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Institutional Incentives for Strategic Voting: The Case of Portugal

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Abstract

Looking more closely at the way people form expectations about the possible outcome of the election in their electoral district I will provide evidence for the first time that strategic voting can be observed and predicted even in PR systems with large districts magnitudes, such as in Portugal. Employing district-level data from 1975-2002 I estimate that a party, who is expected to win no seat, will be strategically deserted on average by about 3 per cent of the voters. This number does systematically vary with the district magnitude of each district and is largest (> 4 per cent) in Portugal's smallest electoral districts (e.g., Beja and Évora). Nevertheless even in Portugal's largest electoral district, Lisbon, strategic voting can be observed to have a systematic impact on parties vote shares.

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Relevance of Strategic Voting in Portugal

Do voters in Portugal try to avoid wasting their vote on uncompetitive parties? The Portuguese electoral system is known to be one of the most disproportional PR list systems in Europe. Thus votes of large parts of the electorate are apparently cast for parties that do not gain representation in parliament. This has, of course, important implications for the responsiveness of the political system. The signal voters can send by casting their votes for particular parties might be seriously biased in the aggregate. Only certain parties will be able to influence both, agenda and the policy-making process in parliament and, therefore, are able to make transparent this signals.

Although we know that naively applying behavioral theories without reference to the institutional embeddedness of the act of voting is misconceived, for the case of Portugal it seems that most voters cast a *sincere* vote, i.e. they vote for their most preferred party. These voters seem to be motivated by expressive concerns, to make their votes counted instead of ensuring that their votes actually count. Conversely, *strategic* voters in Portugal trying to avoid wasting their vote cast their votes for another party than their most preferred one if they thus expect to be more likely to influence the outcome of the race in their electoral district. They make sure that their vote counts as opposed to being merely counted by casting a sincere vote. Even a small number of strategic voters in PR systems might have a large impact on the election outcome in their electoral district, though. Moreover, a small number of voters might also determine the fate of a particular coalition government. Thus studying strategic voting seems to be *a priori* relevant even in PR systems such as Portugal.

The Incentive Structure

What are the incentives that the electoral systems provides to voters to deviate from their most preferred party? In general, in PR systems even marginal parties have chances to gain

seats and to represent the opinions of their voters. Therefore such an electoral system does not provide strong incentives for marginal party supporters to cast a strategic vote. The comparative literature on electoral systems argues, going back at least to Leys (1959) and Sartori (1968), that the smaller the district magnitude is, i.e., the fewer seats are awarded at the electoral district level, the stronger the incentives to vote strategically. Although this hypothesis is developed to assess the incentives across a variety of electoral systems it should also apply to electoral systems that do not award the same number of seats at every electoral system.

The electoral institutions in Portugal are particularly interesting in that regard. Since 1975 the range of the district magnitude is rather wide. Across all 20 electoral districts and all elections between 1975 and 2002 the district magnitude ranges from a minimum of 3 (Portalegre since 1985, Beja since 1999 and Évora since 2002) to a maximum of 58 (Lisbon in 1976). Given the Leys-Sartori conjecture is supported, we should expect to find more strategic voting the smaller the district magnitude is. Nevertheless, the literature claims that strategic voting supposedly fades out when district magnitude is greater than 5 because the informational requirements for voters become too high in order to realize the incentives that are provided in districts with a large district magnitude (Cox 1997: 100, Cox and Shugart 1996, Sartori 1968: 279). Simply put, it is (too) difficult for voters to figure out which party is marginal. Thus they cannot systematically try to avoid wasting their vote. Evidence to support this claim stems from Japanese and Colombian district-level results (Cox 1997: Chapter 5, Cox and Shugart 1996) as well as electoral returns in Spanish districts (Cox 1997: 115-117, Gunther 1989). At first sight, this argument seems plausible. Nevertheless the question, then, is, why forming expectations suddenly does become so difficult that, according to this line of reasoning, one expects some strategic voting in districts with magnitude 4 but no longer in districts with district magnitude 6 and higher.

My argument will be that the literature does not provide sufficiently solid microfoundations for macro-level relationships between electoral system characteristics and implications of the nature of party systems, such as conditions under which certain parties are strategically deserted. In order to understand the influence of institutional incentives that are at work one has to look more closely at the decision-making process of voters.

Microfoundation and the Role of Expectations

Following the wasted-vote logic, strategic voters in Portugal vote for another party than their most preferred one if they thus expect to be more likely to influence the outcome of the race in their electoral district. Thus besides party preferences the main factor that proves to be important for an individual's decision-making process are subjective expectations whether a vote for someone's most preferred party will be wasted. If we are willing to assume that voters try to maximize their expected utility from voting than we can conceptualize the expected utility in the following way: Every voter derives a higher utility from voting for a particular party the more this party is preferred over any other party, assuming that this party gains a seat in the voter's electoral district in the first place. However, without gaining any seat in the voters electoral district, the utility derived from a wasted vote for this party will be much smaller or even zero, if the voter is not expressively motivated.¹ Since not all parties will necessarily gain a seat in the voter's electoral district, the additional utility a voter derives from voting for a party that gains a seat in the voters electoral district is uncertain. Thus the expected utility a voter derives from voting for a party is the product of the utility, given that this party will gain at least a seat in the voters electoral district, weighted by the voter's expectation that this party will actually gain at least a seat.

¹ The voter could derive a non-zero utility from wasting the vote simply for expressive reasons, i.e., because he or she feels good about voting for (e.g., in order to build or maintain a firm political identification that simplifies the political realm) or against a particular party.

How do voters form these expectations? There are at least two processes. On the one hand, independent of which party is most preferred, the larger the district magnitude the lower the threshold for any party to gain seats and thus the higher their supporters expectation that their vote will not be wasted (Sartori 1968: 279). Consequently, voters should be more aware that they potentially waste their vote in smaller districts than in larger districts because parties and the media are more likely to highlight this effect in smaller than in larger districts.

On the other hand, independent of the district magnitude of voters' electoral district, even inattentive voters - as "cognitive misers" (Fiske and Taylor 1991) – are likely to employ heuristics, such as the *electoral history heuristic* (Gschwend 2004) to generate reasonable expectations whether their most preferred party is able to win a seat in their electoral district. Following the electoral history heuristic implies to infer from the rough coordinates of the competitive electoral landscape of previous elections to the upcoming election. Although the process of expectation formation is unobservable, this heuristic implies that voters' expectation whether their most preferred party will gain a seat in their electoral district in the upcoming election should be much higher if this party has previously gained a seat in this district. The consequences of employing this heuristic to generate expectations is independent from characteristics of the electoral district. It should not be harder for voters in large districts than for voters in small districts since they only care about the prospects of their most preferred party. Thus contrary to the reasoning in the literature (Cox and Shugart 1996: 311; Cox 1997: 100) voters might even cast a strategic vote in large districts, given that they expect their most preferred party to not gain representation in their electoral district.

To sum up, there is a process at the district level, which characterizes the nature of the district race. The potential for any vote to be wasted is *a priori* higher in districts with smaller than in districts with larger district magnitude. Thus, political parties and the media should be on average all the more motivated to make voters aware of the wasted-vote context in districts

the smaller district magnitudes is. Thus, this process facilitates voters to form clear expectations. Although the average voter might be more aware of the possibility to waste his or her vote, there is a second process at the individual-level. Voters have to assess whether their most preferred party will gain a seat in their electoral district in the upcoming election. Since both processes operate at different levels at the same time, they presumably interact.

Because these processes are unobservable, I will focus on their observable implications at the district-level in order to derive hypotheses about their consequences for what is politically relevant: party vote shares. If voters expect their most preferred party to gain no seat they should desert this party and vote strategically for another party in order to avoid wasting their vote. Thus, above and beyond a normal level of support that one otherwise expects *parties in danger of not winning representation should get punished by strategic desertion and loose votes on parties that are expected to gain seats*. Moreover, both processes, which facilitate voters to form expectations about the possibility of wasting their vote on their most preferred party, should interact. Thus, *parties in danger of not winning representation should get punished more by strategic desertion and consequently perform worse, the smaller the district magnitude is. Conversely, parties not in danger of losing representation will benefit from strategic voting in the such districts*. In addition to the votes of their loyal supporters these parties are favored by strategic voters who try to avoid wasting their vote.

Data, Measurement and Analysis

Since I traced observable implications of the unobservable expectation formation process to the district-level to predict party vote shares I will use district level results for all parties from 1975-2002 in order to test my hypotheses.

[Table 1 about here]

Following the presumed logic laid out previously, voters can only form expectations about the possibility that their vote might be wasted if the party they prefer most has contested the same electoral district in the previous election. Thus my theory cannot predict party vote shares for the first election a party does contest a particular electoral district. Nevertheless, I will end up with $N = 1477$ cases of parties contesting one of 20 electoral districts. Even a party's election result of the first time it did contest a particular district is relevant in two ways for my analysis, though.

First, what would happen if voters do not care about forming expectation and try to avoid wasting their votes? They simply cast their votes for the party they favor most. The observational implication of this on the district level would be that party vote shares are predictable by past performances in that district. Thus, I take a party's previous vote share in a given district as a measure of the normal vote baseline (*NORMAL VOTE*) a party could reasonably expect. Such a measure of the latent level of sincere party support is necessary to not falsely overestimate the effect of strategic voting for (or against) a party in a given district. At the same token, it is a very conservative measure since it assumes that everybody voted sincerely the last time. Thus this measure potentially underestimate the number of strategic votes.

Second, in order to form an expectation whether a vote for the most preferred party is wasted a typical voter following the electoral history heuristic will look back at the previous election result. How many seats did a party get previously? The voter will be more likely to cast a strategic vote if her or his most preferred party did not get any seat the last time in a given district. Thus, in order to test the hypothesis that parties expected to be in danger of not winning representation should get deserted by strategic voters, we include a dummy variable (*EXPECTATION*) that scores '1' in a given district if a party had gained no seat in the previous election in that district. The distribution of this variable across parties is as follows:

[Table 2 about here]

There is considerable variance across parties. Apart from the 18 districts the AD did contest in 1980 all parties in Portugal have at least once contested an electoral district without winning a single seat there before. Parties in such districts are likely to be strategically deserted at the next election by some of their supporters because they expect their vote to be wasted. Conversely, there are apparently several parties who never managed to win at least a single seat in an electoral district. The support of these parties should diminish over time, or their supporters derive a particular high utility, based on either expressive motifs or to secure side-benefits (such as financial compensation), from wasting their vote on these parties.

In order to test the second hypothesis that parties in danger of not winning representation perform worse while parties who are expected to gain seats should benefit from strategic voting, the smaller the district magnitude is, one has to account for the size of the district magnitude (M) in the model. It is likely that the marginal impact of district magnitude M on party vote shares at the district level diminishes if M gets larger (Monroe and Rose, 2002; Taagepera and Shugart, 1989). Therefore I logistically transform the district magnitude ($\log(M)$) to account for that. In order to test for the conditionality of the hypothesized strategic desertion effect a product term with EXPECTATION will be necessary.

Finally, I also include time fixed-effects (YEARS) into the model since I will combine party vote shares from all elections to be as encompassing as possible and, at the same time, without violating the unit homogeneity assumption for pooling data.

The standard dependent variable in the literature, the effective number of parties, as an aggregate measure of the nature of district party competition, does not directly reflect my predictions, namely the amount of strategic voting that favors or penalizes certain parties. Thus, contrary to previous research, a more appropriate candidate of a dependent variable, Y ,

is the district-level share of parties contesting a particular district. The general specification of the model is as follows:

$$Y = b_0 + b_1 \cdot \text{NORMALVOTE} + b_2 \cdot \log(M) + b_3 \cdot \text{EXPECTATION} + b_4 \cdot \log(M) \cdot \text{EXPECTATION} + \text{YEARS} + e$$

If parties are expected to not gain any seat, i.e. if the EXPECTATION scores ‘one’ we get:

$$Y = (b_0 + b_3) + b_1 \cdot \text{NORMALVOTE} + (b_2 + b_4) \cdot \log(M) + \text{YEARS} + e$$

Table 3 shows the estimation OLS estimation results. All standard errors are clustered by party and electoral district to account for the non-independence in the data structure.

In order to evaluate the unconditional effect of expectations on the amount of strategic desertion of parties I first present the results of a restricted model, excluding the characteristics of the district magnitude. Not surprisingly, there is some kind of continuity when predicting a party’s vote share at the district level. At the electoral district level apparently the strength of a party in the previous election is a reliable predictor of future election results. On average a given party can rely on almost 90 percent of its previous support for the next election.

Moreover, as expected the coefficient of EXPECTATION is negative. This indicates that parties in districts where they have not won any seat in the previous election are predicted to loose on average almost 3 per cent compared to those districts where their voters could expect the party to gain representation. Every party has die-hard supporters. Nevertheless above and beyond the normal vote baseline, these results indicate that on average 3 out of 100 of a party’s potential supporters behave strategically and desert their party if they expect their vote to be wasted.

The impact of strategic voting is also conditional on the size of the electoral district. The estimation results of the full model does make transparent the empirical evidence to support this claim. As expected, the interaction effect of EXPECTATION and district magnitude is significant. Thus the strategic desertion effect depends on the magnitude of the electoral district. In order to make transparent the conditionality and the size of this effect I calculate the causal effect of EXPECTATION depending on the district magnitude, i.e.

$$Y(\text{EXPECTATION} = 1) - Y(\text{EXPECTATION} = 0) = b_3 + b_4 \cdot \log(M)$$

Figure 1 makes transparent the conditionality of the strategic voting effect. The area between the confidence intervals is shaded.

[Figure 1 about here]

In Portugal's smallest electoral districts we find that more than 4 out of 100 supporters of any given party desert this party if they expect their votes to be wasted. The share of strategic voters for any given party will diminish the larger the district magnitude gets. Nevertheless, even in Lisbon, the largest electoral district in Portugal with a district magnitude of 48 (at the moment), the model will predict an albeit small but systematic share of voters cast a strategic vote.

Conclusion

In this paper I provide evidence for the case of Portugal that despite weak institutional incentives, strategic voting is observable across all electoral districts. These incentives constrain an individual's decision-making process. The argument I developed here is that institutional incentives have an impact on the way voters form expectations about the outcome of the upcoming election. These incentives get channeled through the district magnitude. The situation in small districts is consequently different from large districts. Nevertheless there is also a second process at work that has an impact on the way voters form

expectations. Parties expected to be in danger of not winning representation get punished by strategic desertion – less so the larger the district magnitude is. Overall, the model predicts that almost 3 percent of each party’s vote share is lost due to strategic voting if voters do not expect a party to win at least a single seat in that electoral district. This number is highest (over 4 per cent) in Portugal’s smallest electoral districts. Nevertheless in all existing electoral districts today the results indicate some non-trivial amount of loss due to strategic voting. Parties that are expected to win representation benefit from the strategic votes of those voters who try to avoid wasting their votes on their most preferred party. This study echoes in many respects results from a comparable study about strategic voting that was done using district-level data from Finland (Gschwend, Stoiber und Günther 2004). It would be interesting to compare quantitative differences between the number of strategic voters in Finland and Portugal. I would expect to find lower shares of strategic voters in Portugal since all relevant actors, parties, the media and voters alike, presumably still learn how to deal with the institutional incentives offered by the system most effectively. Nevertheless, even if there is a particular learning process it is not clear whether it operates at the electoral district level or at the national level.

A major alternative argument to the one proposed here would be if not the voters react strategically to the institutional incentives of the electoral system but merely the party elites. Strategic behavior of parties is all the more likely if, on the one hand, there are strong party organizations, firmly anchored in the Portuguese society, and, on the other hand, if voting behavior is easily predictable at the district level. While the latter seems to be the case, given the high coefficient of the normal vote baseline in the model, the former criterion seems not to hold yet. There is a proliferation of various parties, which come and go, rename themselves or coalesce with others. Clearly a more detailed study of party is needed in order to estimate the impact of strategic party behavior. Nevertheless, the amount of strategic voting estimated here

is a conservative estimate since strategic behavior of party elites, building pre-electoral coalitions in order to maximize their prospects of getting seats in a particular district, does pre-empt strategic behavior on side of the voters, since a vote for a pre-electoral coalition of parties is more likely not to be wasted.

Finally, future research using survey data has to provide more evidence whether the proposed expectation formation process is valid and whether we get similar evidence about the amount of strategic voting. Besides Portugal and Finland, one has to expand this research design to analyze district-level data from Spain in order to provide evidence that - contrary to the common wisdom in the literature - we might also observe strategic voting in large districts.

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Table 1: Number of electoral districts a party did contest

	Party	1975	1976	1979	1980	1983	1985	1987	1991	1995	1999	2002
1	PS	20	20	20	2	20	20	20	20	20	20	20
	FRS				18							
	UEDS			18								
2	PPD+PPD/PSD	20	20	2	2	20	20	20	20	20	20	20
	CDS+CDS-PP	20	20	2	2	20	20	20	20	20	20	20
	AD			18	18							
	PPM	12	20			16		20	20		13	16
3	CDU							20				
	PCP-PEV								20	20	20	20
	APU			20	20	20	20					
	PCP	20	20									
	MDP+MDP/CDE	20						20				
4	BE										20	19
	BE-UDP											1
	UDP	10	19	20	20	17	20	20	2	20		
	PSR			20	20	17	20	19	20	20		
5	PCTP/MRPP			20	20	20	20	20	20	20	20	20
	PCP-ML		14									
	MRPP		20									
	PDC – RIGHT		17	17	19	19	20	20				
	MPT – RIGHT									5	20	19
	PPM-MPT – RIGHT									6		
	PDA – RIGHT				6	3			11	3	1	
	PNR – RIGHT											6
	PSN – RIGHT								19	13	15	
	POUS – LEFT			5	20	20	20	7			6	8
	OCMLP – LEFT			5	5	13						
	PRD – LEFT						20	20	20			
	PCR – LEFT						17	17				
	AOC – LEFT		18									
	FEC – LEFT	12										
	FER – LEFT								5			
	FSP – LEFT	15	18									
	LCI – LEFT	4	18									
	LST – LEFT					19						
	MES – LEFT	14	20									
	PH – LEFT										7	18
	UDPSR – LEFT					3						
	PRT – LEFT		4									
	PT - ?				20							
	PUP - ?	7										
	PG – ?									8		
	MUT – ?									4		

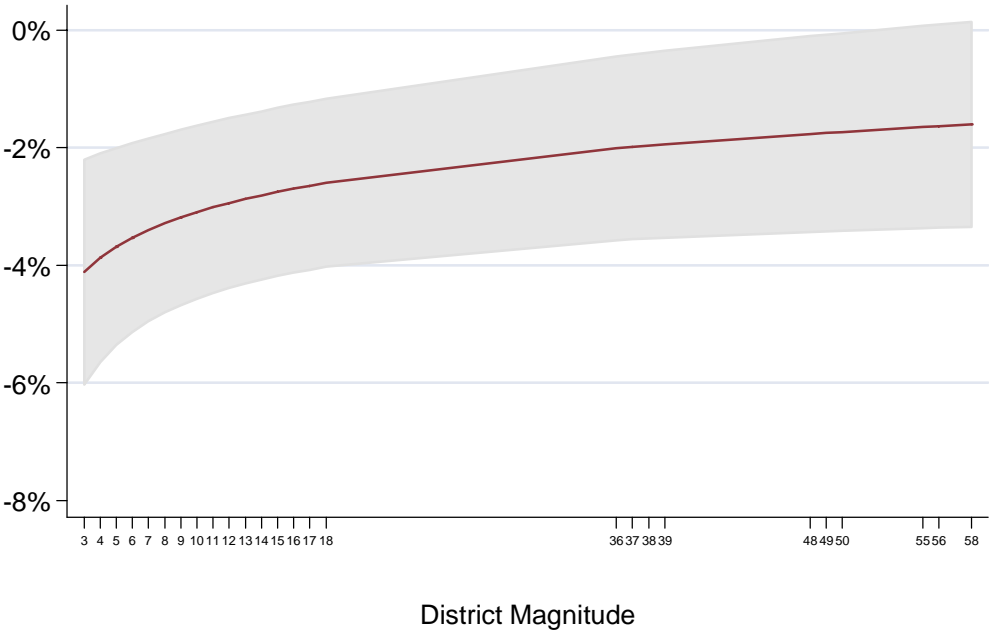
Table 2: Crucial Districts across Parties

PARTY	# electoral districts party did won seat before	# electoral districts party did not won seat before	Sum
AD	18	0	18
APU	36	24	60
BE	1	18	19
CDS	51	53	104
CDS-PP	17	23	40
FSP	0	15	15
LCI	0	4	4
MES	0	14	14
MPT	0	24	24
OCMLP	0	10	10
OCP	9	11	20
PCP-PEV	19	41	60
PCR	0	17	17
PCTP/MRPP	0	160	160
PDA	0	12	12
PDC	0	92	92
PH	0	7	7
POUS	0	66	66
PPD	17	3	20
PPD/PSD	122	2	124
PPM	0	97	97
PRD	18	22	40
PS	181	1	182
PSN	1	27	28
PSR	0	116	116
UDP	4	124	128
TOTAL	494	983	1,477

Table 3: Strategic Desertion of Party Vote Shares

		<i>Dependent Variable: Party Vote Shares</i>					
<i>Independent Variables</i>		Restricted Model			Full Model		
		<i>Coeff.</i>	<i>Std. Err.</i>	<i>p-value</i>	<i>Coeff.</i>	<i>Std. Err.</i>	<i>p-value</i>
b_1	NORMAL VOTE	0.894	0.019	0.000	0.881	0.020	0.000
b_2	ln(M)	***			-0.009	0.004	0.026
b_3	EXPECTATION	-0.027	0.008	0.000	-0.050	0.013	0.000
b_4	EXPECTATION x ln(M)	***			0.008	0.004	0.031
	YEARS						
	1976	0.004	0.005	0.450	0.004	0.005	0.379
	1979	-0.023	0.006	0.000	-0.023	0.006	0.000
	1980	-0.001	0.003	0.765	-0.001	0.003	0.837
	1983	0.001	0.005	0.858	0.001	0.005	0.886
	1985	-0.019	0.003	0.000	-0.020	0.003	0.000
	1987	-0.001	0.004	0.813	-0.001	0.004	0.743
	1991	0.006	0.004	0.171	0.006	0.004	0.156
	1995	-0.003	0.010	0.737	-0.003	0.010	0.730
	1999	-0.001	0.004	0.874	-0.001	0.004	0.868
	Constant	0.031	0.008	0.000	0.054	0.013	0.000
	N	1477			1477		
	# Clusters	286			286		
	R-squared	0.905			0.906		
	Root MSE	0.051			0.051		

Figure 1: The Conditionally of the Strategic Desertion Effect



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