagement, as well as with new interests and worries, then overall participation in electoral politics may also begin to tail off.

The experiencing of aging in both registers – life cycle and generational – is likely to be strongly mediated by the biographies acquired in living in the distinctive places out of which "Italy" is made on a daily and annual basis. This in turn can be expected to affect attitudes towards participation in elections aggregated across local and regional populations in terms of apathy, protest, and indifference. As noted previously, in Italy as a whole older voters tend to have the overall highest propensity to abstention. Though this is particularly marked among those born before 1926 (from 1985 through 2001), successive generations show a similar trend with the relatively oldest tending to the greatest propensity to non-voting (Tuorto 2006, 91). Some of this can be put down to "being too old to vote" in the sense of losing complete interest in politics or being unable to participate physically in the act of voting (because of the increasing number of extremely old people). The particularly large drop-off relative to other generations of that of 1926 can also be ascribed to that generation's socialization into that world of political parties after the Second World War that collapsed in the early 1990s and that has not been replaced by anything recognizably as stable.

But how does the relationship between age and turnout vary empirically across Italy? Differences between places are not mere "noise" disturbing presumably general relationships at the national level. Not only do proportions of the electorate in different age groups vary from

place-to-place, primarily as a result of differential rates of in-and–out migration as well as historic differences in rates of family size and individual mortality, but how these demographic differences translate into differences in political behavior are determined by local economic and social conditions, cultural traditions, and relationships to parties and the political system more generally. In other words, being 'retired', 'young' or of 'middle-age' provides a demographic identity at one level, but the meaning – and the attitudes and behaviors associated with them – arguably vary from place to place.

Thus to understand the nature of the relationship between age and turnout necessitates examining the ways in which the two vary and co-vary spatially. Any generalizations at the national level must therefore be drawn from establishing the character of the distributions and relationships from within local and regional contexts. Figure 1 illustrates this point by plotting the national voter turnout rate in Italy since 1948, and the turnout rates for three of the 100+ Italian provinces, namely, Milan in the north, Rome in the center, and Palermo in the south of the peninsula, since 1987. Similarly, Figure 2 plots the population pyramids for: a) Italy; b) the administrative region of Lombardy, home to Milan; c) the region of Lazio where Rome is located; and, d) the island region of Sicily where Palermo is situated.

Figure 1 and 2 here.

Declining voter turnout in Italy is apparent as early as 1979, and is marked by a sharp downward trend since the 2006 national election. This general trend is reflected in the turnout rates returned in Milan, Rome and Palermo, but the local changes and trends are not consistent between the provinces. For instance, voter turnout actually increases in Palermo between 2006

and 2008. Such differences illustrated in Figure 1 suggest that there are probably more fundamental or structural differences in voter behavior between these and other provinces, which are hidden by the national average. A comparison of the national and regional population pyramids also reveals differences in population numbers and the age structures of these three regions. Not only is the population of Sicily much smaller than that of Lazio (Rome) and Lombardy (Milan), but the profile of its age structure differs as well. In particular, the size of population groups tend to be more equal in size in Sicily than in Lombardy or Lazio, which display notable middle-age bulges (i.e, 30 – 60 years). The key takeaway from this set of figures is that national aggregates and averages (e.g., turnout rates and population structures) both comprise and hide significant subnational differences. Determining whether such subnational variations in turnout and voting are substantive is the focus of the remainder of this chapter.

DATA & METHODS

Drawing from the previous discussion, we specify two general hypotheses concerning the linkage between age and voter turnout to guide the following analysis. First, we expect voter turnout to vary significantly across Italy, and to be significantly lower in the south than in the north. This regional difference in turnout is well-known, but the 2013 Italian general election presents itself as an important opportunity to reassess this divide, and possible changes to it, because it marked the lowest level of voter turnout in the history of modern Italian democracy. Second, we expect that the relationships between the same age groups situated in different places in Italy and voter turnout will not be consistent across the country. We contend that age and demographics are mediated differently in different places, and subsequently, that political attitudes and behavior are geographically contingent.

To assess the geographic dimensions of the age-turnout nexus, we use demographic and election data for the 103 Italian provinces and spatial regression techniques. Demographic and other socio-economic data were obtained from the Italian National Statistical Agency (ISTAT) and election data were provided by the Cattaneo Institute located in Bologna, Italy. Given our focus on the spatial demographics of voter turnout, the following analysis is informed and guided by geospatial analysis and spatial econometric techniques (Anselin 1988). Since most demographic and election data are compiled and aggregated on a geographic basis, for instance, by census tracts or election precincts, any analyses using such data must recognize the biases and limits inherent to such data. Formal spatial analytic techniques not only identify issues such as spatial autocorrelation, or non-random clustering, across data sets, but also offer methods to incorporate or control for such effects in regression models (e.g., Anselin 1988; 1995; O'Loughlin et al., 1994; Shin and Agnew, 2011). This geographically sensitive approach is especially appropriate for this investigation into middle-range perspectives on demography and democracy because it simultaneously recognizes the limits of theoretical overgeneralization and myopic attention to particularities.

Figure 3 maps the key variables of interest within the scope of this analysis of contemporary Italian voter turnout, namely, voter turnout in 2013 and changes in turnout since 2008. We use a very common geographic division between the ‘north’ and ‘south’ of Italy in this analysis and include it as a dividing line on the maps. Though a discussion of Italy’s ‘southern question’ is beyond the scope of this chapter, this geographic distinction has long been a concern for many Italians, policymakers, and academics (e.g., Banfield, 1958; Trigilia, 1992; Davis, 1996). Moreover, this geographic division of the peninsula is formalized through the reporting of statistics for the north and south by the Italian national statistical agency, ISTAT. It

is used here to demonstrate the utility of middle-range perspectives that draw insight from both the national and local levels, and the geographic variations between and within them.

Figure 3 here.

The top two maps in Figure 3 show levels of turnout in the 2013 general election and changes in turnout since the last 2008 general election. Despite the fact that turnout in 2013 was the lowest ever recorded in post-World War II Italian democracy, compared to other democracies it remains relatively high, especially across the north. Turnout increased in only one of the 103 provinces (i.e., Campobasso) since the 2008 general election, and electoral participation dropped off considerably more in the south than in the north.

The bottom two maps highlight the spatial clustering of similarly high and low levels of turnout and turnout change, respectively. A local indicator of spatial association (LISA) index is calculated for each province which measures the degree to which levels of turnout (and turnout change) in one province are correlated with those that are found in neighboring provinces (see Anselin 1995; Shin and Passarelli 2012). Statistically significant values for the LISA index are mapped, thus revealing that higher levels of turnout are concentrated in north central Italy, and clusters of low turnout are found in the south and islands of the peninsula. Clusters of recent turnout change are not as extensive as those for turnout, but the map again shows geographic differences between the north and south, and the clustering of low turnout and large declines in turnout across Sicily. Note that for the turnout change cluster map, ‘low-low’ refers to the clustering of similarly large declines in turnout, and ‘high-high’ refers to clustering of comparatively small changes in turnout. The province of Campobasso in the south is considered

a spatial outlier because it is the only province where turnout increased, by a mere +0.07 percent, and was surrounded by negative change values.

In light of the notable geographical clustering and variations in electoral participation and turnout change, we contend that a single national model of voter turnout is grossly insufficient. Focusing on local particularities, such as Campobasso, would also be unsatisfactory. We proceed by estimating a national baseline ordinary least squares model (OLS: $y = a + bX + e$), and a set of spatial regression models for the north, the south, and all of Italy for comparison. Based on the results from the above spatial analyses and other diagnostic tests (unreported), our spatial econometric approach incorporates a spatial lag term (i.e., $y = Wy + a + bX = u$). For each and every observation, the spatial lag, *wy*, contains the weighted average of all neighboring observations, and is often used to capture the effects of proximity in spatial econometric modeling (see Anselin 1988). Like the LISA index, the spatial lag captures the degree to which turnout (or changes in turnout) in one province are correlated with turnout in neighboring provinces.

The decision to estimate separate sets of models for both the north and south stems from our position that places mediate, condition and shape the very definitions and activities of individuals and social groups. The inclusion of a regional dummy variable (e.g., south = 1) is insufficient because the effects of region and place are not additive but contextual. For example, we contend that being an educated, white collar, manager in the north around Milan is fundamentally different from being an educated, white collar, manager in Palermo, Sicily, which in turn may lead to differentiated political attitudes and behaviors. In this respect, we reject the notion of the idealized median national voter. Moreover, differences in the very nature of the

spatial relationships between places (i.e., provinces), as captured by the spatial lag term, can be identified and assessed.

The dependent variables used in the following analysis are: a) provincial levels of 2013 voter participation; and, b) provincial level changes in voter participation since 2008. Drawing from the large body of literature on electoral participation across contemporary democracies (Wattenburg, 2002; Gimpel et al., 2004) , we included levels of GDP (1,000s of Euros), university graduates and the unemployment rate as covariates. Based on previous studies and understandings of voter behavior, the first two of these variables are expected to be positively associated with turnout, but a negative relationship is expected to emerge between the provincial unemployment rate and turnout.

To capture and assess the relationship between age and turnout, we use provincial age distributions. Specifically, we calculated the proportion of the 2012 provincial population that belonged to a particular cohort. Cohorts are characterized and often defined by external events and shared experiences, such as the fall of the Berlin Wall, and tend to be shorter than generations that are typically defined by years of birth. At the same time, cohorts can provide glimpses into life cycle effects on turnout discussed earlier. Drawing from previous work on political generations in Italy (Corbetta and Parisi, 1994; Corbetta, 2002; Caramani 1996; Tuorto, 2006; Legnante and Segatti, 2009), seven different political cohorts since 1945 are defined and reported in Table 1.

Table 1 here.

For each cohort, we report the range of years of birth, the years in which the cohort became eligible to vote, the range of ages in the cohort in 2012, key political events for the cohort, and the cohort's expected relationship with levels of voter turnout. Expectations for the relationships between cohort and turnout are drawn from the body of work identified above. Generally, voters on the margins or periphery of socio-political life (e.g., the old, the young, under-educated, poor) are less likely to vote, so we expect a negative relationship to exist between turnout and the two oldest (I, II) and the youngest cohorts (VII). The notion of marginality is arguably reinforced in the south of Italy, and we expect there to be notable north-south differences in the association between these peripheral cohorts. We expect positive relationships between the middle age cohorts (III - VI) and turnout because these groups are typically the most politically informed and engaged. Our expectations for the associations between cohorts and change in turnout reflect those for turnout. Though our expectations are 'generationally' informed and derived, the use of shorter cohorts in some periods provides demographic granularity that may permit further insights into the linkages between age and turnout.

RESULTS

Table 2 reports the estimates from the baseline OLS and spatial regression models. For clarity, aside from the national baseline model, only statistically significant estimates from the best fitting, most parsimonious models are reported. Looking first at the results from the baseline OLS model, three variables are significantly associated with voter turnout in 2013: provincial levels of unemployment; the pre-World War II cohort (I); and, the Berlusconi I cohort (VI). Though this model explains a considerable amount of overall variance (86 percent), diagnostic

tests (unreported) indicate that the model suffers from a range of issues such as multicollinearity, a non-normal error term, and spatial autocorrelation in the error term. Failure to address these specification issues can result in biased and inefficient parameter estimates, inaccurate significance tests, and most importantly, incorrect conclusions. To overcome these issues, and as noted previously, we proceed with spatial econometric techniques, and in particular a spatial lag model, that is designed to incorporate spatial effects (see Anselin 1988; Ward and Gleditsch 2008).

Table 2 here.

Looking across all of the lag models in Table 2, for turnout and turnout change, the only consistently significant variable is that for the spatial lag term. In other words, levels of provincial turnout and turnout change are positively related to levels in neighboring provinces. A coefficient of +1.0 would indicate that turnout in a given province could effectively be predicted by the average level of turnout in adjacent provinces. The predictive strength of the turnout lag term remains relatively consistent for the entire country (lag 1), as well as for models restricted to the provinces in the north (lag 3) and south (lag 5). The lag term for turnout change is larger than for turnout alone in the national (lag 2 v. lag 1) and north (lag 4 v. lag 3) models, but is smaller in the south (lag 6 v. lag 5). These results indicate that spatial influences on recent levels of turnout are moderate in size and consistent across Italy and the north (lag 1 and lag 3); spatial effects have a greater impact on turnout change when considered nationally and in the north (lag 2 and lag 4); and, sub-national spatial effects are larger in the north than south (lag 3 v. lag 5, and lag 4 v. lag 6). Geography indeed matters with regard to voter turnout and changes in turnout, but its influence is spatially differentiated.

With regard to variables that are significant in the national, north and south models, it is interesting to note that no single cohort is significantly associated with turnout in both the north and south. For instance, the Berlusconi I (VI) cohort is significant in the national and north models, but not in the south. This cohort includes those voters who became eligible to vote at the same time that Silvio Berlusconi entered the Italian political scene. This was also the period where the old system of parties was dismantled and replaced by a new one that offered existing voters an entirely different menu of political choices (see Shin and Agnew, 2002; 2008). Between 1993 and 2003, one of Berlusconi's key political allies, the regionalist Northern League party, built a platform around the secession of the north, and vociferously characterizing the south and southerners as chronically backwards and corrupt, among other things (see Agnew 1995; Diamanti, 1996). The re-emergence of Berlusconi on the 2013 ballot, in the face of government austerity and economic recession, may have energized some members of this cohort to turnout, especially in areas of the north where he was popular previously.

The positive relationship between the pre-World War II (I) cohort and turnout is opposite of what was expected and is somewhat puzzling. One possible explanation for this result is that poor weather dampened turnout across much of northern Italy in the 2013 election, and may have exaggerated the effects of 'normal' turnout levels for this already marginalized cohort in the south. The negative relationship between what is called the '1968' (III) cohort and turnout is also opposite of what was expected. This may reflect the wide-spread disgust, anger and resentment towards government austerity, entitlement changes, political stalemate and economic stagnation of those quickly approaching retirement and expecting government pensions, and subsequently, their choice to stay away from the polls. Negative associations between turnout and levels of provincial unemployment are significant nationally and in the south, and between the youngest

cohort (i.e., VII) in the north. Though this result was expected, the unemployment covariate in the south is also probably picking up this youngest cohort, as recent figures estimate youth unemployment (ages 16 - 24) in Italy to be over 34 percent, and female youth unemployment in the south to exceed a staggering 50 percent (ISTAT, 2013). Finally, since 2008 it appears that demography has mattered relatively little to changes in voter turnout. This is likely to be a reflection of the near universal political disaffection resulting from economic stagnation and hardship that all Italians are experiencing.

The above results support the position that an intermediate, middle-range approach to understanding the age-turnout nexus is in fact useful. By leveraging the geographic structure of voting data, and the granularity of population data, domain-specific (i.e., national, north, south) models underscore the need for a more nuanced, middle range approach. Such approaches also permit interesting and valuable comparisons to be made, which can inform and extend the complementary use and understanding of both theory and method across spatial demography.

CONCLUSION

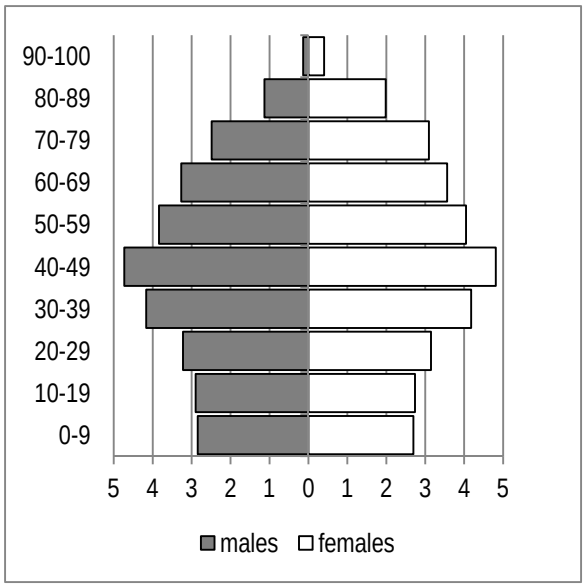
Long standing geographic differences in both turnout and turnout change persisted between the north and south in Italy's 2013 general election. Spatial effects, or the influence of the local provincial context, were significant but also displayed notable geographic variations. Similarly, the associations between cohorts and turnout (and turnout change) were not consistent across Italy. For instance, a positive relationship between the cohort of voters who have only known an Italian politics dominated by Silvio Berlusconi and turnout was detected, but this linkage appeared only in the north of Italy. Moreover, age profiles seem to matter little with regard to the precipitous decline in Italian electoral participation. It seems that the effects of the recent

economic recession and ongoing political crises of Italy are broad and far-reaching. That said, it is precisely such events and circumstances that define geographically situated cohorts and generations, and that shape political attitudes and behaviors.

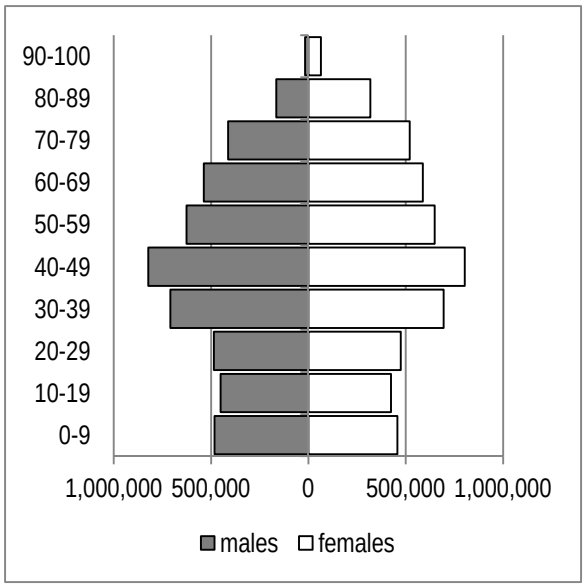
Appreciating and understanding the linkage between age and voting requires theoretical and methodological approaches that are sensitive to such global trends, sub-national patterns and local idiosyncrasies. Neither the local nor the national are privileged in mid-range approaches, but both are recognized as necessarily complementary. Moreover, spatial analytic and spatial econometric techniques that can reveal and evaluate clustering, regional variations and local dependencies highlight the need for such perspectives that draw from multiple scales of analysis. As this chapter illustrates, spatial demography is very well positioned to both benefit from and promote such middle-range perspectives and techniques.

As the number of elections around the world continues to rise, it remains to be seen whether or not electoral participation in Italy and other democracies will continue to decline. Some consider such declines in voter turnout a challenge to the overall state of democracy in the world, but others contend that they are of little consequence. Questions concerning the causes and consequences of voter turnout and abstention will continue to be important in the future, and answering such questions from a spatial demographic perspective will certainly extend current thinking on political participation in both new and established and democracies.

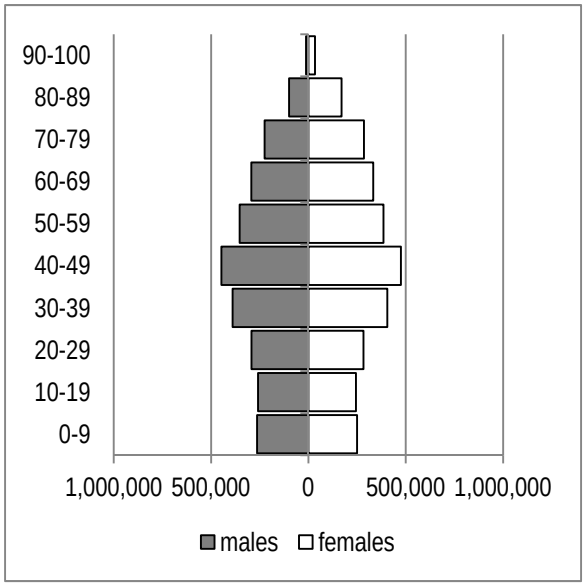
Figure 1. Voter turnout in Italy and selected provinces, 1946 – 2013. **P**rovincial turnout data not available before 1987. Source: Ministero del**l'**Interno.



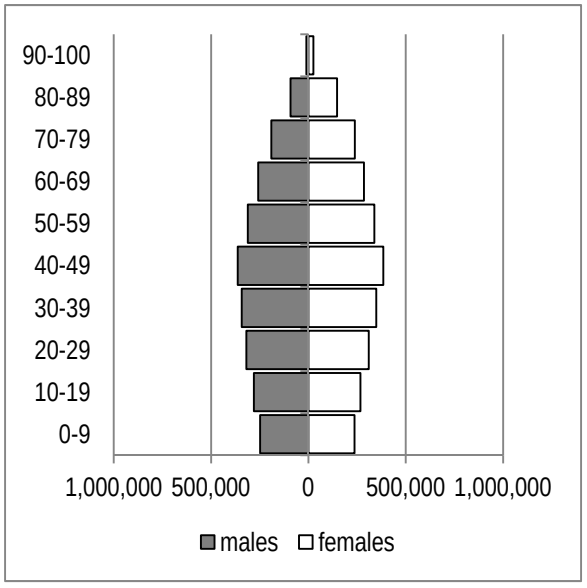
a) Italy (in millions)



b) Lombardy – Milan



c) Lazio – Rome



d) Sicily - Palermo

Figure 2. Population pyramids for: a) Italy; b) Lombary-Milan; c) Lazio-Rome; d) Sicily-Palermo. Source: ISTAT.

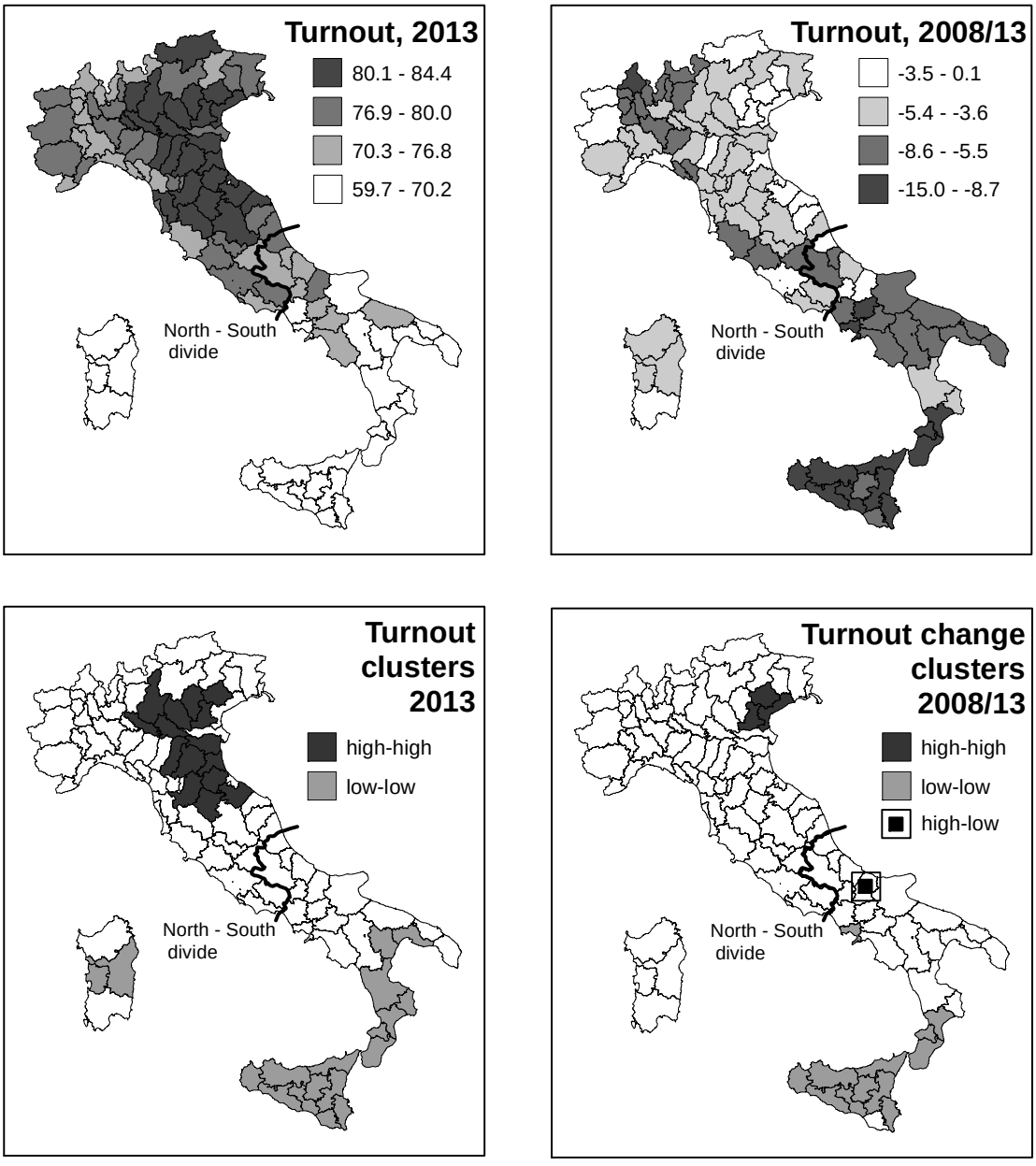


Figure 3. Geographic distribution and clustering of 2013 voter turnout and turnout change, 2008-2013.

	Year of birth	*Eligible to vote in…*	*Age in 2012*	*Defining events for cohort*	*Expected relationship with turnout*
I	pre-1927	<1945	> 85	Fascism, World War II	-
II	1927 -1946	1945 - 1964	66 – 85	postwar, cold war, Italian economic miracle	-
III	1947 - 1955	1965 - 1973	57 – 65	1968, Prague spring	+
IV	1956 - 1965	1974 - 1983	47 – 56	national unity government, Red Brigades	+
V	1966 - 1974	1984 - 1992	38 – 46	*Pentapartito*, fall of Berlin Wall, *Tangentopoli (bribesville), Mani pulite (clean hands)* scandals	+
VI	1975 -1985	1993 - 2003	27 – 37	Berlusconi I, Gulf Wars, 9/11	+
VII	1986 - 1994	2004 - 2012	18 -26	Berlusconi II, wars in Iraq and Afghanistan, global recession	-

Table 1. Political cohorts in Italy and expected relationship to voter turnout.

	National	***National***	***National***	***North***	***North***	***South***	***South***
	Turnout 2013	Turnout 2013	Turnout change	Turnout 2013	Turnout change	Turnout 2013	Turnout change
	baseline OLS	*lag 1*	*lag 2*	*lag 3*	*lag 4*	*lag 5*	*lag 6*
Constant	59.167	14.456	-1.808	70.304	-0.641	43.596	-1.731
Spatial lag	-	**+0.403**	**+0.470**	**+0.409**	**+0.599**	**+0.387**	**+0.370**
GDP (1,000s)	0.069		**+0.171**		**+0.115**		
Laureati	0.195				**0.352**		
Unemployed	**-0.566**	**-0.512**				**-0.396**	**-0.166**
I. Pre-WWII	**3.452**	**+1.672**				**+2.180**	
II. Cold War	-0.685						
III. 1968	-1.193			**-2.586**	**-0.566**		
IV. Unity	1.022						
V. Cold War II	0.273						
VI. Berlusconi I	**1.734**	**+1.940**		**+1.212**			
VII. Youth	-1.163			**-1.528**			
R-squared*	0.861						
pseudo-R-squared		0.873	0.506	0.670	0.523	0.769	0.349
N	103	103	103	67	67	36	36

Table 2. Estimates from the baseline OLS and spatial lag models. All estimates obtained from the GeoDA spatial analysis software package (Anselin et al., 2006).

REFERENCES

Agnew, J. 1995. The rhetoric of regionalism: the Northern League in Italian politics, 1983 – 94. *Transactions of the Institute of British Geographers* 20: 156- 172.

Anselin, L., I. Syabri and Y. Kho 2006. GeoDa: An Introduction to Spatial Data Analysis. *Geographical Analysis* 38: 5-22.

Anselin, L. 1988. *Spatial econometrics: methods and models.* Dordrecth: Kluwer Academic Publishers.

Anselin, L. 1995. Local indicators of spatial association - LISA. *Geographical Analysis* 27:93-115.

Banfield, E. 1958. *The moral basis for a backwards society.* Chicago: Free Press.

Burnham, W.D. 1982. *The Current Crisis in American Politics* Oxford: Oxford University Press.

Caramani, D. 1996. La partecipazione elettorale: gli effetti della competizione maggioritaria. *Rivista Italiana di Scienza Politica* 26:585-608.

Corbetta, P. 2002. Le generazioni politiche. In *Le ragioni dell'elettore* (eds., M. Caciagli and P. Corbetta). Bologna: Il Mulino.

Corbetta, P. and A. Parisi. 1994. Smobilitazione partitica e astensionismo elettorale. *Polis* 8: 423-43.

Denver, D. and G. Hands. 2004. Exploring Variations in Turnout: Constituencies and Wards in the Scottish Parliament Elections of 1999 and 2003. *The British Journal of Politics and International Relations* 6:527-542.

Diamanti, I. 2012. *Gramsci, Manzoni e mia suocera. Quando gli esperti sbagliano le previsioni politiche.* Bologna: Il Mulino.

Diamanti, I. 1996. *Il male del Nord.* Rome: Donzelli.

Davis, J. 1996. Changing perspectives on Italy's 'Southern Problem'. In *Italian Regionalism* (C. Levy, ed.), pp. 53-68. Oxford: Berg.

Downs, A. 1957. *An economic theory of democracy.* New York: Harper and Row.

Franklin, M.N. 1996. Electoral Participation. Pp. 216-235 in *Comparing Democracies: Elections and Voting in Global Perspective,* edited by L. LeDuc, R.. Niemi, and P. Norris. London: Sage.

Fruncillo, D. 2004. *Urna del silenzio. L'astensionismo elettorale in Italia.* Rome: Ediesse.

Galli, C. 2012. Astensionismo. Se il partito del non voto diventa maggioranza. *La Repubblica*, 24 May.

Gimpel, J., J. Dyck, and D. Shaw. 2004. Registrants, Voters and Turnout Variability Across Neighborhoods. *Political Behavior* 26:343 - 375.

Goldstein, K., and T. Ridout. 2002. The Politics of Participation: Mobilization and Turnout over Time. *Political Behavior* 24:3 - 29.

ISTAT. 2013. Occupati e disoccupati: dati recostruiti dal 1977. http://www.istat.it/it/archivio/88827

Johnston, R.J. 1986. Places, campaigns and votes. *Political Geography Quarterly* 5:S105-S117.

Johnston, R.J., and C. Pattie. 2000. People Who Talk Together Vote Together?: An Exploration into Context Effects in Great Britain. *Annals of the Association of American Geographers* 90:85-111.

Krassa, M. 1988. Context and the canvass: the mechanisms of interaction. *Political Behavior* 10:233-246.

Legnante, G. and P. Segatti. 2009. Intermittent abstentionism and multi-level mobilization in Italy. *Modern Italy* 14: 167-181.

Leighley, J. 1990. Social Interaction and Contextual Influences on Political Participation. *American Politics Quarterly* 18:459-475.

Lijphart, A. 1997. Unequal Participation: democracy's unresolved dilemma. *American Political Science Review* 91:1 - 14.

Luskin, R.C. 1990. Explaining political sophistication. *Political Behavior*, 12, 4: 331-61.

McDonald, M.P. and Popkin, S. 2001. The myth of the vanishing voter. *American Political Science Review*, 95: 963-74.

Niemi, R., and H. Weisberg. 1993. *Controversies in Voting Behavior, 3rd ed.* Washington, D.C.: Congressional Quarterly Press.

O'Loughlin, J., C. Flint, and L. Anselin. 1994. The Geography of the Nazi Vote: Context, Confession and Class in the Reichstag Election of 1930. *Annals of the Association of American Geographers* 84:351-380.

Putnam, Robert D. 1993. *Making Democracy Work*. Princeton: Princeton University Press.

Riker, W. and Ordeshook, P. 1968. A theory of the calculus of voting. *American Political Science Review*, 62, 1: 25-42.

Rokkan, Stein. 1966. Electoral Mobilization, Party Competition and National Integration. in *Political Parties and Political Development*, edited by J. LaPalombara and J. Weiner. Princeton: Princeton University Press.

Shin, M. and J. Agnew. 2011. Spatial regression for electoral studies: The case of the Italian Lega Nord. In *Revitalizing Electoral Geography* (B. Warf and J. Leib, eds), pp. 59 - 74. Surrey: Ashgate.

Shin, M. and J. Agnew. 2008. *Berlusconi's Italy.* Philidelphia: Temple.

Shin, M. and J. Agnew. 2002. The geography of party replacement in Italy, 1987-1996. *Political Geography* 21: 221-242.

Shin, M. and G. Passarelli. 2012. The Northern League in national, European and regional elections: A spatial analysis. *Polis* 26: 355-370.

Trigilia, C. 1992. *Svillupo senza autonomia.* Bologna: Il Mulino.

Tuorto, D. 2006. *Apatia o protesta? L'astensionismo elettorale in Italia.* Bologna: Il Mulino.

Tuorto, D. 2010. La partecipazione al voto, in P. Bellucci and P. Segatti (eds.) *Votare in Italia, 1968-2008* (Bologna: Il Mulino), pp. 53-79.

Ward, M. and K. Gleditsch. 2008. *Spatial regression models.* Thousand Oaks: Sage.

Wattenberg, M. 2002. *Where Have All the Voters Gone?* Cambridge: Harvard University Press.

Wolfinger, R., and S. Rosenstone. 1980. *Who Votes?* New Haven: Yale University Press.