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Strategic Voting in Proportional Systems:

The Case of Finland

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Abstract
In this paper we make a case that strategic voting can be observed and predicted even in PR systems. Contrary to the literature we do not see weak institutional incentive structures as indicative of a hopeless endeavor for studying strategic voting. The crucial question for strategic voting is how institutional incentives constrain an individual’s decision-making process. Based on expected utility maximization we put forward a micro-logic of an individual’s expectation formation process as a function of situational and dispositional factors. All well-known situational incentives to vote strategically that get channeled through the district magnitude are moderated by dispositional factors in order to become relevant for voting decisions. Employing district-level data from Finland – because of its electoral system a particularly hard testing ground - we find considerable evidence for predictive implications of our theory.

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Introduction

Studying strategic voting in PR systems seems to be a hopeless endeavor. The literature on electoral systems agrees that under PR many if not all incentives are absent to reduce the number of parties or candidates through either strategic entry decisions of political elites or strategic voting of voters. The conclusion scholars draw from this is that studying strategic voting might be more promising in strong (Sartori 1968) electoral systems possessing a variety of incentives for strategic behavior.

In this paper we argue that this conclusion is too hastily drawn. Focusing on strategic behavior of voters this paper makes a case that despite weak incentive structures of electoral institutions we have to look more closely how voters actually perceive these incentives and form expectations about the outcome of an election in a particular electoral system. Although we do not dispute that strategic voting might be easier to observe in plurality systems, even a small number of strategic voters in PR systems might have a large political impact, though. Since typically single parties do not gain enough seats in such parliaments to form a majority government, coalition governments will be necessary. In the election preceding the coalition formation process the coordinated effort of even a small number of strategic voters might be decisive about the fate of a particular coalition government. Thus strategic voting might prove particularly relevant in PR systems despite relatively small in absolute size.

The paper advances in as follows. First, we revisit the prevalent argument in the literature that voters do not have the necessary informational requirements to vote strategically in PR systems with large district magnitudes. Second, we develop an argument that instead we have to focus systematically on a micro-logic of expectation formation before we can derive predictions about strategic voting in PR-systems. Third, we derive predictable implications of this micro-logic and, fourth, test them with district level election returns of Finish parliamentary elections from 1995-2003. Our results provide considerable support for
our hypotheses about the expectation formation process of voters and its relevance for the success of parties in parliamentary elections.

**Theoretical Background**

What is the impact of electoral systems on an individual’s decision-making process? Voters form preferences about the objects on the ballot, parties or candidates. While disagreeing on how to model the decision-making process, all traditional theories of voting behavior agree that at the end voters should cast their vote for the object on the ballot they prefer most. Thus, this literature is blind towards possible influences of electoral systems on vote-choice. Conversely, the comparative literature on electoral systems allows for the possibility that the same voter might end up voting differently depending on the particular electoral rules used. The hypothesized mechanism is known as Duverger’s (1954) “psychological effect”. Voters are systematically drawn away from their most preferred party\(^1\), just because they realize that supporting a marginal party might be equivalent to wasting their vote given a particular electoral system. In order to avoid wasting their votes, voters cast a *strategic* vote for a viable party although they prefer another one.

PR systems offer chances even for marginal parties to gain seats, particularly, if there is none or only a small national threshold, thereby *a priori* reducing the incentives for supporter of those parties to cast a strategic vote. How many strategic votes ought to be expected? Leys (1959) and Sartori (1968) argue 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.

Strategic voting supposedly fades out when district magnitude is greater than 5 because it gets to complicated to satisfy informational requirements (Cox 1997: 100, Cox and Shugart 1996, Sartori 1968: 279) which party is marginal. Evidence to support this claim

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\(^1\) To simplify language we will just refer to political parties, even if voters can explicitly vote for candidates.
comes from apparent empirical regularities based on 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). The presented evidence does not explain, though, why there is suddenly a magic veil that makes it impossible for voters in larger districts to sort out whether a vote for their most preferred party is wasted. In fact, looking at the expectation formation process more closely as previous research has done we expect to find evidence of strategic voting even in PR systems with large districts.

A Micro-logic of Expectation Formation and Hypotheses

Voters form preferences for parties and derive a utility from voting for their most preferred party ($U_{pref}$). Let's denote the expected probability that a vote will not be wasted, i.e., a voter expects his or her most preferred party to win at least a seat in this district by $p_{pref}$. Thus the expected utility, $EU(pref)$, that his or her most preferred party is competitive to gain a seat, combines the traditional utility component weighted by the voter’s expectation. Thus $EU(pref) = p_{pref} \cdot U_{pref}$. This also implies that with probability $1 - p_{pref}$ no gain will be realized from voting for his or her most preferred party. Although, it seems quite likely that different voters employ different decision rules, we assume that voters’ decision rule is to maximize their expected utility from voting. Thus, we expect voters to deviate from their most preferred party and cast a strategic vote, the lower the expected probability $p_{pref}$, i.e., the more uncertain voters are whether their most preferred party is able to win a seat.

Which factors determine these expectations? We argue that the expected probability that a vote will not be wasted on a voter’s most preferred party is a function of situational (s) and dispositional (d) criteria, i.e., $p_{pref} = f(s,d)$. Electoral institutions provide a set of incentives that determine situational criteria. Following the logic of previous research on electoral systems we focus on the district magnitude (M) as a situational criterion. The larger the district magnitude the lower the threshold for any party to gain seats. While parties are
generally motivated to communicate the importance of being represented to their constituencies, the incentives should be higher in smaller districts than in larger districts since the same vote share might not be enough to gain seats in a small district but sufficient in a large district. Consequently, voters are more aware of the wasted vote context in smaller districts than in larger districts. Thus, hypothetical voters, holding dispositional factors \(d\) constant, should have a higher expected probability \(p_{\text{pref}}\) that their vote is not wasted when they are eligible to vote in a district with a large district magnitude than in a district with lower district magnitude.

Besides situational criteria that are well known in the literature we also introduce dispositional criteria of how voters generate expectations about the probability that a vote will not be wasted on their most preferred party. Dispositional criteria are determined by intrapersonal motivations and capabilities to comprehend such situational criteria, such as the district magnitude, and employ them in their decision calculus. For instance, take some hypothetical voters in the same electoral district with a fixed district magnitude. They nevertheless might have formed different expectations \(p_{\text{pref}}\) just because they most prefer different parties. Voters supporting parties that are not in danger of losing representation in a given district might not feel constraint to vote strategically at all. The situation is obviously different for supporter of marginal parties in a given district. Depending on the nature of the race in a particular district and holding constant situational factors \(s\), a vote for a marginal party might be wasted. Formally a voter casts a strategic vote if \(EU(\text{strat}) > EU(\text{pref})\), i.e., if

\[
EU(\text{strat}) > p_{\text{pref}} \cdot U_{\text{pref}}
\]

or equivalently, if

\[
\frac{EU(\text{strat})}{U_{\text{pref}}} > p_{\text{pref}}
\]
Thus given the expectation that a vote for a marginal party is wasted, $p_{\text{pref}}$ might be small enough to tip the seesaw towards voting strategically.

Voters employ appropriate decision heuristics in order to form expectations $p_{\text{pref}}$ whether their vote could possibly be wasted. Party elites, opinion polls or the media are likely to provide attentive voters with cues about the outcome of a district race. Even inattentive voters - as “cognitive misers” (Fiske and Taylor 1991) – are looking for a way to simplify their decision-making process (Gschwend 2001, 22-27). The *electoral history heuristic* is probably such a short-cut that is most easily available for such voters. Voters look back to previous elections. Even if they cannot recall the correct result of this election, they can easily infer from the rough coordinates of the competitive electoral landscape of previous elections to the upcoming election. The simple but crucial question supporters of a marginal party have to answer is as to whether they expect their party to gain seats in their district in the upcoming election. The expectations $p_{\text{pref}}$ should be much smaller, holding constant situational factors ($s$), if this party has previously gained at most one seat in the district and, thus, is potentially in danger of losing representation there. If voters expect their most preferred party to be in danger of not being represented in their district they might waste their votes on this party. Thus, the invectives to vote strategically are particularly high for supporters of marginal parties if their party had gained none or at most one seat in the previous election in this electoral district. It does not require much of a supporter of a marginal party to figure this out. Moreover, forming expectations $p_{\text{pref}}$ this way should not be harder for voters in large districts than for voters in small districts directly undermining the ad-hoc logic of Cox and Shugart’s argument that it simply becomes to hard to form expectations whether a vote for a marginal party will be wasted in large districts. No appeal to a magic veil of voter ignorance in large districts is needed.
To sum up, a voter’s expectation formation process is a function of situational (s) and dispositional (d) factors that are assumed to operate conjointly. In particular, situational factors can only operate if voters are dispositionally motivated in the first place – otherwise voters do not even consider casting a strategic vote. Thus, if our assumptions about how voters form expectations are correct, all well-known situational incentives that get channeled through the district magnitude are expected to be moderated by dispositional factors in order to become relevant for an individual’s decision-making process. Strategic voters following the wasted-vote logic should cast their votes for parties in a given district who will gain representation. Thus only if parties are not expected - derived from dispositional (d) motivations of voters - to be represented in a given district we expect situational criteria, the size of the district magnitude, to kick in. Only if dispositional requirements are fulfilled we expect to find any influence on forming the expectation $p_{\text{pref}}$ through incentives that get channeled through the district magnitude. In order to derive hypotheses on the electoral district level, as previous research has done, we have to aggregate these micro processes. If we can assume that dispositional factors are likely to operate for party supporters at the electoral district level, the predictions of the Leys-Sartori conjecture should hold. The smaller the district magnitude is, the stronger the incentives to vote strategically. Thus, our first hypothesis is as follows:

*If parties are expected to be in danger of losing representation they should get less punished by strategic desertion in large districts than in small districts. Consequently, these parties should perform better in large districts than in small districts.*

This logic implies, that those parties not in danger of losing representation will benefit from strategic voting in the respective districts. In addition to the votes of their loyal supporters they might get strategic votes from supporters of other parties that expect their party to be in danger of losing representation. The magnitude of this effect also depends on the district
magnitude and should perform reciprocally to the strategic desertion effect. Thus, our second hypothesis is as follows:

*If parties are expected not to be in danger of loosing representation they should perform better in small districts than in large districts.*

If we find evidence of these hypothesized effects, do these effects have an impact on the macro-level structure of the party system? Following our argument, we should find predictable consequences for the vote share of small parties on the district level over time. Thus, our third hypothesis is dynamic in nature. If our assumption about the process of forming expectations on the micro-level can be sustained then the wasted-vote desertion logic should lead to a downward trend over time of party vote shares at the electoral district-level for parties penalized by strategic voting, while this should not be the case otherwise. If some voters will not run the risk to waste their vote on their preferred party in a particular district and given that there has been systematic desertion of this party, then, in the next election, the expectations $p_{\text{pref}}$ that this party will gain representation will be even smaller. Consequently this leads to a higher degree of strategic desertion from a latent level of party support reducing the district vote shares of such parties even further. Thus, our third hypothesis is as follows:

*In those districts, where a party is in danger of loosing representation, its vote share should eventually shrink because of strategic desertion. Since we assumed that dispositional motivations are a necessary condition for situational factors to operate we expect at the same time no systematic decline in districts where a party is not in danger of loosing representation.*

**The Case of Finland**

Our proposed theory describes how any effects of varying size of the district magnitude have an impact on the electoral outcome. If there are no additional rules that determine the translation of votes into seats (e.g. compensatory seats on a higher level) at the district level, the strategic incentives that get channeled through the district magnitude can be isolated. In
order to test whether these incentives of strategic voting are not only present in districts with small district magnitude but also – albeit to lesser degree - in districts with higher district magnitude we need to introduce enough variation in the distribution of our key independent variable, district magnitude, and at the same time holding constant alternative explanations. Thus, a case study design has an advantage over pooling data from various electoral systems because the impact of social cleavages, political culture and the party system can be largely controlled given that the elections were held in the same country.

Moreover, if our reasoning about expectation formation and its consequences for voting behavior is supported by empirical evidence rather than Cox-Shugart’s voter ignorance argument, than a particularly hard case to demonstrate evidence supporting our theory stems from a PR system with rather large multimember districts. In such an electoral system, following Cox and Shugart, we should not find any evidence of strategic voting, whatsoever. In contrast to this reasoning, our expectation is that even in large districts we might observe evidence of strategic voting if certain party supporters are dispositional motivated in the first place.

Given these institutional requirements, Finland seems a particular interesting case to look for any effects of district magnitude on the degree of strategic voting. Finland employs a multimember-district electoral system with one tier and no compensatory seats. Additionally the district magnitude differs considerably - it ranges from 6 to 33 - and even the smallest districts are still considered relatively large by Cox and Shugart’s standards. The voter casts his or her ballot in the district for a candidate of a party. The votes of all candidates of one party will be summed up at the district level and the number of seats for each party in the respective district is calculated by applying the d'Hondt formula. Thus, even in a system that allows for personal preference votes the party-logic of the system prevails (Kuusela 1995, Pesonen 1995).
Our argument is based on the assumption, that a voter’s expectation reflects the competitive nature of the district race. But in PR systems like Finland, where the result of national elections is the starting point for coalition bargaining process a voter might focus might focus the national level instead. If voters in Finland focus on national results in order to derive their expectations then one might observe in small districts supporters of national medium-sized parties that do not desert in those districts, where they are in danger of loosing representation Thus we potentially underestimate the relationship of district magnitude and strategic voting if voters derive their expectations based on the competitive nature of the national rather than the local race at the district level.

**Data, Operationalization and Results**

Since our hypotheses are geared at the electoral district-level and we employ actual election returns in order to test them. Particularly we pool data from all national elections in Finland since 1991, because since the end of the 1980s and the establishment of the Green Party (VIHR) the party system has been very stable (Sänkiaho 1995). Thus, we can hold macro-level trends in the development of the party system constant. Contrary to previous research we explicitly formulated predictions about the impact of district magnitude on the amount of strategic voting that favors or penalizes certain parties. 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 that. Instead, the natural candidate of a dependent variable is rather the district-level results of various parties. Thus, we employ seven

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2 Ideally, a panel survey design clustered on the electoral district level is needed to test our theory about the expectation formation process and strategic voting in a PR system such as Finland. This is, of course, not available.

3 The date is provided by ‘Statistics Finland’ and can be downloaded (http://www.stat.fi/index_en.html). According to personal information provided by Jaana Asikainen from ‘Statistics Finland’, the governmental statistical office, redistricting between 1991 and 2003 is not a problem. In one district, between 1999 (Mikkeli district) and 2003 (South Savo), there was some minor redistricting. Nevertheless besides renaming the new South Savo district still has about 85 % of the eligible voters of the former Mikkeli district.

4 Nevertheless, holding other factors constant, the effective number of parties should decline over time in districts where some marginal party supporters (of various parties) vote strategically, because these parties will be deserted and the larger parties will benefit from it in a given district.
dependent variables: the vote shares of seven parties in 14 electoral districts\footnote{We exclude the autonomous province of Åland from our analysis because this district does not participate in the national seat-allocation system (Kuusela 1995: 24).} in the last four elections, i.e. we have 56 observations per party. Descriptive statistics of our dependent variables are presented in table 1.

According to Duverger’s Laws the Finnish party system is characterized by its fragmentation. During the last decades the Social Democratic Party (SDP), the agrarian Center Party (KESK) and the conservative National Coalition Party (KOK) became the dominant parties in Finland. Four relevant smaller parties were continuously represented during our time of analysis: the left-wing VAS, the Green Party (VIHR), the Christian League (SKL) and the Swedish regional party (RKP). The existence of several rainbow coalitions shows that the ideological barriers between parties cannot perceived to be very high.\footnote{If we are willing to believe, that the ideological distance is the main factor in determining voters’ utility expectation, the costs of strategic voting seem not to be that high and we should observe a significant level of strategic voting.} A dividing line of the party system (apart from the ideological) is the difference between the rural north and the urban centers of Finland (Sundberg 2000). The SDP has it biggest support in the industrial centers of the South and shares the support of the land workers and small farmers for left parties with its left counterpart, the VAS, in the rural north. The KOK is a strong party in the urban centers while its conservative counterpart, the KESK, is strong in the periphery of the country. A similar pattern is recognizable for the smaller parties. The Greens have their strongholds in urban districts like Helsinki whereas the VAS is stronger in the periphery. The SKL is a small party, which has success throughout the country. The liberal RKP is just a regional party, which is supported basically by the Swedish-speaking minority (Sänkiaho 1995, Martikainen and Yrjönен 1991). As table 1 shows, all parties vary noticeable in their strength across electoral
districts. Thus, the expectation formation process of a voter preferring a specific party may vary from one district to another. E.g., if a voter prefers the VAS in a relatively large district, where the VAS is traditionally strong (say over 20%), this voter has a lower incentive to cast a strategic vote than in a relatively small district, where the VAS is traditionally weak (say just 5%).

What would happen if we were wrong and voters simply cast their votes for the party they favor most? The observational implication of this individual-level process on the district level would be that parties vote shares should be predictable by past performances in that district. Given the low electoral volatility within electoral districts (Pesonen 1995) and the stable party system in Finland during the time of our analysis (Sundberg 2000), a party’s previous vote share should be a strong predictor. Thus, we need some kind of normal vote baseline to not falsely overestimate the effect of strategic voting induced by situational and dispositional factors. Our normal vote ($NV$) measure is a party’s previous vote share in that district. This is a very conservative measure since every party’s normal vote share comprises both, its latent support in that district in addition to the number of strategic votes that either favored or panelized this party in the previous election. Therefore we potentially underestimate the number of votes that are strategically cast or withdrawn from a latent level of sincere party support in a given district.

The Leys-Sartori conjecture posits 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. Since it is likely that the marginal impact of district magnitude $M$ on party vote shares at the district level diminishes if $M$ gets larger we logistically transform the district magnitude ($\ln(M)$) to account for that. Moreover, our theoretical contribution is to point out the conditionality of this conjecture as a consequence of the described expectation formation processes that might go on at the individual level. As hypothesized, we anticipate a reduced impact of situational incentives on a party’s vote share for larger districts if this party is
expected to be in danger of loosing representation. Given the logic behind the electoral history heuristic we measure this expectation \((EXP)\) simply by a dummy variable that scores ‘one’ in a given district if this party had gained at most one seat in the previous election. In our data set the number of such crucial districts varies considerably across parties (KESK: 5 districts, SDP: 4 districts, KOK: 14 districts, VAS: 29 districts, VIHR: 49 districts, SKL all districts and RKP: 44 districts). The general specification of our models is as follows:

\[
Y = b_0 + b_1 \cdot NV + b_2 \cdot \ln(M) + b_3 \cdot EXP + b_4 \cdot \ln(M) \cdot EXP + e
\]

Strategic voters following the wasted-vote logic should generally cast their votes for parties viable to gain seats. Thus if parties are expected - derived from dispositional motivations of voters - to be represented in a district they should benefit from strategic voting, the more the smaller the district magnitude is. Thus, for those parties we expect \(b_2\) to be negative. The situation is different in crucial districts, however, where a party might loose representation, i.e. in districts where the expectation dummy \((EXP)\) scores ‘one’. In these electoral districts the relationship will be:

\[
Y = (b_0 + b_3) + b_1 \cdot NV + (b_2 + b_4) \cdot \ln(M) + e
\]

According to our first hypothesis parties expected to lose representation should nevertheless get punished less and consequently perform better in large districts than in small districts, we expect the sum of the respective coefficients \((b_2 + b_4)\) to be positive. Since \(b_2\) is negative we, therefore expect \(b_4\) to be positive.

We employ ordinary least squares (OLS) to estimate the model for all seven dependent variables. The standard errors are panel-corrected, following Beck and Katz (1996), to account for the non-independence in the data structure.\(^7\) Table 2 summaries our estimation results.

\[^7\text{OLS models with robust White-Huber standard errors clustered by electoral district yield essentially the same results.}\]
We employed several independent tests of hypotheses 1 and 2. Because the SDP and the KESK were in danger of loosing representation just in one district in each of the four elections, a test of the conditionality hypothesis does not make much sense, since there is no variance. These parties should always benefit from support of strategic voters, the more the smaller the district. For the SKL the EXP-dummy is ‘one’ for all districts indicating that in every district voters should expect a vote for this party to be wasted. This implies, that SKL is penalized more the smaller the district magnitude is.

The results across all parties presented above largely support our expectations. First, for all seven models the $NV$ is significant. Thus, in predicting a party’s vote share at the district level, the strength of this party there in the previous election is the single most reliable indicator across all parties.

Second, for the parties that do not provide enough variance to allow for a meaningful test of the conditionality characteristic we find in correspondence with hypothesis 1 an expected (although not quite significant) positive coefficient $b_2$ for the SKL. Conversely, in correspondence with the second hypothesis we find support for models of the SDP and the KESK. A significantly negative coefficient $b_2$ of $\ln(M)$ indicates that these parties while essentially nowhere in danger of loosing representation are favored more by strategic voting, the smaller the district magnitude is.

Third, if there is enough variation across districts whether voters might expect that parties loose representation, we find the respective coefficient $b_4$ (of the interaction-effect of $\ln(M)$ and EXP) to be positive for all remaining models (VAS, VIHR, KOK, RKP) and a significant effect for the models of VAS and VIHR. The results for VAS and VIHR provide strong evidence of our first hypothesis. While we get the predicted sign, one conceivable

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8 The significance may be undermined by expressive voting. Based on survey data Borg (1995: 149) provides evidence that the proportion of party supporters having expressive motifs among all parties is the largest for supporters of the SKL and the RKP (57 and 61%, respectively compared to at most 36% for all other parties). Thus, even if the $p_{SKL}$ of these SKL-supporters is low, their utility $U_{SKL}$ may be so large, that their EU(SKL) will be high enough to vote for the SKL - no matter what.
explanation that there is no significant effect in the RKP model has to do with the nature of its supporting base. It is reasonable to assume, that for members of the Swedish-speaking minority the utility $U_{strat}$ of a vote for any other party is very low, so that $EU_{(strat)}$ is always smaller than $EU_{(RKP)}$, even if the $p_{RKP}$ is very low, because the party is in danger of loosing representation.\(^9\) The non-findings of the KOK model might have something to do with the way their supporters form expectations about the changes of winning seats in the district. Given that since 1987 the KOK was one of two large parties (the other was the KESK or the SDP) constituting the core of the respective government coalition, supporters might just focus on the national level. The KOK’s important role in government might anchor the expectation formation process of their supporters at the national and not as assumed by our theory at the district level.

Furthermore, the expectation about the size of $b_4$ such that $(b_2 + b_4)$ is positive is also supported for models of the VAS and the VIHR and, although not significantly, through the SKL model. This party is threatened to be penalized by strategic desertion in every district, though. $(b_2 + b_4)$ is larger for VIHR (1.3) than for VAS (0.4). In table 3 we show for the VIHR and the VAS the effect of strategic voting in districts where these parties are endangered to loose representation (i.e., EXP=1) as well as the size of the counterfactual effect if these parties where not perceived to be in danger of loosing representation in a particular district (i.e. the difference of EXP=1 and EXP=0).

[Table 3 about here]

If the VIHR is in danger of loosing representation (EXP=1), the effect of strategic voting would lead on average to about 1.4 %-points more votes in a district with 17 seats than in the smallest district ($M=6$) in Finland and to 1.9 %-points more votes in the largest district.

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\(^9\) Among the RKP-supporters there is the largest proportion of expressive voters (Borg 1995: 149).
The size of the dispositional effect of being endangered or not differs remarkably between both parties. Again, this effect depends on the district magnitude. For a \( M \) of 17 the predicted vote share would shrink on average about 5.5%-points for the VIHR and 1.1%-points for the VAS in districts where these parties are perceived to be the danger of loosing representation compared to an hypothetical district of the same size where these parties are expected to win seats easily. Our dispositional factor has its largest impact in small districts \( (M=6) \), where the VAS would get 3.9%-points less than in a safe district of the same size. The VIHR would face to be deserted completely in such a district given the predicted magnitude of the dispositional effect of 14.4%-points.

In order to generate evidence for our third hypothesis we have to analyze party vote shares over time while distinguishing districts where we expect a systematic decline of support from those districts where parties are not expected to be in danger of loosing representation. Since only dispositional factors determine the generating mechanism behind this hypothesized trend we average party district-level results across election years. In the following figure 1 we present for each party\(^{10}\) the average vote share by year relative to the national result separated by the EXP-dummy. The points above the zero axis show the averaged results of safe districts, the points below present the averaged results of the endangered districts, where the dispositional factors are presumably present, relative to the party’s national result.

\[\text{[Figure 1 about here]}\]

\(^{10}\) Not for the SKL, because the EXP-dummy is one for all districts.
Our third hypothesis predicts that in those districts, where a party is in danger of losing representation, its vote share should eventually shrink because of strategic desertion. So, the figure above provides evidence for our claim that dispositional motivations are a necessary condition for situational factors to operate. If they are present we clearly see across parties a decline in vote shares while if they are absent we cannot find such a trend for districts in which the party is not in danger of losing representation. We find this trend of a negative regression line for the endangered districts for the VIHR, the VAS and if we were to exclude the 1991-election we also find evidence for the KOK. Moreover, even for the one district where SDP and KESK theoretically face strategic desertion this trend can be observed. Only the RKP shows a wrong direction, but as argued above, the language-based nature of the party might undermine the logic of strategic desertion to a large extent.

**Conclusion**

In this paper we make a case that despite weak incentive structures of electoral institutions there might be nevertheless indications of strategic voting. Contrary to the literature we do not see weak institutional incentive structures as indicative of a hopeless endeavor for studying strategic voting. The crucial question for strategic voting is how institutional incentives constrain an individual’s decision-making process. We argued that we have to look more closely how voters actually perceive these incentives and form expectations about the outcome of an election in a particular electoral system in order to evaluate and finally predict their voting behavior. Based on expected utility maximization we put forward a micro-logic of an individuals expectation formation process. We assume that this process is a function of situational and dispositional factors. All well-known situational incentives to vote strategically that get channeled through the district magnitude are moderated by dispositional factors in order to become relevant for voting decisions. Employing district-level data from
Finland – because of its electoral system a particularly hard testing ground - we find considerable evidence for predictive implications of our theory.

Across parties we find that if parties are expected to be in danger of loosing representation these parties get punished less by strategic desertion and hence perform better in large districts than in small districts. And conversely, if parties are expected not to be in danger of loosing representation, however, we find evidence that they perform generally better in small districts than in large districts. Moreover, the impact of strategic voting over time has further predictable implications for the success of parties at the polls. At least based on four time points we clearly see that a parties vote shares in districts do shrink over time because of strategic desertion if they are in danger of loosing representation, and, conversely, we do not find at the same time such a systematic decline in districts where a party is not in danger of loosing representation. Further research using survey data has to provide more evidence as to whether our proposed micro-logic of forming expectations is valid. Such data is not yet available for the case of Finland. Moreover we would like to expand this research design in future iterations of this work both, over time and across electoral systems to provide more empirical evidence that studying strategic voting is particularly relevant for election outcomes in PR systems.
References


Pesonen, Pertti. 1995. “The Voters’ Choice of Candidate.” In Borg, Sami and Sänkiaho, Risto
(eds.) The Finnish Voter, 114-128.


Table 1: *Descriptive Statistics of all Dependent Variables*

<table>
<thead>
<tr>
<th>District Vote Shares</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
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Table 2: Estimated effects of Strategic Voting on the Success of Finish Parties at the electoral
district level, 1995-2003

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<td>Difference EXP=1 - EXP=0</td>
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Figure 1: Test of the third hypothesis. Strategic Desertion at work.