Tavares, A., Raudla, R., & Silva, T. 2020. Best of Both Worlds? Independent Lists and Voter Turnout in Local Elections. *Journal of Urban Affairs*. Forthcoming.

#### Best of Both Worlds? Independent Lists and Voter Turnout in Local Elections

#### Abstract

How does the presence of independent lists influence voter turnout in municipal and submunicipal elections? Despite the persistence of independent lists in local elections of European countries, this question has remained underexplored. Our paper examines the influence of independent lists on voter turnout both theoretically and empirically. In the theoretical discussion, we outline two competing hypotheses. On one hand, the best of both worlds hypothesis predicts that owing to increased choice for the voters the presence of nonpartisan lists would increase voter turnout. On the other hand, the competing hypothesis suggests the opposite due to higher information costs associated with independent lists. We test our hypotheses using data from four election cycles of Portuguese municipal and sub-municipal levels of government. Since 2001, Portugal's electoral law allows the participation of nonpartisan lists of candidates in local elections. The empirical analysis employs fractional probit and beta regression models and finds strong support for the best of both worlds hypothesis, both at the municipal and the sub-municipal levels.

Keywords: nonpartisan; elections; voter turnout; independent candidates; local lists; Portugal.

## Introduction

The institutional setting in which local elections take place can clearly influence the benefits and costs of voting for the electorate and hence affect turnout (Jackman, 1987; Merrifield, 1993). One of such institutional features in the European context is whether voters are able to vote for candidates from independent lists, alongside the partisan lists.

Despite the fact that this aspect of institutional design is likely to influence voter turnout, there is only limited research on it, especially in the European context. Studies conducted in the US tend to suggest a negative effect of nonpartisan elections on voter turnout (e.g. Karnig & Walter, 1983; Schaffner et al., 2001) but it would be difficult to generalize these findings to the European context. While in the US, the choice between partisan and non-partisan local elections is, for the most part, a dichotomous one, in many European countries, local elections follow a hybrid model where nonpartisan lists of candidates coexist alongside partisan ones in the same ballot (Holtmann, 2008).<sup>1</sup>

In general, there is a lack of research on independent local lists, since "nonpartisan groups have been regarded as a political anomaly and as relics of an 'old system' of local self-government and it was expected that they would eventually perish" (Reiser, 2008, p. 277). The empirical reality is, however, that in the European context, the presence and success of independent lists in local elections has steadily increased and "they were able to establish themselves also in countries which had been fully party-politicized before" (Reiser, 2008, p. 277).

<sup>&</sup>lt;sup>1</sup> In the following, we use the terms "independent", "nonpartisan" and "local" lists interchangeably.

Although by now some studies have looked at the emergence, persistence, and success of local lists in European countries (Reiser & Holtmann, 2008; Gendźwiłł, 2012), only few studies have looked at how the presence of such lists influences voter turnout (Aars & Ringkjob, 2005; Freire et al., 2012). Our study aims to contribute to this scarce body of empirical work by examining whether and how the presence of independent lists influences voter turnout in both municipal and sub-municipal elections in Portugal. The inclusion of both categories of local governments in the analysis can be justified on two accounts. First, independent lists tend to appear in very small municipalities where national level parties may not have sections (Kopric, 2008; Soos, 2008; Göhlert et al., 2008; Vampa, 2016) and where local politics tends to be more personalized and focused on the individuals (Jüptner, 2008; Steyvers et al., 2008; Reiser, 2008; Oliver, 2012). Second, in larger municipalities the professionalization of the supra-local parties may be more complete, increasing the disconnect from the local issues and leading to more nonpartisan lists to fill the gap (Aars & Ringkjob, 2005). Thus, including both larger municipalities and smaller sub-municipal units of a two-tiered local government system helps to increase the robustness and reliability of the findings. Using data from the last four election cycles in Portugal, the empirical analysis employs fractional probit and beta regression models and finds strong support for the 'best of both worlds' hypothesis – the presence of independent lists leads to increased voter turnout – both at the municipal level and at the sub-municipal level.

The article proceeds as follows. First, we discuss the theoretical links between nonpartisan lists and voter turnout and review the scarce empirical evidence on this topic. Section two discusses other possible factors affecting turnout at the local level. Next, we present a brief account of the Portuguese local government system – the context of our research. The fourth section introduces the data and methods employed in our study,

whereas the fifth section presents the findings. Section six discusses the implications of the results and concludes.

#### Nonpartisan Elections and Voter Turnout

From the perspective of an individual, the decision to vote is influenced by the expected benefits and costs (Downs, 1957; Brennan and Lomasky, 1997; Fiorina, 1976; Matsusaka, 1995; Struthers & Young, 1989). One of the most often-used equations for characterizing that decision is (Riker & Ordeshook, 1968):

R = PB + D - C

Where: R = Individual Expected Utility, B = investment benefits, D = consumption benefits, and C = costs.

The investment (also called instrumental) benefit of voting (B) entails the benefit the voter gains from having their preferred candidate or party win (Kaniovski & Mueller, 2006). Despite the small probability (P) of the individual voter's ballot being decisive in influencing the outcome of an election, several studies argue that the investment benefits associated with voting are still significant (Fiorina, 1976; Jackman, 1987; Merrifield, 1993; Stigler, 1972). For example, the larger the margin of victory for an elected official, the higher their ability to influence policies (Stigler, 1972). Other studies emphasize the dominance of consumption benefits (also called expressive benefits (Fiorina, 1976)) in a voter's decision, referring to the gratification gained from the act of voting itself: experiencing the entertainment value of the occasion, the desire to express his/her preferences, the affirmation of group solidarity, the feeling of fulfilling a civic duty, or the influence of peer pressure (e.g. Brennan and Lomasky, 1997; Kaniovski & Mueller, 2006; Riker & Ordeshook, 1968; Schuessler, 2000; Struthers & Young, 1989).

The benefits and costs of voting are influenced by the institutional setting in which elections take place (Jackman, 1987; Merrifield, 1993). Especially at the local level, an important institutional feature is the choice set voters face and, in particular, whether it includes the option to vote for candidates from independent lists alongside the partisan ones.

Following the cost-benefit reasoning outlined above, we can hypothesize that the coexistence of partisan and non-partisan lists at local elections is likely to increase the benefits for the voters – and the more independent lists there are, the larger the benefits. The coexistence of these two types of lists is likely to enhance the competitiveness of elections and broaden the available choice set for the voters, making it more likely that they find a candidate who fits their preferences – hence increasing the instrumental and expressive benefits of voting. There are various mechanisms through which that can take place.

First, independent lists can help to fill gaps in the local political landscape – and hence increase the voters' choice set – in situations where the local sections of national parties are absent or underdeveloped (Gendźwiłł, 2012; Holtmann, 2008). In those settings, local lists can act as substitutes for political parties (Holtmann, 2008). This is especially likely to be the case in very small municipalities (Kopric, 2008; Soos, 2008).

Second, the independent local lists can present themselves as attractive alternatives to the problematic (or even tainted) party politics (Aars & Ringkjob, 2008; Boogers, 2008; Gendźwiłł, 2012; Holtmann, 2008; Soos, 2008; Vampa, 2016; Wörlund, 2008). The local sections of *national* parties are less likely to pay attention to issues that are not relevant

from a party-ideological standpoint – and even if they do, they might conceptualize these issues in more ideological terms (Aars & Ringkjob, 2008; Boogers, 2008; Copus et al., 2008). Local political issues are often incompatible with party cleavages (Aars & Ringkjob, 2008) and hence the national parties might not always identify and address specific local interests (Copus et al., 2008; Gendźwiłł, 2012). The insulation from national level party politics can make the local politicians from independent lists more responsive to the voters in their jurisdiction and to focus on more pertinent local questions (Kopric, 2008). They can claim to respond to the local interests more genuinely: to represent rather than just govern (Copus et al., 2008). They can aspire to be hands-on and pragmatic, rather than getting caught in ideological squabbles or political nitpicking of the national-level parties – over issues that are often not relevant at the local level (Boogers, 2008; Kopric, 2008; Pettai et al., 2008). Furthermore, certain cleavages and division lines within local communities (e.g. between different districts) would not be captured by supra-local parties and, hence, could be better addressed by local lists (Aars and Ringkjob, 2008). In sum, the local independent lists can better represent the diverse range of interests and positions that constitute the "local political dynamic" (Copus et al., 2008, p. 254) and act as correctives to national-level party politics (Aars & Ringkjob, 2005). Thus, in contexts where citizens have become increasingly disenchanted from the national parties, and, in the presence of only partisan options would not vote, the increased choice set in the form of independent lists increases their expressive and instrumental benefits from voting and hence boosts turnout. The focus on local issues would increase the instrumental benefits of voting since the electoral platforms of the candidates would be geared to policies that are potentially more important for them. The insulation of the candidates from the party labels may also enhance the expressive benefits for the voters by boosting their desire to assert their preferences for locally focused issues.

Third, having both partisan and independent lists running in the local elections can increase the level of voter mobilization and hence boost turnout. If there are more lists both partisan and independent – running in the local elections, they can generate and amplify conflict (Schattschneider, 1975; Sharp, 1990), which, in turn, can activate citizens' desire to participate in local affairs (Tao, 2014) and to enhance the sense of duty to vote (Gerber & Green, 2000; Merrifield, 1993). Mobilization efforts from more actors can motivate a voter to participate in the elections in order to demonstrate that they are "rooting for the team" (Schaffner et al., 2001; Verba et al., 1978). Furthermore, the local independent lists can activate and mobilize otherwise apolitical citizens among the electorate and also provide opportunities for a broader group of individuals to run as candidates (e.g. for persons who don't want to identify themselves with a party label) (Aars & Ringkjob, 2005; Copus et al., 2008; Göhlert et al., 2008). Local lists can revitalize and enrich the local political scene with "new political dividing lines, smoothing the entry of new demands, themes, and issues on to the political agenda" and, through that, potentially mobilizing more citizens to turn up at the voting booths (Boogers, 2008, p. 165). Furthermore, if the local lists emerge around very specific local topics that are controversial and extensively debated, such focal issues can contribute to the mobilization of the electorate and increase turnout (Aars & Ringkjob, 2005).

To conclude, in terms of the benefits associated with voting, the co-existence of partisan and independent lists is likely to offer the *best of both worlds* for the local electorate and help to increase voter turnout. Thus, our first hypothesis – which we call the *best of both worlds* hypothesis – is:

*Hypothesis* 1 (*H*<sub>1</sub>): *The presence of independent lists in local elections increases turnout.* 

While there are weighty theoretical arguments for why the co-existence of partisan and independent lists at local elections would increase voter turnout, the best of both worlds does not come without costs. The party labels can provide conspicuous and easily identifiable cues and simplify the choices for the electorate (Aars & Ringkjob, 2005; Hawley, 1973; Schaffner & Streb, 2002; Squire and Smith, 1988). In the case of independent lists, the voters may lack such clear cues (Karnig and Walter, 1983; Schaffner et al., 2001; Schaffner and Streb, 2002). Thus, compared with partisan-only elections, a hybrid model with both partisan and independent lists can increase information costs for the voters, who now have more candidates to compare and evaluate. In the case of independent lists, the absence of partisan cues may elevate the decision-making costs for the voters making it potentially more challenging for them to reach a decisions on who to vote for (Karnig & Walter, 1983; Schaffner et al., 2001; Schaffner & Streb, 2002; Squire & Smith, 1988).<sup>2</sup> Finally, the presence of non-partisan lists on the political scene may make it more difficult for the voters to predict what kind of coalitions are more likely (Blais, 2006; Blais & Dobrzynska, 1998; Jackman, 1987), which in turn, makes the calculation of the effects of one's vote more challenging for the voters and hence reduces the expected investment benefits of voting. In light of these arguments, we can propose a competing hypothesis (which we call the *higher information costs* hypothesis):

#### Hypothesis 2 (H<sub>2</sub>): The presence of independent lists in local elections lowers turnout.

The existing empirical evidence about how the presence of independent lists alongside partisan lists affects voter turnout is scarce. So far, only three studies have examined it and,

<sup>&</sup>lt;sup>2</sup> One could counter that, however, with an argument that when citizen groups recruit, fund and campaign for candidates, they can also provide information, which, at least in some cases, can give even more accessible cues than the more general party labels (Wright 2008, p. 14).

overall, present support for the best of both worlds hypothesis. In an early study about Norway, Rokkan & Valen (1962) pointed to a positive relationship between party politicization of local elections and voter turnout. In a more recent study, however, Aars & Ringkjob (2005) observe that in Norway the electoral turnout is the highest in municipalities with non-partisan alternatives, irrespective of the size of the municipality. In a study of Portuguese municipalities, Freire et al. (2012) find that the presence of non-partisan lists boosts turnout. From those studies, only Freire et al. focus on municipal executive elections, due to their importance in the Portuguese context, indicating that more research is needed on the effects of independent lists in municipal executive elections as well.

# **Other Factors affecting Voter Turnout in Local Elections**

The focus of our paper is to investigate the association between the presence of nonpartisan lists and voter turnout in local elections. However, in order to understand the role of this institutional feature, one needs to control for other factors that may influence turnout levels in local elections. This section summarizes some of these factors, particularly those considered the most relevant in the context of our study (for comprehensive surveys of the literature see Geys, 2006; Smets & Van Ham, 2013; Cancela & Geys, 2016). First, the section addresses the political variables in more detail, including political competition, political fragmentation, ideology, and term limits. Second, we briefly discuss the most relevant socioeconomic variables.

Following the rational voter model (Downs, 1957), one would expect the predicted *margin of victory* to influence voter turnout. The closeness of elections is likely to trigger more extensive campaign and mobilization efforts, which would influence the turnout rate

positively (Blais, 2006; Cox & Munger, 1989; Kaniovski & Mueller, 2006; Matsusaka, 1993; Thompson, 1982). The existing empirical studies provide strong evidence in support of that effect (though with stronger predictive effects at the national compared to the subnational level) (Cancela & Geys, 2016; Caren, 2007; Geys, 2006; Tavares & Carr, 2013).

The existing literature points to diverging predictions with regard to the effect of *political fragmentation* or *party fractionalization* (measured as the number of candidates or lists) on voter turnout (Blais & Dobrzynska, 1998; Jackman, 1987; Smets & Ham, 2013; Struthers and Young, 1989). An earlier review of the literature by Blais (2006) points to evidence supporting a negative effect of political fragmentation on voter turnout rates, but more recent data suggests the absence of a relationship (Cancela & Geys, 2016).

Party ideology can also be regarded as a possible driver of turnout. In several European countries it has been suggested that some parties are more likely to influence voter turnout than others because they focus on narrower topics, which are more likely to drive issue-based voters to the polls (Müller-Rommel, 2002; Golder, 2003; Arzheimer, 2009; Pressnall, 2016). These works highlight the ability of these parties to capture portions of the electorate that may be less inclined to participate if only mainstream options are available. Similarly to party ideology, the effect of *term limits* on voter turnout has received little attention in electoral participation studies (Hajnal & Lewis, 2003). Term limits can be regarded as a way to renew the pool of candidates and to stimulate competition and voter participation in the electoral process. However, term limits can create electoral races with only non-incumbents, increasing the costs of information gathering on the part of voters. Research at the California State Legislature level found evidence that term limits lower

turnout (Nalder, 2007), but Hajnal & Lewis (2003) find no effects for both mayor and councilor term limits in local elections in California.

Besides the political controls, our analysis also accounts for the influence of several socioeconomic and demographic contextual factors, including population, population density, education, wealth, elderly population, population homogeneity, and religiousness. The empirical evidence provides overwhelming support for the negative effect of population size on voter turnout, especially at the subnational level (Cancela & Geys, 2016; Carr & Tavares, 2014; Sellers et al., 2013; Tavares & Carr, 2013). Alongside population size, population density is likely to influence voter turnout. Here, however, the existing empirical evidence for the effect of population density is mixed (Geys, 2006; Cancela & Geys, 2016). Socioeconomic status is also expected to produce a positive impact on turnout. More educated people tend to be more active politically (e.g. because they have more resources to become politically informed); thus, the higher the level of educational attainment, the higher the electoral turnout (Squire et al., 1987; Verba et al., 1995; Blais & Dobrzynska, 1998). Empirical studies conducted in the US context and other Western democracies show that individuals with less access to resources, whether money, time and/or civic skills, are less likely to participate (Brady et al., 1995; Magalhães, 2001), but the evidence concerning income and prosperity is quite mixed: Brady et al. (1995) show a positive effect of income on electoral participation, while more recent studies, such as Solt (2008) and Trounstine (2013) find negative effects.

The meta-analysis conducted by Smets & Ham (2013) shows that the relationship between age and turnout is likely to be curvilinear, with lower turnout levels for younger and aging populations and higher levels achieved during adulthood. In studies employing the

proportion of population over 65 years-old, the results point to a negative relationship, indicating that the propensity to vote decreases in the last stage of the life-cycle (Blais et al., 2004). Similarly, the literature also reports a negative relationship between the proportion of foreign-born population in a municipality and voter turnout (Tavares & Carr, 2013). In contrast, the level of religiousness is generally expected to increase turnout (by promoting civic skills, for example) (Verba et al., 1995) but the empirical studies do not provide systematic evidence of this positive association (Smets & Ham, 2013).

### **Research Context: Local Government in Portugal**

Article 236 of the Portuguese Constitution defines two categories of local governments: municipalities and parishes (*freguesias*). Both types of local governments operate with executive and deliberative bodies and are invested with financial and administrative autonomy. In August 2001, the Portuguese parliament approved Organic Law nº1/2001 (*Lei Eleitoral dos Órgãos das Autarquias Locais* also known as LEOAL) allowing "groups of citizens" to present lists in local elections (Pires de Almeida 2008). The initial effect of this legal change was small but the number of independent lists has been slowly growing over the last four election cycles. Their popularity and success can also be witnessed by the number of independent candidates elected: 3 mayors in 2001, 7 in 2005 and 2009, and 13 in 2013; 31 city councilors in 2001, 45 in 2005, 67 in 2009, and 112 in 2013.

Independent lists in Portugal appear for two main reasons. First, a politician affiliated with a political party (often the incumbent mayor) wishes to be the party candidate and the national party structure does not support him/her (for whatever reason). As a result of being replaced by someone else in the party structure, s/he runs against all the other parties,

including her/his own former party as part of an independent list. In other cases, independent candidates have never been affiliated with a political party, but have prior experiences with civil society organizations (sports clubs, cultural associations, among many others). They wish to extend their contribution to civic life by running a political campaign; sometimes they do this out of disaffection with party politics, but other times it is simply a personal motivation.

#### **Municipalities**

Municipalities in Portugal are organized around a strong mayor-type executive. There are two types of elections at the municipal level: municipal executive and municipal council. Portugal operates a joint system for the election of the mayor and the local executive, which is considered to be an exception in the European context (Magre & Bertrana, 2007). Mayors are elected as heads of the winning party's or civic/independent movement's list in the municipal executive election and the members of the municipal executive are divided up using the d'Hondt proportional formula (Pires de Almeida, 2008). Hence, the mayor is unable to choose the members of the executive cabinet, but mayoral powers are derived from executive competences, which guarantee a strong influence over the executive decisionmaking (Magre & Bertrana, 2007). As a result of this strong authority over the executive, municipal executive elections can adequately be described as first-order elections at the local level. As heads of their party's list, mayoral candidates enjoy most of the attention during the electoral campaigns and are largely the reason why voters go to the polls. Similarly to Greece, most Portuguese mayors are "locally born and bred and therefore have extensive knowledge of their communities, as well as many formal and informal contacts with their citizens" (Elcock, 2008: 808).

Local elections are hybrid, allowing both partisan and independent lists. If the winner is the head of an nonpartisan list, s/he is considered independent, as s/he is not affiliated with any of the national political parties. Local executives can be minority executives, meaning that the winning party (and the mayor in office) may not have the majority of members in the executive cabinet.

City councils are responsible for budget approval, set up land use plans, sell municipal bonds, set municipal tax rates, and approve local ordinances and regulations. The separation between the executive and the council is clear (Magre & Bertrana, 2007), but, with the exception of Lisbon, the overwhelming majority of city councils have limited resources, are understaffed, and are generally incapable of effectively fulfilling their oversight function. The Portuguese law foresees a mixed composition of the city council, combining district or parish (*freguesia*) representatives and members elected at-large. District representatives can never outnumber the number of council members elected at-large. The size of the latter is equal to the number of the former plus one. As a result, the city council size varies with the level of territorial division of the municipality into parishes. All heads of parish executives are also members of the city council. In municipalities with only few parishes, the minimum number of council members elected is three times the number of members in the municipal executive.

## Parishes (Freguesias)

Parishes are the smallest unit of local self-government in Portugal and their boundaries are completely contained within a single municipality. The number of parishes per municipality varies significantly, ranging from one (in four municipalities), where the boundary of the

parish coincides with the boundary of the municipality, up to 61 (in the municipality of Barcelos), where each parish is essentially equivalent to a neighborhood government. After the Liberal Revolution of 1820, many religious institutions were secularized, with a more evident separation between church and state, and the parishes assumed different names, depending on their nature. In 1830, parishes were incorporated into the administrative system as civil parishes (*paróquias civis*) as opposed to religious parishes (*paróquias eclesiásticas*). After 1878, the Catholic Parishes remained *paróquias* but their political equivalent became the *freguesia* (Pereira & Almeida, 1985).

Parishes have democratically elected executive and legislative bodies. The parish council or assembly (*Assembleia de Freguesia*) is a deliberative body elected by the municipality's registered voters residing within the parish territory. The parish executive (*Junta de Freguesia*) is composed of the parish president and a variable number of cabinet members, two of them being the secretary and the treasurer. Contrary to municipal elections, there is only one type of election at the parish level: the head of the parish executive is the first candidate on the list receiving the most votes in the elections to the parish council. The size of each parish executive also varies according to the number of registered voters.

Given the unique characteristics of the local government system in Portugal, we decided to analyze the influence of the presence of independent lists on voter turnout by focusing on municipal executive elections and parish council elections. In other countries, it might make sense to focus on city council elections; however, the features of Portuguese municipal executive elections described above suggest these should be examined, as they

are the ones that most likely exhibit the different effects of partisan versus independent lists/candidates.

## **Data and Methods**

The empirical analysis is divided into two parts. In the first part, we use panel data from all 308 Portuguese municipalities, of four municipal executive elections (2001, 2005, 2009 and 2013), to analyze the effect of independent lists on the level of turnout in those elections. We employ the ratio between the number of independent lists and the total number of lists in each local election. This choice is justified for two reasons.<sup>3</sup> First, it secures a better assessment of the relative importance of independent lists vis-à-vis their partisan counterparts. A municipal election where only two lists compete – one partisan and one independent – is substantially different from another municipality where one independent list competes against many partisan lists. This relative measure provides a better understanding of the context where independent lists appear, whether they are the product of the absence of party lists or whether they are a complement to their presence. Second, this measure also captures the level of nationalization of local party systems, with lower numbers indicating a higher level of dominance of national parties in local elections.

We estimated three sets of specifications with three models each. The first model estimates ordinary least squares (OLS) with fixed effects and robust standard errors clustered by municipality, controlling for time-fixed effects. Since our dependent variable is bounded between zero and one and it is possible for OLS predicted values to lie outside this boundary,

<sup>&</sup>lt;sup>3</sup> We would like to thank an anonymous reviewer for suggesting the use of the ratio variable rather than the count of the number of lists.

the second and third models use two methods – the fractional probit and the beta regression – which are more suitable for modeling rates and proportions. The first set of specifications only includes our theoretical variable of interest: the ratio of the number of independent lists to the total number of lists. In the second set of specifications we add all the political variables, including political competition, party ideology, and the number of consecutive terms served by the incumbent mayor. Political competition is measured as the average difference in percentage points between the first two top lists in the previous three elections in each municipality. Party ideology is a dummy variable assuming the value of 1 when the mayor belongs to a party on the left of the political spectrum and 0 otherwise. The rationale for the inclusion of the ideological variable is that the voters of the Portuguese Communist Party are traditionally regarded as the most loyal party base and voters for the Left Bloc (a left-wing party) are seen as primarily swayed by divisive issues. We include a count variable – consecutive terms – identifying the number of consecutive terms served by the incumbent mayor.

The third and final set of specifications includes the theoretical variable of interest, all the political variables described above, and all the socio-demographic and economic controls. This second set of control variables – socio-demographic and economic control variables – includes population size and population density (both in natural log format to uphold the normality assumption), the proportion of municipal population with a bachelor's degree, the municipal unemployment rate, the proportion of population older than 65, the proportion of population under 15, the proportion of foreign-born population, and the proportion of Catholic weddings as a measure of religiousness. These socio-demographic variables, with the exception of religiousness, use census data collected by the Portuguese National Statistical Institute (INE) every ten years. Therefore, since only data from 2001 and 2011 was available, both linear

interpolation and linear extrapolation were used to generate data for 2005, 2009 and 2013. Finally, the municipal executive turnout models include an additional control variable related to the territory of the municipality: the number of sub-municipal governments (parishes) in the municipality, for which a positive effect is expected. The upper part of Table 1 includes the names of the variables, the indicators, the sources and the expected signs of the analysis of voter turnout in municipal executive elections<sup>4</sup>.

## [Table 1 here]

In the second part of the empirical analysis we zoom in on voter turnout at the submunicipal level. The key theoretical relationship of interest is the association between independent lists and parish council voter turnout. Here we focus on the parish council since it is the only type of election at the sub-municipal level. The leader of the parish executive is the first name of the winning list, so, just like the municipal executive elections, parish council elections are also highly personalized around first place candidates. We analyze this relationship using, again, panel data from three elections (2001, 2005 and 2009). The key theoretical variable is the ratio of the number of independent lists to the total number of lists competing in each sub-municipal election.

Again, we include three sets of specifications with three models each. The first set of models includes the ratio of the number of independent lists to the total number of lists. The second set includes this variable plus two political control variables: political competition and party ideology. Political competition is measured as the average difference in percentage points between the first place and the runner-up lists in the previous three elections in each

<sup>&</sup>lt;sup>4</sup> The upper part of Table 1 also includes the political fragmentation variable used in Appendix A. This variable is measured as the total number of lists participating in the municipal executive elections.

parish council. Party ideology is a dummy variable that takes the value of 1 if the parish president belongs to a party on the left of the political-ideological spectrum and 0 otherwise. The full model specifications include all relevant control variables for which data is available. Besides the political control variables, the full models include the remaining sociodemographic control variables measured at the parish level using the same indicators as described for the municipal level. The lower part of Table 1 includes the names of the variables, the indicators, the sources, and the expected signs of the analysis of voter turnout in parish council elections.<sup>5</sup>

Table 2 displays the summary statistics of the variables included in the analysis of voter turnout in municipal executive elections. The average turnout in the four elections was 63%. The descriptive data indicates that the average number of independent lists participating in the 1,232 electoral contests (308 municipalities in four election cycles) was 0.196. This suggests that most elections did not involve nonpartisan lists (1,019 cases or 82.71% of the total), with a few unusual cases involving two lists of independents (21 or 1.7%), two cases where there were three independent lists and a single case where four nonpartisan lists ran in a municipal executive election.<sup>6</sup>

[Tables 2 and 3 here]

<sup>&</sup>lt;sup>5</sup> The bottom part of Table 1 also includes the political fragmentation variable used in Appendix B. This variable is measured as the total number of lists participating in the parish council elections.

<sup>&</sup>lt;sup>6</sup> The descriptive statistics of the political variables are also worth mentioning. The level of political competition is generally low, since the average margin of victory (i.e. the difference between the first place list and the runner-up) is 24.4 percentage points. The majority of contests were won by parties on the left (53%). The average number of consecutive terms served by Portuguese mayors is 1.5, a mean clearly deflated by the effect of the term limits legislation applied for the first time to the 2013 election cycle. In the 2009 elections, the mean was 1.9, and about 17% of mayors were serving more than three consecutive terms. This number dropped to zero in the 2013 election cycle as a result of the enactment of the term limits legislation (mean = 0.4). Finally, also as a result of the term limits, 12.7% of the mayors in the 2013 election cycle came into office as a result of the forced exit of the incumbent.

Table 3 presents the summary statistics of the variables included in the analysis of voter turnout in three parish council elections (2001, 2005 and 2009). The average turnout for parish council elections was 67.3% – higher than the average for municipal executive elections. The number of independent lists in the 12,780 contests included in the analysis varies between 0 (77.9% of cases) and 4 (only one case). This means that in 2,739 elections, 22.12% of the total, there was at least one independent list and in 277 cases (2.24%) there were at least two independent lists. The average was 0.25.<sup>7</sup>

#### Findings

The results of the analysis of voter turnout in municipal executive elections are presented in Table 4. As stated in the previous section, three different estimation methods are used: (1) Fixed Effects; (2) Fractional Regression; and (3) Beta Regression). All three specifications of the full models include the same set of independent variables and have municipal and time(election) fixed effects. The results are similar and consistent across the different models. The coefficients of our key theoretical variable are positive as predicted by H1, the difference being statistically significant. On average, an increase of 10 percentage points in the ratio of independent lists to the total number of lists increases turnout by 0.38 (0.038\*10) percentage points. The most important political variable is political competition. As predicted, larger margins of victory are detrimental to turnout rates. In model 7, an increase of 10 percentage points in the margin of victory decreases turnout, on average, by 0.4 percentage points. The remaining two political variables (Ideology and Consecutive Terms)

<sup>&</sup>lt;sup>7</sup> The average margin of victory was high (26.8 percentage points). The proportion of contests won by parties on the left was substantially lower than in the case of municipal executive elections (48.7% of cases).

have negative coefficients, the differences being, for both of them, also statistically significant. These results suggest that not only left-wing parties tend to gain more when electoral participation is lower but also that turnout levels decrease when incumbent mayors have been in office for longer periods. Overall, the results show that electoral participation in municipal executive elections increases with the presence of independent lists, the level of political competition and mayors' turnover. In other words, Portuguese citizens are more likely to vote in municipal executive elections when there is an alternative to the national political parties and when they feel their vote is more likely to matter.

# [Table 4 here]

Regarding the socio-economic control variables, four of them (Population, Elderly population, Young population and Municipal Fragmentation) reach statistical significance with all three estimation methods. The coefficient for population size is negative and therefore consistent with most empirical studies addressing the determinants of voter turnout. Similarly, the proportion of elderly population has a negative and statistically significant effect on turnout levels in municipal executive elections. In contrast, both the proportion of young population and the level of municipal fragmentation increase electoral turnout. Overall, most of these results are consistent with the existing literature and our expectations. The only inconsistent result concerns education: its coefficient is negative and it reaches statistical significance in the second and third models. This result contradicts the majority of the findings in the existing empirical studies.

#### [Table 5 here]

Table 5 contains the results of the analysis of voter turnout in parish council elections for three elections (2001, 2005 and 2009). Again, all full models share the same set of

independent variables but use different estimation methods. Parish and year fixed effects are included in all models but have been omitted from the table. With the exception of party ideology, population, and education, all the remaining independent variables are statistically significant and therefore associated with voter turnout. The result for the theoretical variable of interest – the ratio of independent lists to the total number of lists – provides support for H1: an increase of 10 percentage points in the ratio of independent lists in parish council elections is associated with an average increase of 0.33 percentage points in voter turnout. As expected, diminished political competition gauged by the margin of victory is again associated with lower turnout rates. Elections won by parties on the left of the ideological spectrum are again associated with lower turnout rates (about 0.25 percentage points lower). This difference, however, only reaches statistically significant levels in the fractional and beta regression models in the incomplete specifications.

Regarding the demographic control variables, in contrast with the results for turnout in municipal executive elections, population size is negatively related with parish council turnout but fails to reach statistical significance. The other three variables (Elderly population, Young Population and Foreign population) are all statistically significant. For these variables, the sign of the coefficient is consistent with what we found for municipal executive elections. While elderly population has a negative effect on the turnout levels in parish elections, the young population and foreign population variables are positively associated with the levels of electoral participation at the parish level.

#### **Discussion and Conclusion**

The main objective of this study is to assess the impact of the presence of independent lists on voter turnout levels in local elections. In the theoretical discussion, we outline two competing hypotheses. On one hand, the best of both worlds hypothesis predicts that owing to increased choice for the voters the presence of independent lists would increase voter turnout. On the other hand, the competing hypothesis suggests the opposite due to higher information costs that voters face. The empirical analysis, which uses data from four election cycles of Portuguese municipal and sub-municipal levels of government, indicates that the presence of independent lists is positively associated with voter turnout. Our empirical analysis takes advantage of the unique features of the local government system in Portugal, which allows for a more general test of the hypotheses by covering both municipal and sub-municipal elections. Thus, our study demonstrates that the positive effect can also observed in smaller scale elections, such as Portuguese parish council elections, where the personalization of campaigns and candidates is more evident.

These findings strengthen the argument that understanding how different institutional factors influence turnout is important because it can help to inform policies to encourage political participation (Hajnal & Lewis, 2003). In the case of nonpartisan lists, the presence of candidates not affiliated with any political party is likely to increase the diversity of choice faced by voters and contribute to the mobilization of citizens not swayed by traditional party options. More importantly, our results support the idea that a hybrid system combining partisan and nonpartisan lists may truly be the "best of both worlds". Indeed, instead of treating independent lists as relics of history, they may be viewed as playing a role in efforts at democratic renewal and re-mobilizing apathetic voters – especially in contexts where the local electorate has become disenchanted with the workings of the party machines that pay insufficient attention to genuinely local issues.

The major limitation of our analysis is the inability to test these effects over a longer time period. The recent amalgamation reform, resulting in the extinction of 1 168 parishes, further complicates any attempts at extending this research to the most recent election cycle at the sub-municipal level.

Also, we are fully aware that one should be careful in making inferences from the aggregate to the individual level – although this is indeed a fallacy mostly honored in breach in many studies of voter turnout (Blais, 2006; Geys, 2006; Smets and Ham, 2013). In particular, in our analysis, such an approach may overstate the similarity between voters, implying that all voters in the municipality would face high information costs or derive more benefits. In reality, the local jurisdictions are likely to entail various groups of voters responding differently to certain political circumstances.<sup>8</sup>

More broadly, one of the major limitations of our study is that the focus on the presence of independent lists disguises the potential heterogeneity in their *raison d'etre*, origin and motivation for existence. While some of the local lists may indeed perceive themselves as non-partisan, others are more "clandestine", in the sense that even though they are formally local lists, they "oscillate between covered party loyalty and partial detachment" (Holtmann, 2008, p. 12). While some local lists grow out of the local civic engagement, others can be nominally independent but sponsored by political parties (Göhlert et al., 2008; Holtmann, 2008; Jüptner, 2008; Reiser, 2008; Steyvers et al., 2008). The lists can aim to fill the gaps in local representation or serve as "local garbage cans which collect growing disappointment with party politics" (Holtmann, 2007, p. 13). Also, the lists can vary in the scope of their focus, ranging from single issues to a broader spectrum of local questions (Aars

<sup>&</sup>lt;sup>8</sup> We are really grateful to an anonymous reviewer for pointing this out.

and Ringkjob, 2005, 2008; Copus et al., 2008; Göhlert et al., 2008; Holtmann, 2008; Reiser 2008; Steyvers et al., 2008). They can also range in their geographical reach, varying from lists confined to one jurisdiction to those with regional coverage (Reiser, 2008; Steyvers et al., 2008). The nature of local lists can potentially affect turnout as well and, hence, in future studies it would be fruitful to examine whether different types of local lists have different effects on voter turnout.

# References

- Aars, J., & Ringkjøb, H. E. (2008). Independent lists in Norwegian local politics. In Farewell to the Party Model? Independent Local Lists in East and West European Countries (pp. 211-232). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Aars, J., & Ringkjøb, H. E. (2005). Party politicisation reversed? Non-partisan alternatives in Norwegian local politics. *Scandinavian Political Studies, 28*, 2, 161-181.
- Arzheimer, Kai. (2009). Contextual Factors and the Extreme Right Vote in Western Europe, 1980-2002. American Journal of Political Science, 53, 2, 259–275

Bartolini, S. (2005). Restructuring Europe. Oxford: Oxford University Press.

Blais, A. (2006). What affects voter turnout?. Annual Review of Political Science, 9, 111-125.

- Blais, A., & Dobrzynska, A. (1998). Turnout in electoral democracies. *European Journal of Political Research, 33, 2,* 239-261.
- Blais, A., Gidengil, E., Nevitte, N., & Nadeau, R. (2004). Where does turnout decline come from? *European Journal of Political Research*, 43, 221-236.

Boogers, M. (2008). Local political parties in the Netherlands: anomaly or prototype?. In Farewell to the Party Model? Independent Local Lists in East and West European Countries (pp. 149-167). Wiesbaden: VS Verlag für Sozialwissenschaften.

Brady, H. E., Verba, S. & Schlozman, K. L. (1995). Beyond SES: A resource model of political participation. *American Political Science Review*, 89, 2, 271-294.

Brennan, G., & Lomasky, L. (1997). *Democracy and decision*. Cambridge University Press.

- Cancela, J., & Geys, B. (2016). Explaining voter turnout: A meta-analysis of national and subnational elections. *Electoral Studies, 42*, 264-275.
- Caren, Neal. (2007). Big City, Big Turnout? Electoral Participation in American Cities. *Journal* of Urban Affairs, 29, 1, 31-46.
- Carr, J. B. & Tavares, A. F. (2014). City size and political participation in local government: Reassessing the contingent effects of residential local decisions within urban regions. *Urban Affairs Review, 50, 2,* 269-302.
- Copus, C., Clark, A., & Bottom, K. (2008). Multi-party politics in England: small parties,
   independents, and political associations in English local politics. In M. Reiser & E.
   Holtmann (eds). *Farewell to the Party Model? Independent Local Lists in East and West European Countries* (pp.253-276). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Cox, G. W., & Munger, M. C. (1989). Closeness, expenditures, and turnout in the 1982 US House Elections. *American Political Science Review*, *83*, *1*, 217-231.

Downs, A. (1957). An Economic Theory of Democracy. New York: Harper and Row.

- Elcock, H. (2008). Elected mayors: Lesson drawing from four countries. *Public Administration, 86, 3,* 795-811.
- Fiorina, M. P. (1976). The voting decision: instrumental and expressive aspects. *The Journal of Politics, 38, 2,* 390-413.

- Freire, A., Martins, R., & Meirinho, M. (2012). Electoral rules, political competition and citizens' participation in the Portuguese local elections, 1979–2009. *Portuguese Journal* of Social Science, 11, 2, 189-208.
- Gendźwiłł, A. (2012). Independent Mayors and Local Lists in Large Polish Cities: Towards a Non-partisan Model of Local Government? *Local Government Studies, 38, 4,* 501-518.
- Gerber, A. S., & Green, D. P. (2000). The effects of canvassing, telephone calls, and direct mail on voter turnout: A field experiment. *American Political Science Review, 94, 3,* 653-663.
- Geys, B. (2006). Explaining voter turnout: A review of aggregate-level research. *Electoral Studies, 25, 4,* 637-663.
- Göhlert, S., Holtmann, E., Krappidel, A., & Reiser, M. (2008). Independent local lists in East and West Germany. In *Farewell to the Party Model? Independent Local Lists in East and West European Countries* (pp. 127-148). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Golder, M. (2003). Explaining variation in the success of extreme right parties in Western Europe. *Comparative Political Studies*, 36, *4*, 432-466.
- Hajnal, Z. L., & Lewis, P. G. (2003). Municipal institutions and voter turnout in local elections. Urban Affairs Review, 38, 5, 645-668.
- Hawley, W. (1973). Nonpartisan elections and the case for party politics. New York: John Wiley.
- Holtmann, E. (2008). Local Lists in Europe. In M. Reiser & E. Holtmann (eds). *Farewell to the Party Model? Independent Local Lists in East and West European Countries* (pp. 11-19). Wiesbaden: VS Verlag für Sozialwissenschaften.

- Jackman, R. W. (1987). Political institutions and voter turnout in the industrial democracies. *American Political Science Review, 81, 2,* 405-423.
- Jüptner, P. (2008). Local lists in the Czech Republic. In M. Reiser & E. Holtmann (eds). *Farewell to the Party Model? Independent Local Lists in East and West European Countries* (pp.21-37). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Kaniovski, S., & Mueller, D. C. (2006). Community size, heterogeneity and voter turnouts. *Public Choice, 129,* 399–415.
- Karnig, A. & Walter, B. O. (1983). Decline in Municipal Voter Turnout: A Function of Changing Structure. *American Politics Quarterly, II, 4,* 491-505.
- Koprić, I. (2008). Independent Local Lists in Croatia: In Search for a Composite Theoretical Frame. In Farewell to the Party Model? Independent Local Lists in East and West European Countries (pp. 39-61). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Magalhães, P. (2001). Desigualdade, Desinteresse e Desconfiança: A Abstenção nas Eleições Legislativas de 1999. *Análise Social, 35*, 1079-98.
- Magre, J. & Bertrana, X. (2007). Exploring the limits of institutional change: The direct election of mayors in Western Europe. *Local Government Studies, 33*, 2, 181-194.
- Matsusaka, J. G. (1993). Election Closeness and Voter Turnout: Evidence from California Ballot Propositions. *Public Choice, 76*, 313-334.
- Matsusaka, J. G. (1995). Explaining voter turnout patterns: An information theory. *Public Choice, 84*, 1-2, 91-117.
- Merrifield, J. (1993). The institutional and political factors that influence voter turnout. *Public Choice*, 77, 3, 657-667.

- Müller-Rommel, F. (2002) The Lifespan and the Political Performance of Green Parties in Western Europe, In F. Müller-Rommel and T. Poguntke (eds.), *Green Parties in National Governments*. London: Frank Cass.
- Nalder, K. (2007). The Effect of State Legislative Term Limits on Voter Turnout. *State Politics* & *Policy Quarterly, 7, 2,* 187-210.
- Oliver, J.E. (2012). *Local Elections and the Politics of Small-Scale Democracy*. Princeton: Princeton University Press.

Pereira, A., & Almeida C. D. (1985). Conhecer as Autarquias Locais. Porto: Porto Editora.

- Pettai, V., Toomla, R., & Joakit, E. (2008). Citizen Electoral Alliances in Estonia: Citizen
   Democracy versus Cartel Parties. In M. Reiser & E. Holtmann (eds). Farewell to the
   Party Model? Independent Local Lists in East and West European Countries (pp. 85-104). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Pires de Almeida, Maria Antónia. (2008). Independents and Citizen's Groups in Portuguese Municipalities. In M. Reiser & E. Holtmann (eds). *Farewell to the Party Model? Independent Local Lists in East and West European Countries* (pp. 233-251).

Wiesbaden: VS Verlag für Sozialwissenschaften.

- Pires de Almeida, Maria Antónia. (2008a). Party Politics in Portugal: Municipalities and central government. *European Societies, 10, 3,* 357-378.
- Pressnall, N. L. (2016). *Voter Turnout: Ideologically Swayed? Exploring Effects of Ideologically Extreme Parties on OECD Countries*. Undergraduate Honors Theses. Paper 1064.
- Reiser, M. (2008). Conclusion: Independent local lists in East and West European countries. In Farewell to the Party Model? Independent Local Lists in East and West European Countries (pp. 277-294). Wiesbaden: VS Verlag für Sozialwissenschaften.

- Reiser, M. & E. Holtmann (eds). (2008). *Farewell to the Party Model? Independent Local Lists in East and West European Countries*. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Riker, W. H., & Ordeshook, P. C. (1968). A Theory of the Calculus of Voting. *American Political Science Review, 62, 1,* 25-42.
- Rokkan, S., & Valen, H. (1962). The mobilization of the periphery: Data on turnout, party membership and candidate recruitment in Norway. *Acta Sociologica, 6, 1,* 111-152.
- Schaffner, B., & M. Streb. (2002). The partisan heuristic in low-information elections. *Public Opinion Quarterly*, 66, 559-81.
- Schaffner, B., Streb, M., & Wright, G. (2001). Teams without uniforms: The nonpartisan ballot in state and local elections. *Political Research Quarterly*, 54, 1, 7–30.
- Schattschneider, E.E. (1975). *The semisovereign people: A realist's view of democracy in America*. Boston, MA: Wadsworth.
- Schuessler, A. A. (2000). *A logic of expressive choice*. Princeton, NJ: Princeton University Press.
- Sellers, J. M., Kübler, D., Water-Rogg, M. & Walks, R. A. (2013). Conclusion Metropolitan sources of political behaviour. In Sellers, J. M., Kübler, D., Water-Rogg, M. & Walks, R. A. (eds.) *The political ecology of the metropolis: Metropolitan sources of electoral behaviour in eleven countries* (pp.419-478). Colchester, UK: ECPR Press.
- Sharp, E. B. (1990). Urban politics and administration: From service delivery to economic development. Boston: Addison-Wesley Longman Ltd.
- Smets, K., & Van Ham, C. (2013). The embarrassment of riches? A meta-analysis of individual-level research on voter turnout. *Electoral Studies, 32, 2,* 344-359.
- Solt, Frederick. (2008). Economic Inequality and Democratic Political Engagement. *American Journal of Political Science*, *52*, *1*, 48-60.

- Soós, G. (2008). Local and National Parties in Hungary. In M. Reiser & E. Holtmann (eds). Farewell to the Party Model? Independent Local Lists in East and West European Countries (pp. 63-84). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Squire, P., & Smith, E. R. A. N. (1988). The effect of partisan information on voters in nonpartisan elections. *Journal of Politics* 50: 169-79.
- Squire, P., Wolfinger, R. E. & Glass, D. P. (1987). Residential Mobility and Voter Turnout. American Political Science Review, 81, 1, 45-66.
- Steyvers, K., Reynaert, H., De Ceuninck, K., & Valcke, T. (2008). All politics is local, partisan or national? Local lists in Belgium. In Farewell to the Party Model? *Independent Local Lists in East and West European Countries* (pp. 169-193). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Stigler, G. J. (1972). Economic competition and political competition. *Public Choice, 13, 1,* 91-106.
- Struthers, J., & Young, A. (1989). Economics of Voting: Theories and Evidence. *Journal of Economic Studies*, 16, 5, 3-42.
- Tao, J. L. (2014). Is Taking the Party out of Politics Good for Democracy? Local Level
   Comparisons of Urban Political Landscapes in South Korea. Paper presente at the 23rd
   World Congress of the International Political Science Association in Montreal, Quebec,
   Canada.
- Tavares, A. F. & Carr, J. B. (2013). So close, yet so far away? The effects of city size, density, and growth on local civic participation. *Journal of Urban Affairs*, *35*, *3*, 283-302.
- Trounstine, Jessica. (2013). Turnout and Incumbency in Local Elections. *Urban Affairs Review, 49, 2,* 167-189.

- Thompson, F. (1982). Closeness counts in horseshoes and dancing ... and elections. *Public Choice, 38, 3,* 305-316.
- Vampa, D. (2016). Declining partisan representation at the sub-national level: assessing and explaining the strengthening of local lists in Italian municipalities (1995–2014). *Local Government Studies, 42, 4,* 578-597.
- Verba, S., Nie, N. H., & Kim, J. O. (1978). *Participation and political equality: A seven-nation comparison*. University of Chicago Press.
- Verba, S., Schlozman, K. L., Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics* (Vol. 4). Cambridge, MA: Harvard University Press.
- Wörlund, I. (2008). Local parties in Sweden. In M. Reiser & E. Holtmann (eds). Farewell to the Party Model? Independent Local Lists in East and West European Countries (pp. 195-210). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Wright, G. C. (2008). Charles Adrian and the study of nonpartisan elections. *Political Research Quarterly, 61, 1,* 13-16.

# Table 1. Variables, Sources and Expected Signs

<b>Dependent Variable</b> Voter Turnout	Indicator Voter turnout in the 2001, 2005, 2009 and 2013 municipal executive elections	<b>Source</b> DGAI		
Independent Variables	Indicator	Source	Expected Sign	
Independent lists	Number of candidates without national party affiliation	DGAI	+/-	
Political competition	Difference in percentage points between the first two lists in municipal executive elections (avg. 2001, 2005 and 2009)	DGAI	-	
Political fragmentation	Number of lists	DGAI	-	
Party ideology	Mayor belongs to a party on the left		+	
Consecutive terms	Number of consecutive terms by the incumbent	DGAI	-	
Population size	Municipal population (natural log)	INE	-	
Population density	Municipal population per square kms (natural log)	INE	+/-	
Education	Proportion of population with bachelor degree	INE	+	
Unemployment	Municipal unemployment rate		-	
Elderly population	Proportion of population over 65 years- old	INE	-	
Young population	Proportion of population under 15 years-old	INE	-	
Foreign born population	Proportion of foreign born population	INE	-	
Religiousness	Proportion of Catholic weddings in the municipality	INE	+	
Municipal fragmentation	Number of parish governments per municipality	INE	+	

# Municipal Level Analysis of Voter Turnout (Municipal Executive elections)

# Sub-Municipal Level Analysis of Voter Turnout (Parish council elections)

Dependent variable	Indicator	Source
Voter Turnout	Voter turnout in the 2001, 2005 and	DGAL
	2009 parish council elections	DGAI

Independent Variables	Indicator	Source	Expected Sign
Independent lists	Number of candidates without national party affiliation	DGAI	+/-
Political competition	Difference in percentage points between the first two lists in parish council elections (avg. 2001, 2005 and 2009)	DGAI	-
Political fragmentation	Number of lists	DGAI	+/-
Party ideology	Parish president belongs to a party on the left	DGAI	+
Population size	Parish population (natural log)	INE	-
Population density	Parish population per square kms (natural log)	INE	+/-
Education	Proportion of population with bachelor degree	INE	+
Elderly population	Proportion of population over 65 years-old	INE	-
Young population	Proportion of population under 15 years-old	INE	-
Foreign born population	Proportion of foreign born population	INE	-

\_

# Table 2. Summary Statistics (Municipal Executive Elections 2001, 2005, 2009 and 2013)

VARIABLES	N	mean	St dev.	min	max
Municipal executive turnout	1,232	0.630	0.0845	0.378	0.826
# Independent lists	1,232	0.196	0.459	0	4
Ratio # Independent / # Total	1,232	0.037	0.086	0	0.5
Political competition	1,232	20.37	14.52	0.0252	75.77
Political fragmentation	1,232	4.342	1.386	2	15
Party ideology	1,202	0.532	0.499	0	1
Consecutive Terms	1,232	1.493	1.706	0	9
Population size (n. log)	1,232	9.723	1.120	6.052	13.24
Population density (n.log)	1,232	4.401	1.436	1.571	8.908
Education	1,232	8.010	4.535	1.440	36.06
Unemployment	1,232	10.26	3.606	2.300	25.72
Elderly population	1,232	22.19	6.927	8.428	44.74
Young population	1,232	14.29	2.823	6.416	27.80
Foreign born population	1,232	2.200	2.451	0.180	24.14
Religiousness	1,222	48.10	18.43	0	100
Municipal Fragmentation	1,232	12.88	11.68	1	89

	(1)	(2)	(3)	(4)	(5)
Variables	Ν	mean	St.	min	max
Turnout in parish council elections	12,381	0.673	0.0963	0.294	0.953
# Independent lists	12,381	0.245	0.486	0	4
Ratio # Independent / # Total	12,381	0.092	0.197	0	1
Margin of Victory	12,381	26.84	21.12	0	100
Political fragmentation	12,392	2.857	1.030	1	7
Party ideology	11,067	0.487	0.500	0	1
Population (n.log)	12,720	6.913	1.267	3.550	11.31
Education	12,720	5.499	5.358	0	53.61
Elderly population	12,717	23.78	10.48	4.900	72.40
Young population	12,720	13.94	4.305	0	34.64
Foreign born population	12,720	1.441	2.123	0	33.47

# Table 3. Summary Statistics (Parish Council Elections, 2001, 2005 and 2009)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
VARIABLES	FF-FE	Frac Reg-FE	Beta-FE	FF-FE	Frac Reg-FE	Beta-FE	FF-FE	Frac Reg-FE	Beta-FE
Ratio # Independent Lists / # Lists	0.0572***	0.0579***	0.0578***	0.0435***	0.0439***	0.0437***	0.0381***	0.0386***	0.0386***
	(4.608)	(5.612)	(6.192)	(3.483)	(4.244)	(4.646)	(3.335)	(4.050)	(4.318)
Political competition				-0.000308***	-0.000321***	-0.000322***	-0.000367***	-0.000377***	-0.000377***
				(-3.538)	(-4.515)	(-4.913)	(-4.472)	(-5.504)	(-6.026)
Party ideology				-0.00693**	-0.00723***	-0.00739***	-0.00762**	-0.00774***	-0.00786***
				(-2.107)	(-2.953)	(-3.089)	(-2.475)	(-3.322)	(-3.476)
Consecutive terms				-0.00287***	-0.00291***	-0.00293***	-0.00277***	-0.00279***	-0.00279***
				(-4.571)	(-5.376)	(-5.358)	(-4.708)	(-5.515)	(-5.400)
Population							-0.126*	-0.118**	-0.116**
							(-1.901)	(-2.222)	(-2.402)
Population density							-0.0273	-0.0266	-0.0252
							(-0.375)	(-0.472)	(-0.498)
Education							-0.00248	-0.00211*	-0.00198**
							(-1.572)	(-1.873)	(-2.025)
Elderly population							-0.00435***	-0.00400***	-0.00385***
							(-3.101)	(-4.068)	(-4.657)
Young population							0.00522***	0.00535***	0.00538***
							(2.925)	(4.268)	(5.005)
Foreign population							0.000142	0.000182	0.000165
							(0.101)	(0.170)	(0.144)
Religiousness							-1.40e-05	-1.10e-05	-6.99e-06
C C							(-0.111)	(-0.115)	(-0.0852)
Unemployment							-0.000182	-0.000212	-0.000216
							(-0.224)	(-0.373)	(-0.445)
Municipal fragmentation							0.00131***	0.00131***	0.00130***
							(3.353)	(4.170)	(3.952)
							()	( - <i>y</i>	()
Observations	1,232	1,232	1,232	1,202	1,202	1,202	1,192	1,192	1,192
R-squared /Pseudo R	0.519	0.0216	,	0.545	0.0217	,	0.608	0.0216	,
Log-likelihood	2875	-794.6	2896	2849	-775.2	2872	2914	-769	2925
-0									

 Table 4. Analysis of Electoral Participation in Municipal Executive Elections (2001, 2005, 2009, and 2013)

Robust t-statistics in parentheses. Marginal effects reported for Fractional and Beta regression models. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
VARIABLES	FF-FE	Frac Reg-FE	Beta-FE	FF-FE	Frac Reg-FE	Beta-FE	FF-FE	Frac Reg-FE	Beta-FE
Ratio Independent/Total	0.00937**	0.00875***	0.00909***	0.0339***	0.0334***	0.0340***	0.0325***	0.0316***	0.0320***
	(2.209)	(2.664)	(3.677)	(8.307)	(10.14)	(10.29)	(8.013)	(9.654)	(9.700)
Political competition				-0.000952***	-0.000954***	-0.000960***	-0.000947***	-0.000951***	-0.000956***
				(-24.16)	(-32.12)	(-40.32)	(-24.00)	(-31.92)	(-40.31)
Party ideology				-0.00232	-0.00241*	-0.00245*	-0.00199	-0.00203	-0.00207
				(-1.330)	(-1.740)	(-1.898)	(-1.148)	(-1.472)	(-1.610)
Population							-0.00651	-0.00692	-0.00688
							(-0.558)	(-0.760)	(-1.220)
Education							-0.000229	-0.000180	-0.000109
							(-0.428)	(-0.443)	(-0.292)
Elderly population							-0.000895**	-0.000664*	-0.000658**
							(-2.005)	(-1.945)	(-2.398)
Young population							0.00248***	0.00267***	0.00267***
							(3.865)	(5.393)	(6.736)
Foreign population							0.00286***	0.00301***	0.00301***
							(2.937)	(4.280)	(5.512)
Observations	12,381	12,381	12,381	11,067	11,067	11,067	11,020	11,020	11,020
R-squared	0.114	0.0293		0.242	0.0304		0.251	0.0305	
Log-likelihood	23933	-7593	23876	22806	-6783	22828	22778	-6753	22804

# Table 5. Analysis of Electoral Participation in Parish Council Elections (2001, 2005 and 2009)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
VARIABLES	FF-FE	Frac Reg-FE	Beta-FE	FF-FE	Frac Reg-FE	Beta-FE	FF-FE	Frac Reg-FE	Beta-FE
# Independent lists	0.00970***	0.00964***	0.00953***	0.00850***	0.00844***	0.00835***	0.00774***	0.00769***	0.00764***
	(4.527)	(5.383)	(5.409)	(3.451)	(4.166)	(4.254)	(3.498)	(4.147)	(4.101)
Political competition				-0.000312***	-0.000325***	-0.000326***	-0.000370***	-0.000381***	-0.000380***
				(-3.528)	(-4.525)	(-4.953)	(-4.472)	(-5.532)	(-6.064)
Political fragmentation				-0.00134	-0.00136	-0.00137	-0.00135	-0.00138	-0.00140
				(-1.110)	(-1.355)	(-1.492)	(-1.261)	(-1.457)	(-1.556)
Party ideology				-0.00710**	-0.00739***	-0.00752***	-0.00777**	-0.00787***	-0.00797***
				(-2.143)	(-3.005)	(-3.131)	(-2.515)	(-3.379)	(-3.512)
Consecutive terms				-0.00286***	-0.00290***	-0.00291***	-0.00276***	-0.00278***	-0.00278***
				(-4.515)	(-5.314)	(-5.323)	(-4.654)	(-5.469)	(-5.365)
Population (log)							-0.129**	-0.122**	-0.120**
							(-1.982)	(-2.305)	(-2.468)
Population density (log)							-0.0227	-0.0214	-0.0197
							(-0.316)	(-0.383)	(-0.385)
Education							-0.00267	-0.00230**	-0.00218**
							(-1.644)	(-2.007)	(-2.201)
Elderly population							-0.00427***	-0.00392***	-0.00376***
							(-3.047)	(-3.977)	(-4.529)
Young population							0.00529***	0.00543***	0.00546***
							(2.956)	(4.331)	(5.076)
Foreign population							0.000112	0.000157	0.000143
							(0.0800)	(0.148)	(0.124)
Religiousness							-1.36e-05	-1.07e-05	-6.61e-06
-							(-0.108)	(-0.112)	(-0.0804)
Unemployment							-0.000121	-0.000150	-0.000155
							(-0.148)	(-0.264)	(-0.317)
Municipal fragmentation							0.00133***	0.00133***	0.00132***
							(3.416)	(4.207)	(3.991)
Observations	1,232	1,232	1,232	1,202	1,202	1,202	1,192	1,192	1,192
R-squared/Pseudo R	0.516	0.0215		0.544	0.0217		0.607	0.0216	
Log-likelihood	2871	-794.6	2891	2848	-775.2	2871	2913	-769	2925

Appendix A. Analysis of Electoral Participation in Municipa	l Executive Elections (2001, 2005, 2009 and 2013)
---	---

Robust t-statistics in parentheses. Marginal effects reported for Fractional and Beta regression models. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
VARIABLES	FF-FE	Frac Reg-FE	Beta-FE	FF-FE	Frac Reg-FE	Beta-FE	FF-FE	Frac Reg-FE	Beta-FE
# Independent lists	0.0146***	0.0144***	0.0156	0.0123***	0.0121***	0.0123***	0.0116***	0.0113***	0.0113***
	(12.85)	(15.92)		(10.35)	(12.86)	(11.79)	(9.726)	(11.90)	(10.87)
Political competition				-0.000953***	-0.000955***	-0.000960***	-0.000948***	-0.000952***	-0.000957***
				(-24.17)	(-32.17)	(-40.49)	(-24.01)	(-31.97)	(-40.48)
Party ideology				-0.00220	-0.00230*	-0.00234*	-0.00188	-0.00194	-0.00198
				(-1.261)	(-1.663)	(-1.818)	(-1.086)	(-1.404)	(-1.539)
Population							-0.00678	-0.00713	-0.00706
							(-0.582)	(-0.784)	(-1.253)
Education							-0.000312	-0.000264	-0.000194
							(-0.584)	(-0.651)	(-0.522)
Elderly population							-0.000888**	-0.000659*	-0.000655**
							(-1.987)	(-1.930)	(-2.389)
Young population							0.00248***	0.00266***	0.00266***
							(3.866)	(5.390)	(6.737)
Foreign population							0.00266***	0.00281***	0.00281***
							(2.724)	(3.982)	(5.130)
Observations	12,381	12,381	12,381	11,067	11,067	11,067	11,020	11,020	11,020
R-squared	0.131	0.0294		0.244	0.0304		0.252	0.0305	
Log-likelihood	24051	-7593	23023	22822	-6783	22845	22790	-6753	22816

Appendix B. Analysis of Electoral Participation in Parish Council Elections (2001, 2005 and 2009)